



## Designing New Models for Explaining Family Change and Variation

Recommendations to Demographic and Behavioral Sciences Branch of the National Institute of Child Health and Human Development for improving scientific knowledge on the factors and mechanisms that lead to change and variation in family and fertility

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### Executive Committee

S. Philip Morgan, PI\*  
Duke University

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Northwestern University

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V. Joseph Hotz\*  
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Seth Sanders\*  
Duke University

Judith A. Seltzer\*  
UCLA

Duncan Thomas\*  
Duke University



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## **Executive Summary**

### **Understanding Family Change in the Twenty-First Century**

**U**nderstanding family change is vital to public policy and to advancing scientific inquiry surrounding this important institution. The family plays a pivotal role in the well-being of current and future generations. How many children families have, when, and how they support them largely determines a population's age structure, dependency burdens, and the need for public services such as education. Healthy intimate relationships among adults contribute to better financial, physical, and mental health for family members. Policies designed to foster healthy child development, economic independence, physical and mental health, as well as those supporting dependent elders or population growth must take family change and variation into account.

Expanding our understanding of family change requires two research priorities: tracking demographic change, and developing models to understand *why* those changes occur. Tracking change provides the foundation for predicting population trends and estimates of the numbers of families who need attention, while knowing why something changes helps policymakers shape effective public policies for families.

#### **New Directions for Research**

In December 2002, the National Institute of Child Health and Human Development (NICHD) issued a Request for Proposal (RFP) entitled “Designing New Models for Explaining Family Change and Variation” to take stock of the field and to think creatively about how to advance new, and old, areas of inquiry. Specifically, the project was intended to advance our understanding of:

- Factors and processes that produce family change in populations over time;
- Factors and processes that influence variation in family change and behavior among racial, ethnic, socioeconomic, regional, and cultural groups, and among men and women.

NICHD chose a group of nine leading researchers to head up the inquiry into these questions and advise the Institute on how to move forward in researching and thinking about family change. The researchers focused on three aspects of family change: parenthood, intimate unions, and the relationships between generations. They surveyed the field, invited groups of experts across disciplines to brainstorm and share ideas, and from the process created a set of recommendations for moving forward. The tasks and realm of inquiry of each group—parenthood, unions, and generations—are outlined below, followed by a compiled set of recommendations from all three groups.

#### **Parenthood Group**

The crux of family change across time begins with parenthood—decisions about if, when, and how many children to have. The scientific community has done an outstanding job of

tracking fertility change. However, if it is to accurately predict how becoming a parent will change in the future, the field must develop a deeper understanding of *why* the changes have occurred.

The parenthood group, therefore, developed a new model of how and why the process of becoming a parent has changed and why it varies across groups. Their *Theory of Conjectural Action* focuses on both the material aspects and the schemas—the bundle of attitudes, motivations, beliefs, mental maps for action, and other cultural influences—that guide our internal and external lives and influence parenthood. This new theory, it is hoped, can productively stimulate new advances that explain how and why the process of becoming a parent has changed and why it varies across groups.

In addition, the group identified key questions for future exploration, including:

- How are fertility/parenthood patterns and trends changing?
- What do fertility intentions mean and how do they matter?
- How do developmental processes shape fertility and parenthood?
- What can advances in the genetic and biological sciences do for research on parenthood?
- How are the nature and quality of relationships between partners related to parenthood?
- How is parenthood affected by cultural schemas?
- How is parenthood affected by technologies?
- How do social and economic institutions affect parenthood?
- What drives change and variation in parenthood?

Although the United States possesses a rich set of data resources related to fertility and parenthood, the data are limited in certain ways. Most data sets, for example, are compromised by small sample sizes of certain important subgroups, such as racial and ethnic minorities, immigrants, or gays and lesbians. Available data are also inadequate for testing the proposed theory of family change because they fail to adequately measure attitudes, culture, and schemas, or the full range of factors that contribute to fertility behaviors. This prevents researchers from testing competing hypotheses and controlling for confounding influences. Important gaps also exist in our understanding of the dynamic interactions of the social and economic environment, life-course events, and fertility.

## **Unions Group**

The state and meaning of marriage and intimate relationships have changed profoundly in just a few decades. The task of the Unions Group was to assess how best to track these changes and grasp their meaning and impact. As the world of intimate relationships changes—as same-sex couples and cohabitation become more common, for example, or as young adults delay marriage—understanding the ramifications of these changes and the benefits or harm accruing to adults and children from those changes is imperative. Yet, the field lacks a consistent base of data, as well as a theoretical foundation from which to gauge these impacts.

What is it about adult intimate relationships, for example, that confers benefits to individuals? How are the qualities of the parental relationship transferred to children? What leads to the ability to form and sustain meaningful romantic unions? Has the nature of what partners expect from each other changed over time? How do the answers to all of these questions differ across subpopulations? These are just some of the questions that remain unanswered by today's current data and theory.

The Unions Group, therefore, marshaled evidence across multiple disciplines and identified gaps and critical questions. From that review, the group created a set of recommendations for monitoring and understanding the effects and future ramifications of the profound changes in unions that have occurred in the past several decades. By assessing existing research, theory, and scientific methods, the group was able to suggest some innovative models for research and data collection that give direction to a coordinated program of research capable of enhancing the field's understanding of change and variation in unions at both the individual and the societal levels. To this end, the research recommendations represent the inspirations, thoughts, and research of scholars across multiple disciplines.

### **Family Change across and within Generations**

Without a doubt, our families leave an indelible imprint on us. The Generations Group focused on this enduring legacy of family relationships throughout members' lives, particularly resource flows and obligations and their effects on family dynamics. For example, how does the fact that mothers tend to influence the connection between young children and their fathers shape children's obligation to their father in later life? Or, how do the enormous cultural changes ripple through family life? Parents who reared children in an era when marriage was forever and out-of-wedlock childbearing was rare now may have adult children who are single parents or step-parents. Mothers who stayed at home may now have daughters who are trying to combine childrearing and employment. The implications of these and other changes are only now coming into focus.

The Generations Group identified areas where continued research is needed if the field is to gain deeper understanding of the legacy of families, including:

- extended-family living arrangements and ties;
- elements that bind generations, including both actual and expected exchanges and transfers;
- transmission of advantage across and within generations;
- contexts that impinge on generational relationships;
- the role of biology, gene-environment interactions, and links between biology and culture in both theories and empirical study of change and variation across and within generations.

### **Immediate Needs: Key Recommendations for NICHD Action**

While each of the three groups focused on a specific realm of family life and change, several threads of inquiry were common to all three and motivate a set of

recommendations for moving the field forward to explain family change and predict its future.

This final report to NICHD is broad-ranging and includes many recommendations to the research community. The following is a list of priority items for NICHD to pursue beginning now and through the next few years.

- 1) *NICHD should support planning for a new wave of data collection on families.* For over three decades, NICHD has played a vital role in supporting data collections that have documented family change and difference and allowed for research aimed at understanding both the causes and consequences of these changes and differences. This support was fundamental to past research successes and is crucial to future efforts. The Explaining Family Change project identified many areas where new data collection is needed both *to describe and explain family change and variation*. The NICHD should fund one or more grants or contracts with the purpose of developing implementable plans for the scope, design, and content of the next generation of data collection studies on families. These targeted development projects should begin within the next 18 to 24 months.
- 2) *NICHD should support the augmentation of existing data sets to address emerging questions and gaps in the extant literature.* The Explaining Family Change report details the many advantages, both scientific and practical, of augmenting existing data collection efforts. Further, it suggests several promising augmentation opportunities. Here, the project's recommendations are more specific, with supporting detail provided in the chapters of this report:
  - a. *NICHD should act quickly to augment existing surveys that allow for documentation of changes and differences in union formation and fertility behavior.* To fill the void left by the discontinuation of the Current Population Survey (CPS) marriage and fertility supplements, NICHD should issue a call for proposals to augment the National Survey of Family Growth (NSFG). The primary goal would be to add older respondents to the survey and to ask them subsets of questions now asked of NSFG respondents, with special attention to union and fertility histories. NICHD should also work with the Census Bureau to make important but modest changes to the American Community Survey (ACS): add a question on the age of first marriage and add fertility questions on the number of a woman's previous births in order to allow calculation of many key fertility indicators.
  - b. *One or more existing data collection studies should be augmented to collect much needed data on intra- and intergenerational relationships and transfers.* NICHD and NIA should encourage research proposals to collect information about the nature and strength of family interactions and relationships within and between generations by building on existing data collection studies. Prime candidates for such augmentation include the Panel Study of Income Dynamics (PSID), the National Longitudinal Survey of Youth 1979 (NLSY79) and its Child and Young Adults samples, the Health and

Retirement Study (HRS), and the Wisconsin Longitudinal Survey (WLS). These studies have already collected data on family members from two or more generations. Chapter 6 discusses in detail the potential for augmenting these and other studies to address unanswered questions about intergenerational relationships.

- 3) *NICHD should invest in methodological studies, the knowledge base for the data collections mentioned above.* The related questions of what is a family and who needs to be interviewed must be addressed. The usefulness of the traditional definition of family (persons related by blood or marriage) has faded. What will replace it? The idea of a family as a network for providing for individuals' emotional and material needs holds promise. But its measurement is challenging. How would this network be sampled? How durable must the network tie be to consider the relationship a significant family tie? And continuing with the network metaphor: how many nodes (family members) would need to be interviewed to understand family dynamics and processes? Methodological studies to improve measurement of core constructs, such as family, are essential groundwork for new data collection in this area.
- 4) *NICHD should continue to encourage interdisciplinary research on the family.* During the past few decades, NICHD has fostered significant interdisciplinary research on families and the effects of families on individual health and well-being. Much of the impact of these interdisciplinary endeavors has followed from NICHD's role in creating data of interest to multiple disciplines. But research networks and conferences have also fostered interdisciplinary research and collaboration. Such efforts must be continued and expanded. For example, NICHD should encourage more theoretical work on the family that draws together and integrates concepts and ideas from a broad range of disciplinary perspectives.



## Preface View from NICHD

Christine A. Bachrach

### Past Accomplishments

The Demographic and Behavioral Sciences Branch (DBSB) of NICHD has a long history of supporting demographic research related to family issues. Large national surveys—such as the National Survey of Families and Households (NSFH), the National Longitudinal Surveys of Youth (NLSY), and the National Survey of Family Growth (NSFG)—and smaller-scale studies supported by the Branch have documented dramatic changes in the timing and circumstances of family formation and fertility and the development of new family forms. They have also produced a wealth of policy-relevant knowledge on the correlates of family patterns. More recently, other large studies supported by DBSB, such as the Fragile Families and Child Wellbeing Study (Fragile Families); Welfare, Children and Families: A Three City Study (Three City Study); and the Los Angeles Families and Neighborhoods Study (LA FANS), have examined family behaviors in specific types of families and have begun to provide us with more detailed insights about family behaviors.

Many of these studies have also linked information about family to the development and well-being of children. These have included the NLSY-79, the Panel Study of Income Dynamics; the National Longitudinal Study of Adolescent Health; Fragile Families; the Three City Study; and LA FANS. These studies have produced a rich and still rapidly growing body of knowledge about the mechanisms that link family behaviors to health and well-being across generations. They have provided the resources to support a new generation of interdisciplinary researchers who combine scientific knowledge of the psychological and biological processes that unfold as a child develops with knowledge of the social and economic processes that influence the formation and stability of families as well as the investments parents make in their children.

Demographers have also made progress in addressing questions about the *causes* of family change and variation. Existing theory and research have addressed potential causes, including economic conditions, available technologies (e.g., contraception, time- and labor-saving devices), the human capital needed to effectively employ these technologies, social institutions, cultural beliefs and values, and couple dynamics and family processes. The relative importance of these factors has been fruitfully debated within the context of the transition from high to low fertility and in regard to changing family forms, but no consensus yet exists as to how these factors relate to one another in producing change and variation in family formation, dissolution, and fertility.

Advancing knowledge about family change and variation is fundamentally important for public policy. As noted above, the family plays a pivotal role in affecting well-being and nurturing children who ultimately become adults themselves, forming their own families. Fertility is a major determinant of population age structure, dependency burdens, and the need for public services such as education. Policies concerned with healthy child development, economic dependency, the support of dependent elders, the containment of sexually transmitted diseases, and sustaining overall physical and mental health must take family change and variation into account. Public policy is not, and has never been, neutral on family issues, and

current policy specifically calls for reducing teen pregnancy and encouraging marriage. An information base that provides a more sophisticated understanding of the processes that create family change and variation would contribute to guiding policy formation.

This information base requires two kinds of research priorities. On the one hand, there is an ongoing need for monitoring and in-depth description of demographic trends. This type of research provides the foundation for the knowledgeable interpretation of population trends and the formulation of research questions. On the other hand, there is a need for models that explain how and why population change occurs. This type of research is necessary to understand how existing or potential public policies affect families and family formation, and how other kinds of change—economic, institutional, and cultural—can interact with and complicate policy effects. In the past, analysis of national survey data that incorporate prospective or retrospective life histories has contributed to both kinds of research, but researchers are increasingly questioning the suitability of these approaches to testing explanatory models of family change.

### **Motivation for the Project**

This project was funded to create visions and plant seeds. In the early years of the twenty-first century, DBSB believed that the time was ripe for taking stock of what we had achieved in the area of family and fertility research and thinking creatively about how to help these areas of inquiry advance. The environment of science and the environments of the people and families that are the focus of our research were changing rapidly. The bridging of disciplinary boundaries was leading to a new integrative understanding of human behavior and opening new toolkits that could enrich demographers' approaches to learning about the family. DBSB believed that the investment of protected time and resources for a talented and motivated group of scientists could produce fresh insights about the family research agenda and innovative approaches to collecting data.

Facilitating strategic planning of this kind is a central part of the DBSB mission. The Branch takes its cues for such activities from periodic formal planning activities involving scientific experts, the scientific expertise of Branch staff, and the experience and perspective gleaned from overseeing a large and diverse portfolio of demographic research and interacting with the scientific communities that contribute to the research. Several developments prompted the Branch's thinking about a stock-taking exercise. The NSFH was winding down after having dramatically enhanced research on the family. The Branch had hosted or co-hosted several national conferences on fatherhood, marriage, and measurement of family patterns. National data on marriage, fertility, and other aspects of family were, in the view of many, failing to keep pace with research needs; vital statistics on marriage and Current Population Survey (CPS) data on marital and fertility histories had been discontinued. New knowledge about the family was spurring interest in the contributions of non-resident fathers, the high prevalence of turnover in children's family living arrangements and the changing meaning of marriage as issues for scientific study. The field of demography was evolving, embracing multi-method studies, questioning traditional approaches to causal modeling, and looking for innovative ways to link micro- and macro-level analyses. Clearly, new investments in family research would be both necessary and productive, but it was not obvious how resources could best be deployed to advance the field.

The project also grew out of a desire to explore the potential for innovation in demographic research on family and fertility. We wanted to explore whether new models of

research could be fashioned to extend beyond the limitations of existing studies. These perceived limitations included the following issues:

- The preponderance of existing family research is based on individual-level analyses of individual-level data. These methods produce valuable knowledge about the determinants of variation in individual behavior, and about the factors contributing to different distributions of family patterns by race, ethnicity, education, and other dimensions. However, explanatory models of individual differences do not necessarily help to explain changes over time in population patterns of family behavior. Our understanding of the relationship between the determinants of individual behaviors and those that drive change at the population level remains incomplete.
- Individual-level studies also often lack information on the complexity of family relationships, including the parts men play in family formation and family life, the important influence of couple-level dynamics in influencing family behaviors and outcomes, and the influence of family members who do not reside in the same household.
- The cross-sectional designs of some existing surveys are highly suitable for monitoring trends but not for other research uses. Despite conscientious efforts to collect valid life-history data on key variables in cross-sectional surveys, many variables needed for causal modeling cannot be measured adequately with retrospective reports.
- Existing research on the causes of family behavior and change is limited by the well-known challenges of deriving causal inferences from observational data. Social scientists have increasingly turned to experimental methods and the use of “natural experiments” to circumvent these challenges, but these approaches tend to have limited external validity. There is an evolving debate over the standards of evidence for drawing causal inferences in the social sciences, and it is unclear whether existing standards effectively address causal processes in the context of complex systems.
- Most scholars who have conducted family and fertility research in recent decades have tended to focus on either family or fertility outcomes, partly in response to the specialization of existing surveys on one topic or the other. DBSB has been urged to facilitate the integration of these lines of research; progress toward this goal has been made, but much remains to be accomplished.
- Most research has been grounded in the theories and quantitative research traditions of demography, sociology, and economics. These fields have been crucial in advancing scientific knowledge in the areas of family and fertility. However, a broader approach may be helpful in studying the causes of family change and variation. Developments in social network modeling, qualitative methods, spatial analysis, the collection of biomarkers in large-scale surveys, the study of culture, gender, and communities and other contexts have opened the door to richer cross-disciplinary approaches that can extend earlier research. Advances in neuroscience, behavior genetics, and psychology (particularly in the areas of human development, couple dynamics, and family systems) also hold promise for extending our understanding of family change and variation.

## Project Goals and Charge

The long-range goal of the Explaining Family Change Project was to improve scientific knowledge about the factors and mechanisms that lead to change and variation in family and fertility. This included understanding changes over time and subgroup variations in aggregate patterns of marriage, divorce, cohabitation, childbearing, sexual behavior, parenting, and other family processes. The immediate goal of the project was to develop and execute a substantive, interdisciplinary research-based planning process to develop innovative models for research and data collection on family and fertility in the United States. The Request for Proposal (RFP) called for the development of “new models for research and data collection” to advance scientific understanding of at least two central research questions:

- What factors and processes produce family change in populations over time?
- What factors and processes influence variation in family change and behavior among racial, ethnic, socioeconomic, regional, and cultural groups, and among men and women?

The RFP also allowed for the exploration of complementary research questions to the extent possible. Examples given in the Request for Application (RFA) included biological influences on family behaviors, meanings associated with family formation strategies, the effects of gender, individual and couple decision making related to family choices, the allocation of family time and resources in relation to family behaviors, the effects of social and economic institutions on family change and variation, and the relationship between assisted reproductive technologies and socioeconomic differences in the timing of fertility.

It was implicit that the project would need to consider family behaviors at the individual and family levels in the process of addressing issues of aggregate change and variation. Although the initiative focused on the United States, it was recognized that research on population change and variation in diverse settings around the world is necessary to inform theory and produce scientific findings that improve the understanding of U.S. family patterns.

To achieve these goals, the RFP specified that the project should undertake a number of steps, including:

- Proceed under the direction of a Principal Investigator in conjunction with a core working group of six to eight members;
- Seek input from a broad range of scholars, including those who conduct work in population research and other potentially relevant scientific areas, as well as specialists in public policy;
- Conduct reviews of existing research, identifying gaps and challenges;
- Conduct reviews of the major existing sources of data available for descriptive or explanatory research on fertility and family;
- Review policy-related issues related to U.S. fertility and family patterns;
- Assess theories and methodologies (including methods of causal inference) from a wide variety of disciplines (e.g., anthropology, biology, demography, economics, family studies, policy, psychology, and sociology);

- Develop a theory or set of theories to explain family change and variation that integrate and build on major approaches in different disciplines;
- Develop a model or models for research and data collection to integrate and extend existing knowledge about the causes of family change and variation.

The new models developed by the project were to serve as a resource for family and fertility researchers addressing a broad set of policy-relevant and scientific questions. As implied above, these models were to reflect a multidisciplinary theoretical approach or set of approaches to family research, permit the testing of hypotheses drawn from a broad set of theories and disciplines, and reflect methodological approaches drawn from a variety of disciplines. The models could consist of multiple components; they were to complement existing data resources on family and fertility and have the flexibility to accommodate potential uncertainties in funding availability.

## Chapter 1

### **Explaining Family Change and Variation: Background, NICHD Charge, and Project Overview**

In December 2002, NICHD issued a Request for Proposal (RFP) entitled “Designing New Models for Explaining Family Change and Variation.”<sup>1</sup> The charge to researchers was to develop a model for a coordinated program of research and data collection for the study of the family that would address the following questions:

- a) What factors and processes produce family change in populations over time? b) What factors and processes influence variation in family change and behavior among racial, ethnic, socioeconomic, regional, and cultural groups, and among men and women? (RFP NICHD 2003-03, December 2002, p. C-1).

The RFP was motivated by the progress researchers have made in describing the causes of change and variability in family processes across groups, but also the continued changes in U.S. families, how these changes alter the lives of individuals and the need to better understand those changes.

#### **Background for the 2002 RFP**

More than 20 years ago, the Demographic and Behavioral Sciences Branch (DBSB) of the NICHD issued an RFP to “provide an assessment of the state-of-the-art of research in the family and household structure area, and recommendations regarding the content and strategy of a large-scale data collection effort on the causes and consequences of changing family and household structure” (RFP No. NICHD-DBS-83-8, May 1, 1983, II-1, p. 5). Several family trends motivated the 1983 RFP: delayed marriage, smaller families, increasing numbers of mothers who combined paid work with caring for children, high divorce rates, cohabitation, and improvements in life expectancy that allow parents to see their children age through adulthood and their grandchildren form new families of their own. In 1983, existing data were inadequate to fully describe these key changes in family processes and the effects of these changes on individuals. Researchers wanted to know more about family caregiving and childrearing, family extension and inclusion of non-family members, the organization of step-families, the division of household and family labor, and exchanges of time and money between households.

The result of this RFP was the launching of the National Survey of Families and Household (NSFH), one of the most widely used data sets to study families during the past two decades. The call for “recommendations regarding the content and strategy of a large scale data collection effort” and the subsequent use of the NSFH reflected the assessment by NICHD program staff and scholars in the demographic community that the central scientific issues were a lack of systematic data on families and the accompanying development of measurements for key theoretical concepts. Although the scientific community rarely agrees on which theoretical

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<sup>1</sup> The RFP is available at [www.soc.duke.edu/~efc/Docs/RFP-2003-03.pdf](http://www.soc.duke.edu/~efc/Docs/RFP-2003-03.pdf).

approaches are the most promising to pursue, in 1983, social scientists did agree that they needed new data to describe and explain changes and variation in family and household structure.

Since then, the NSFH and other large-scale data collection efforts sponsored by NICHD—such as the widely used National Longitudinal Survey of Youth (NLSY) and the National Survey of Family Growth (NSFG)—and smaller-scale studies have documented dramatic changes in the timing and circumstances of family formation and fertility, the development of new family forms, and the implications of these changes for individual well-being. They have also documented substantial variation in these family forms across racial and ethnic groups. As Christine Bachrach noted in the preface, large studies supported by DBSB, such as the Fragile Families and Child Wellbeing Study (Fragile Families); Welfare, Children and Families: A Three City Study; and the Los Angeles Family and Neighborhood Survey (LA FANS) have examined family behaviors in these specific types of families and are providing more detailed insights about subgroup variation in family behaviors. At the same time, increased attention to collecting data on both women’s and men’s experiences of family formation and dissolution has contributed to more systematic assessments of the causes and consequences of gender differences in family life.

Much has also happened on the theoretical front since 1983. Theories developed for other applications have been applied to family life (such as theories of the firm and social network theory), and new foci ranging from gene-environment interactions to macro-level ideational change have altered how demographers understand family change. At the same time, families themselves have changed as has the world around them. (See Appendix 1.A for descriptions of some of these changes.) Step-families formed by cohabitation and remarriage are increasingly common as the cohorts of children who more frequently experienced step-family life are reaching middle and older age. Families once largely ignored in large-scale surveys, for instance immigrant families and gay and lesbian families, have become more visible. Finally, improvements in the technology of data collection from the molecular level to the level of complex social interactions along with the demonstrated success of many mixed-methods projects provide new opportunities to describe the mechanisms of family change and variation.

New developments in theory and method, new questions about family life, and the evolution of many large-scale research projects tapping different aspects of family life and pointing the way to possible methodological innovation led to questions not often posed in the past: How does the increase in life expectancy affect family life when four generations may be alive at the same time? To what extent are children and parents of cohabiting partners treated as family members? Why are marriage and parenthood linked for some racial, ethnic, and economic groups but not for others?

### **New Models: Then and Now**

The RFPs in 1983 and 2002 had some common motivations. Both recognized the essential roles for theory, measurement, and data collection. An important difference, however, was the emphasis on “large-scale data collection” in the earlier RFP and an emphasis on “developing new models” in the most recent RFP. The different emphasis reflects what the scientific community saw at each time as the element most responsible for holding back scientific progress on understanding family change. It is in part the success of past NICHD-funded data collection

programs that have generated a set of new questions for which existing theoretical models seem inadequate.

The call for new models has two meanings in the context of the 2002 RFP, both of which we address in this report. The first refers to the process by which researchers collaborate to develop and carry out a research program. NICHD has supported diverse organizational strategies to advance a multidisciplinary and multimethod understanding of families. These include multidisciplinary advisory boards and workshops to inform the design of major studies (such as NSFH and NLSY), interdisciplinary research teams for study design and data collection (such as National Longitudinal Survey of Adolescent Health [Add Health], LA FANS, and Fragile Families), and coordinated data analysis efforts, such as those undertaken by the NICHD Family Structure and Child Wellbeing Network, to name only a few examples. These strategies informed our own approach to developing models of collaboration.

The second meaning of models in the RFP is as a synonym for new theoretical approaches and innovations in applying and integrating existing theories, a blueprint for data collection and research. The RFA states:

NICHD seeks to develop a model (or models) for a coordinated research and data collection program reflecting a multidisciplinary approach to the study of family change and variation. The model research and data collection program will address previously disparate streams within family research, including research on fertility, marriage and cohabitation, sexual behavior, and parenting, and will have the potential to significantly advance understanding of the factors and processes that drive family change at both the individual and societal levels. The model(s) may have several components which together comprise a coordinated program of research capable of testing specific, theoretically driven hypotheses while also serving as a resource for researchers addressing a broad set of policy-relevant and scientific questions.

Interdisciplinary projects supported by NICHD have contributed to a better understanding of similarities and differences across disciplines in what constitutes theory, the meaning of causation, and evidence with which to evaluate the theory. As a result, demographers are adopting new ways to address such old puzzles as:

- Why has fertility fallen, union formation slowed, and intergenerational transfers reversed their flow in developed economies but also in many other—but not all—parts of the world? Why are there exceptions?
- How is the dramatic change in gender specialization in the market and home affecting union formation, fertility decline, and parent-child relationships at young and older ages? Why are these changes occurring?
- Why do mother-child bonds appear relatively more durable in some cultures than those between couples, whereas in other cultures, the bonds within parent-child and conjugal relationships are more similar?

Throughout the course of our work, we have used different models—or ways of organizing interdisciplinary work—to identify the need for new theories and new evidence for evaluating these theories. Our strategy recognizes that theory and standards of evidence do not



have universal definitions, and at the same time we address the common goal of better understanding the causes and mechanisms for family change and variation.

Advancing knowledge about why and how families change is fundamentally important for public policy. Families rear children and provide physical and emotional care to both the young and old in ways that critically affect individual well-being. Fertility (becoming a parent) is a major life goal for many individuals and couples. Biological relatedness provides fundamental ties from which families are constructed. Fertility is also a major determinant of population growth, age structure, dependency burdens, and the need for public services such as education. Increases in life expectancy and immigration also affect these outcomes in ways that policymakers care about deeply. Policies concerned with healthy child development, economic dependency, the difficulties of combining paid work and family care, the containment of sexually transmitted disease, and sustaining overall physical and mental health must all take family change and variation into account. Understanding how families vary in the challenges they face in rearing children and caring for each other can improve public policies designed to improve individual health and well-being. Knowledge about what *causes* these variations in family behaviors provides much-needed insight into which policies are likely to be successful and which policies are not.

### **Taking Stock and Challenges of Moving Forward**

Demographers have a long and successful tradition of describing family and fertility trends. Without this monitoring of the “facts,” policymakers would not be able to anticipate future needs—such as resources necessary for schools, health care, or Social Security in coming years. The statistical portraits provided by descriptive analyses are essential for characterizing the behaviors and relationships that theories must explain. Drawing inferences about what *causes* these observed relationships or patterns of change is much more challenging in general and for studying family-related behaviors in particular.

Despite the consensus that led to the NSFH as a way to describe new types of family relationships, there is always a tension between devoting resources necessary to *monitor* demographic trends and devoting resources to research on *why* these trends occur. Both undertakings are vital endeavors for the scientific and policy community. The distinction between monitoring and explaining is not clear cut, but in general the design requirements for theory development and testing often differ from those that are appropriate for describing and monitoring family change and variation.

Monitoring change is usually done in large-scale, repeated cross-sectional data collections. The limitations of designs developed to monitor family change and variation are well known. First, the cross-sectional design of some existing surveys limits their usefulness; many variables needed for causal modeling cannot be measured adequately through retrospective reports. Second, most existing family research is based on analyses of individual-level data; however, family processes by definition include more than one person. Without information about other actors such as wives, husbands, or partners, mothers and fathers, parents and children, their motivations, and the factors that affect their actions (or inaction), demographers can neither fully describe nor explain why family relationships change over time or vary by race, ethnicity, or education. A focus on individuals also ignores the broader social world that affects

family behavior. Perhaps most important, studies of individuals ignore the demographic tenet that the behavior of individuals does not simply aggregate to population-level distributions.

Drawing causal inferences is a fundamental challenge for research that examines why families change. Researchers use two broad approaches to determine causation. In one, researchers explain family behavior by emphasizing the distinction between individuals' choices to behave in a certain way—for example, deciding to get premarital counseling—and the *effects* of counseling. Researchers use a range of designs—including directly measuring characteristics and observing behaviors, exploiting naturally occurring variation or exogenous changes in policies or the environment, randomized treatment-control designs, and statistical techniques (e.g., propensity score matching)—to identify the causal factors that account for family change and variation.

In a second approach, researchers consider individuals' own explanations for their family and fertility behavior. This approach takes seriously peoples' accounts of why they live as they do to gain insight into cultural aspects of family change. These accounts and a range of other evidence and observations are weighed in assessing the plausibility of particular causal mechanisms. A successful model for new research on family change and variation must take account of diversity in researchers' understandings of causality and explanation. This may be a particular challenge—and opportunity—for new research on family change as demographers collaborate with researchers whose disciplines and empirical methods have not been part of the traditional landscape of family demography (e.g., behavioral genetics, social networks, neuroscience, ethnography, and psychology).

A final challenge deserves mention as the backdrop for the efforts of our project. A tension exists in developing theory and data that is evident in the choice between focusing on a particular life stage or aspect of family life, on the one hand, and focusing on multiple actors, stages, and dimensions of family life, on the other hand. The former strategy allows for greater specificity in theory development and testing (e.g., about transitioning to adulthood, forming/dissolving a union, becoming a parent), but the specificity comes at the cost of knowledge about how the broader family context affects these experiences (e.g., how parents affect adult children's decisions about cohabitation and marriage; how adult children's relationships with their parents affect the children's relationships with their spouses and their own childrearing). The latter strategy provides information about other types of family relationships (parent-child, couple, sibling) and multiple dimensions of relationships (economic, social, emotional) that foster the development of theories and data about kinship, but the breadth necessary for these comparisons comes with the loss of depth about any single type of relationship. Moving forward requires careful assessment about when scientific progress requires the specificity of a targeted design, and when the comparisons possible with broader coverage offer better hope for improved understanding of family change and variation.

### **Addressing the Challenges and Project Organization**

The NICHD charge to our project requires a broad view of the methods and materials for studying change, a bold and inclusive approach for understanding family change and variation, and a disciplined effort to integrate past contributions with proposals for new research. To address the challenges, we acknowledged from the outset that within our group there would be consensus on some issues and disagreement on others. This range of opinions is also evident in

the advice we received from the population scholars who have generously advised us along the way. We view these disagreements as useful. They have sharpened our focus. Ultimately we believe disagreements were most productive when they helped identify complementary tasks that together have greater potential to move the field forward than an unwavering consensus about a single task.

We adopted a modified version of the organizational strategy outlined in the original proposal, in which we proposed to conduct most activities in small working groups with regular meetings of the full group of investigators.<sup>2</sup> We organized ourselves into three working groups: *parenthood* and fertility; *unions* or couple relationships; and *generations*, or parent-child and sibling relationships.

Each of the groups conducted a coordinated set of activities to assess the state of knowledge in their broad areas and determine the theoretical and empirical steps likely to be most fruitful in moving the field forward. This allowed for a better understanding of the explanations for change and variation in parenting, unions, and intra- and intergenerational relationships. These activities and our conclusions are described in detail in the working group reports, included here as Chapters 2 and 3 (parenting), Chapter 4 (unions), and Chapter 5 (generations). Because the state of theory and existing data differed across topic areas, groups differed in their strategies, as did group members' informed judgments about critical needs and the most productive way to address them. We have facilitated communication among groups through regular meetings of the full project team, by involving each other in group-sponsored workshops and conferences, and circulating manuscripts to share ideas about work in progress. The next sections summarize very briefly each working group's findings about central needs that must be addressed to advance understanding of family change and variation.

### ***Parenthood***

For descriptive questions about changes in the timing and number of children, the Parenthood Group assesses the measurement of key concepts to be relatively clear, and the measurement of these key concepts well implemented in surveys for over 40 years. As a result, the Parenthood Group focused their work on addressing the need for new theory of fertility or becoming a parent. In its view, no existing theory from any of the traditional disciplines of the population sciences provided an adequate explanation for contemporary fertility change and variation. For example, economic models have emphasized the changing cost of children, especially related to the rising opportunity cost of mothers' time, and have been useful in explaining the fall in completed fertility both historically and currently in developing countries. Yet these explanations are incomplete. Further, in the United States, women's economic opportunities have continued to rise over the last 30 years while completed fertility has remained stable, at just above two children per woman for most of the period. Sociological explanations that emphasize the different meaning of a first, second, and third or higher parity child might help explain the stagnation of completed fertility but beg the question of the origin of these different meanings. The Parenthood Group sought to anchor social demographic theory in social history within frameworks that could account for macro-level stability and change in the social environment.

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<sup>2</sup> The original proposal is available at [www.soc.duke.edu/~efc/Docs/InitialProposal\\_4\\_03.pdf](http://www.soc.duke.edu/~efc/Docs/InitialProposal_4_03.pdf) and summarized in an article that appeared in the November 2005 issue of *Journal of Marriage and Family* ([www.soc.duke.edu/~efc/Docs/pubs/ExplainingFamilyChange\\_JMF2005\\_final2.pdf](http://www.soc.duke.edu/~efc/Docs/pubs/ExplainingFamilyChange_JMF2005_final2.pdf)).

A second key question in fertility research is what explains the well-documented fact that large fractions of U.S.–born children are reported to have been unwanted or mistimed. Although it might be possible to augment a rational choice approach by incorporating the gratification of sexual activity and the costs of birth control and abortion, the Parenthood Group’s reading of the literature was that too many women looked back and questioned their judgment to conclude that the driving force behind pregnancy was a careful calculus of costs and benefits. Impulsivity and ambivalence seem to have characterized many of these pregnancies. Therefore, understanding why impulsivity and ambivalence seem so salient in pregnancy and its outcomes deserves intellectual investment. The Parenthood Group was struck by the potential for new understanding that could be gained in this area by insights from neuroscience, psychology, and anthropology about the constraints on human cognition. Thus, it sought a theory that would integrate choice, constraints, and cognitive processes.

In sum, the Parenthood Group embraced the broad challenge to develop an integrative and innovative model of fertility (and family) change and variation that includes mechanisms from across the sciences, from social history to neuroscience.

### *Unions*

The Unions Group recognizes the considerable progress made in recent decades in understanding the contours of couple relationships in the United States. The NSFH, for example, provided much needed data on nonmarital cohabitation to document the large cohort rise in cohabitation, that cohabitations quickly ended in either marriage or separation, and that couples who lived together prior to marriage had higher rates of divorce than couples who did not. The group identified aspects of couple relationships that are not well explained by existing theories within the field of population studies that would benefit from integration with theories from allied fields. For example, there is increasing availability of data on the division of responsibilities between couples in households and in the division of resources; there are almost no systematic, large-scale data on the process by which couples negotiate these decisions. Also, although there is theory from psychology, especially from the fields of developmental science, family systems, and clinical psychology, on what leads to successful resolution of conflicting interests within relationships, there are no data from population-based samples, nor have these processes been considered within more traditional choice models of the division of resources and responsibilities in families. For this reason, the Unions Group’s recommendations for making progress on this issue concentrated on change in both the data requirements and theory development. Incorporating psychological theory into traditional choice models could lead to more illuminating theory. In addition, incorporating assessments developed in a clinical setting, research laboratory, or extensive home observation into longitudinal surveys may be useful for testing these new theories and for describing within-household dynamics.

### *Generations*

The Generations Group, like the Unions Group, characterizes the decades since the NSFH as a period of significant progress in theory and data on relationships across and within generations. The Health and Retirement Study, special topics modules in surveys such as the Panel Study of Income Dynamics, and the advent of the Generations and Gender Programme in Europe contribute to new facts about the implications for intergenerational relationships of increased life

expectancy, smaller families, cohabitation, union dissolution and formation of new partnerships, and higher rates of women's employment. A striking feature of these and related efforts is the theoretical and empirical difficulty of explaining family change and variation in a way that takes into account individual aging throughout life—not simply starting with adulthood or older age, but rather earlier in life—and the linked lives of parents, children, spouse or partners, and siblings. For instance, if mothers mediate the relationship between young children and their father, this may affect children's willingness and ability to provide emotional support to their father if their mother is in poor health later in life. Similarly, parents' decisions about postmarital cohabitation and remarriage have lasting, sometimes unanticipated, consequences for the economic support young adults receive when they leave their parents' household, for the quality of relationships between biological and step-siblings in adulthood, and for how adult children care for their aging parents.

Efforts to address the theoretical and empirical challenges must be integrated, although individual projects may emphasize theoretical goals over empirical goals and vice versa. The Generations Group sees new opportunities to advance existing theory by addressing theoretical puzzles uncovered in previous empirical work (for example, why parents treat children equally when they make bequests, but distinguish among them when they make transfers during their lifetime) and by expanding the boundaries of the phenomena that theories seek to explain (for example, by moving beyond a focus on actual transfers to include individuals' perceptions about their ability to get a transfer if they needed or wanted it and the dynamics of expected and actual transfers across the life course). Ethnographic efforts to learn more about the transformation of quasi-kin relationships into family relationships (e.g., children in multipartnered fertility families) have substantial potential to guide new, large-scale data collection to address explanations for change and variation in inter- and intragenerational relationships. Insights from existing data also point to the need for innovation in measuring central theoretical constructs in the traditional disciplines that inform population studies, such as norms and attitudes about obligations, altruism and caring, and dimensions of generational ties that are not well measured in existing studies (e.g., insurance value of kin). At the same time, new technologies of data collection provide opportunities to expand theories of generational relationships that take account of gene-social environment interactions that affect the type of child, sibling, and parent an individual becomes. Finally, improvements in survey designs also offer great potential for improving researchers' understanding of family change and variation to the extent the designs take account of multiple family actors, some of whom coreside and some of whom do not (e.g., non-resident fathers of divorce or nonmarital childbearing, adult siblings, middle-aged adults and their adult children).

## Summary

Our three working groups have several common themes in the conclusions we draw. All the groups recognize the significant achievements of the NSFH, NLSY, NSFG, and other surveys addressing the family as well as the population science accomplished using the available data. All identify ways that theories from the disciplines conventionally represented in population studies can be enhanced by drawing on insights from disciplines not previously under the population umbrella. Each group points to the opportunities offered by new technologies and methods of inquiry beyond those of large-scale survey data sets, although for some topics we

need new large-scale data collection. Each group proposes enhancements to existing data sets through modifications to survey design and content. All believe that the traditional field of population studies, as well as fields not traditionally in our purview, has much to gain by drawing on the insights these diverse approaches offer for explaining the multiple facets of family life. We return to these common themes in Chapter 6 in which we present recommendations for a coordinated program of data collection for research on family change and variation.

## Chapter 2 Variation and Change in Parenthood

Christine Bachrach, S. Philip Morgan, Hans-Peter Kohler, Jenna Johnson-Hanks

The Parenthood Group chose the title “parenthood” rather than “fertility” to stress the range of ways individuals become parents—for example, not only through unassisted (or natural) pregnancy and childbirth, but also through assisted reproductive technology and adoption. We also acknowledge important overlapping concerns with the Unions Group (e.g., the relationship context of parenthood) and the Generations Group (e.g., resource flows between parents and children). The main focus of the Parenthood Group’s efforts during the EFC contract was on theory development, not substantive issues. In our assessment of existing research and data, we believed that theory enrichment would most productively stimulate new advances that explain how and why the process of becoming a parent has changed and why it varies across groups. The theoretical work of the group is reported in Chapter 3. In this chapter, we summarize the state of research on “the path to parenthood” via childbearing or adoption. Our central focus is on fertility—as this remains the predominant means of becoming a parent—in the United States and other industrialized countries.

This chapter begins with a selective review of the facts about fertility patterns and change, with a focus on developed countries and the United States in particular. The chapter develops a set of key questions that extend existing lines of research in fertility and parenthood and explore research opportunities that are newer and less well-developed. Two subsequent sections examine the adequacy of existing data resources for studying these questions and existing and new theoretical approaches. The final section offers research recommendations.

### Fertility Patterns and Change

In most countries, fertility has declined dramatically during the last half-century, but substantial variations in fertility levels remain (see United Nations 2005). Fertility remains well above replacement levels in many African countries and in some Asian and Latin American and Caribbean countries, but fertility levels in developed—and increasingly some developing—countries are below replacement levels (total fertility rate [TFR] < 2.1). In Europe and East Asia, fertility has dropped to very low levels (TFR < 1.5). The United States is a rare case among developed countries, with aggregate fertility near replacement levels (see Morgan 2003).

Low-parity births (particularly one child and a sibling) remain strongly normative and fulfill women’s or couples’ strong desires to be parents, although one-child norms may be emerging in some European low-fertility countries (Goldstein, Lutz, and Testa 2003). Ideal and intended family sizes of young women in the United States are usually two, with three being the second-most popular choice (Hagewen and Morgan 2005). Childlessness and one-child families are not seen as ideal and are not commonly intended. High-parity births are increasingly rare; they are frequently viewed as disadvantageous for parents, siblings, and society more generally.

Social movements opposing low-parity families—such as the Quiverfull movement<sup>1</sup>—are small and decidedly outside the mainstream.

In many contexts, the timing of childbearing (the parents' ages, prior births, marital status, or other life activities, for example) is the key issue facing would-be parents. Fertility postponement is a significant contributor to contemporary low fertility. Postponement is well established in developed countries and is pervasive across developing countries. This shift in the timing of childbearing is related to important changes in the integration of childbearing into the individual's life, changes in the sequencing of fertility with respect to other important life-course events (such as marriage), and changes in gender equality within and outside the household. Fertility postponement is also important from a demographic perspective because it lowers current period measures of fertility relative to cohort measures<sup>2</sup> (or to period measures adjusted for these timing shifts) (see Bongaarts and Feeney 1998). Postponement also is generally associated with fewer children at the cohort and individual levels (Kohler, Billari, and Ortega 2002; Morgan and Rindfuss 1999).<sup>3</sup>

In many parts of the developed world, births often occur to unmarried parents (Sardon 2004:Table 9). Increases in nonmarital childbearing in the United States are strongly related to the delay of marriage and the decreasing propensity to legitimize premarital conceptions through marriage (see Parnell, Swicegood, and Stevens 1994). The proportion of U.S. births born to unmarried parents has been increasing steadily during the last half-century (Smith, Morgan, and Koropecj-Cox 1996), reaching 36% in 2004 (see Martin, Hamilton, and Sutton 2006). Between 40% and 50% of these births are to cohabiting couples, rather than single parents; this proportion of cohabiting births is even higher in many European countries (Kiernan 2001).

In most contemporary contexts, parents incur high direct and indirect costs in rearing children (Becker 1981; Willis 1973). Indirect costs are substantial and primarily reflect the mother's forgone earnings due to pregnancy, childbirth, and childrearing. Direct costs are also substantial and are more easily and regularly calculated (see Lino 2004). However, the costs of parenthood depend on norms about how children should be reared and provided for and institutional and economic structures that ease or impede conflicts between parenthood and other life domains. It has long been argued, for example, that child-care services would ease work–family conflict and increase fertility; new research that allows for the endogenous effects of day-care-center placement<sup>4</sup> shows such positive effects (see Rindfuss et al. 2007). Less research has addressed other institutional features such as flexible work schedules, costs of services produced in the market (for example, take-out food, laundry or cleaning services), or normative issues beyond the acceptability of combining work and motherhood.

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<sup>1</sup> Quiverfull is a movement that promotes large families and opposes any form of contraceptive. The movement is centered among evangelical Christians in the United States. See <http://en.wikipedia.org/wiki/Quiverfull>. For a Quiverfull self-description see [www.quiverfull.com](http://www.quiverfull.com).

<sup>2</sup> Period fertility measures refer to births or birth rates for a given year (or years). Fertility postponement can shift births from the current year into the next one and thus lower fertility in the current period. Cohort fertility refers to lifetime births or birth rates and is thus not influenced by timing, given that births occur.

<sup>3</sup> Postponement of fertility can reduce the likelihood that births ever occur, but this is distinct from the effects of timing per se on period fertility.

<sup>4</sup> Rindfuss et al. (2007) argue that day care centers are established in places where the parenthood–work conflict is most severe. This nonrandom placement of centers creates a negative association between day care centers and fertility. However, once this nonrandom placement is modeled, the expected positive association is observed.



Throughout the world, dominant norms and cultural frames, or *schemas*,<sup>5</sup> legitimate active birth control to influence the timing and number of births. It is widely accepted that family size and the timing of children affect individual and family well-being and that strategizing about these decisions is legitimate. Cultural schemas of “birth control” in affluent countries are beginning to include the “quality” of children, such as preconception care, pre-implantation genetic tests, genetic tests during pregnancies and abortions of children carrying risks of genetic diseases, and conscious selection of both sperm and egg donors during infertility treatments. The use of new technologies of reproduction, such as in vitro fertilization, has increased substantially in recent decades. The legality and funding of the new reproductive technologies vary widely between countries, and also within the United States (Nachtigall 2006; Schmidt and Bitler 2006).

### ***Becoming a Parent in the United States***

Among industrialized countries, the United States is unusual in its near-replacement fertility rates—and therefore above the level in most other industrialized countries—for most of the past four decades. In part, these relatively high rates reflect the racial and ethnic diversity of the population, which is fueled by immigration (Bean, Swicegood, and Berg 2000). For example, National Center for Health Statistics data show (see Martin et al. 2006) that the rapidly growing Hispanic population has higher fertility (TFR = 2.8 in 2005) than other groups, including African-American (TFR = 2.02), Asian/Pacific Islander (TFR = 1.90), and non-Hispanic whites (TFR = 1.85). Hispanic and African-American women have children earlier than do other groups, but at the same time, birth rates among women under age 20 have declined dramatically since the early 1990s, particularly among African-Americans. There are also important fertility differences by socioeconomic class. More-educated men and women delay childbearing substantially and have a lower completed fertility than their less-educated counterparts (see Rindfuss, Morgan, and Offutt 1996). The proportion of births to unmarried couples also varies substantially by race, ethnicity, and socioeconomic status (Wu and Wolfe 2001). Although rates of nonmarital childbearing remain higher among African-American and Hispanic women, increasing overall rates of nonmarital childbearing are largely due to increases among whites (Martin et al. 2006)

There are also sharp fertility differences by measures of religiosity and value orientation. Although denominational differences (such as Protestant versus Catholic) are modest, data in the National Survey of Family Growth (NSFG) show that those who report religion as “very important” (versus not important) in their lives have and intend more children (see Hayford and Morgan 2008). This fertility differential exceeds one-half of one birth, thus approximating the differences observed between the United States and Europe. Hayford and Morgan argue that greater religiosity implies that traditional family schemas (ones privileging the wife and mother roles over non-familial roles) are more likely to be invoked than postmodern ones (that legitimate self-actualization and independence). Similarly, Lesthaeghe and Neidert (2006) link geographic variations in U.S. fertility to different political behaviors, such as voting in presidential elections. Voting, they argue, reflects ongoing “cultural wars.” Postmodern values, which deemphasize religion and traditional family values, and late and low fertility, they argue,

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<sup>5</sup> A schema is a mental structure that represents some aspect of the world and is shared among a population. People use schema to organize current knowledge and provide a framework for interpreting events. See Chapter 3 for a full discussion.

are part of a package of beliefs and behaviors that they consider a *second demographic transition*.

Rates of unintended pregnancy in the United States are substantially higher than in most other developed countries (Jones et al. 1988). Although overall these rates have remained relatively stable during the past decade, they have increased among women of low socioeconomic status (SES) and decreased among high SES women. The unintended birth rate has risen slightly, with dramatic increases among poor and near-poor women (Finer and Henshaw 2006).

In vitro fertilization (IVF), gamete donation, and surrogacy have all become more common and more accepted (CDC Reproductive Health 2006; Wright et al. 2005). In 2004, 1% of U.S. births were conceived through IVF. This percentage, however, is relatively low compared with some European countries with later patterns of childbearing and more comprehensive coverage of IVF through health insurance (e.g., Billari et al. 2007a). The practice of adoption has also changed significantly in the United States. Thirty years ago, most adoptions in the United States were domestic, organized by agencies, and the identity of the birth mother was strictly secret. Today, both “open” adoption and international adoption are widespread.

### **Theoretical Approaches**

Existing theories of fertility levels and trends in low fertility contexts vary on a number of dimensions (see Morgan and Taylor 2006). We focus here on five:

1. Focus on proximate or distal causes
2. Degree of specificity regarding causal forces, as opposed to offering a framework for interpreting putative causes (life-course and developmental perspectives)
3. Behavioral assumptions
4. Theoretical scope (across time, space, etc.)
5. Theoretical content (the putative causal factors on which they focus)

Existing theories “cluster” in the intellectual space spanned by the above dimensions. We consider each of these dimensions in some detail.

#### ***Focus on Proximate or Distal Causes***

Whereas most fertility models focus on distal causes, the well-known proximate determinants and widely used decompositions can often “account” for changes or differences in fertility, even when the ultimate causes are unknown. For instance:

- Analysis of fertility separately by parity shows that overall fertility declines are driven primarily by declines in the likelihood of higher parity births, that is, by declines in the proportion of women having three, four, or more children.

- Net of parity distributional shifts, fertility postponement exerts downward pressure on period fertility rates. This postponement has variable effects on cohort or completed fertility (“recuperation”).
- Fecundity, coitus, contraception, and abortion are key proximate determinants in low fertility settings (length of postpartum period without ovulation is also relevant in high fertility contexts and depends on duration and intensity of lactation).
- Fecundity declines with age (approximately linearly on a log scale) and with disease history.
- For most aggregates, coital frequency within marriage or stable unions is in ranges that have only modest aggregate effects on fertility. Huge variation exists in the frequency of nonmarital coitus.
- Level of contraceptive use, effectiveness of use, and contraceptive choice vary widely across populations.
- Acceptability and use of abortion varies widely across populations.
- With the exception of declines in high parity births, none of the other compositional components or proximate determinants follow relatively simple secular trends.

***Degree of Specificity Regarding Causal Forces, as Opposed to Offering a Framework for Interpreting Putative Causes (Life Course and Developmental Perspectives)***

Important conceptual insights for fertility are captured in frameworks largely devoid of putative causal factors. For instance, at the individual level, women’s (men and couple’s) fertility histories unfold in tandem and in interaction with human capital formation, mental and physical health trajectories, and other key aspects of their and their partner’s life course. Despite its lack of specificity, the life-course perspective is the unquestioned, appropriate analytic frame for contextualizing fertility intentions and behavior. This framework can incorporate a range of decision-making models and theories that posit roles for the economic, political, and institutional environment and for ideologies and attitudes.

***Behavioral Assumptions***

Explanation at the individual level has frequently drawn on psychological and economic decision-making theories (such as expectancy-value theory and rational choice). For instance, persons maximize utility or at least act in ways that do. An alternative cultural/social model posits that persons behave according to “scripts” or schema, with utility maximization as only one script. Scripts are determined by context of interaction and individual agency. Both approaches focus on concepts such as socialization, identity, social influence, and social control to explain individual variations in pregnancy and fertility.

***Theoretical Scope (across Time, Space)***

A fundamental theoretical dimension is its implied scope, and to what groups, times, or places it applies. Scope can range from grand to idiosyncratic. Most theories of fertility have intended to

be of grand scope, even when certain of their assumptions have been historically and culturally bounded.

### ***Theoretical Content (Putative Causal Factors on which Theories Focus)***

At the macro-level, a broad set of theories has been advanced to explain fertility change. A brief review follows. These macro-level theories delineate a range of contextual influences that may shape fertility behaviors at the individual level.

**Explanations stressing economic change**—Demographic transition theory holds that economic development lowers mortality; in turn, both of these factors lead to a subsequent fertility decline (Notestein 1945; 1953). Other economic change explanations share common elements: economic development drives a process of social change (including institutional changes and changing roles, expectations, and opportunities of women) that is at odds with the social organization characterized by a kin-based, familistic society (Davis 1937; 1997; Davis and Van den Oever 1982; Thompson 1929). Economic development undermines incentives for childbearing, particularly at parities greater than two (Bulatao 1981; Livi-Bacci 1999). Direct costs of educating children play an important role, but indirect costs are likely more consequential (Becker 1981; Becker and Lewis 1973; Blau and Robins 1989; Caldwell 1982; Mason and Kuhlthau 1992). Industrial society constructs “achievement ladders” that place demands specifically on women and heighten the importance of education for both sexes and for children (Caldwell 1982). Economic development and globalization are pervasive causal forces that fit the requirements for a fundamental “driver” of fertility decline around the globe (Caldwell and Schindlmayr 2003). A variation on these explanations acknowledges the roles played by birth control technologies (such as the contraceptive pill) and new rationales for controlling fertility (for example, concern about rapid population growth) in accentuating and hastening fertility decline (Caldwell 2001).

Other, more idiosyncratic explanations focus on markets and economic change as driving forces for fertility declines in specific nations and regions (e.g., Kreyenfeld 2003). Notable among these is the “crisis” argument that upheavals caused by the fall of communism had social consequences (Caldwell 2004), including an insecurity about the future or personal disorientation in addition to economic hardship (Conrad, Lechner, and Werner 1996; Eberstadt 1994; Philipov 2002; Witte and Wagner 1995). Nations such as those in Eastern Europe may have unique fertility outcomes after such upheavals (Sobotka, Zeman, and Kantorova 2003). The crisis explanation, however, has not been substantiated at the micro-level in Russia (Kohler and Kohler 2002). In addition, the argument that upheaval and uncertainty *promote* fertility has also been forwarded (Friedman, Hechter, and Kanazawa 1994).

**Explanations stressing the importance of ideological change**—Mason (1997: 450) argues that “theories of fertility change must recognize that changing perceptions ultimately drive fertility change, and that perceptions may change more slowly or more quickly than the reality with which they are concerned.” Behavioral change, including fertility change, results from the adoption of new cultural schemas that interpret contemporary contexts in ways that produce low fertility. The emphasis on changed cultural schema does not deny structural changes. Rather, it views as fundamental key shifts in the interpretative frames through which structural changes are viewed and understood

The work of van de Kaa and Lesthaeghe suggests that cultural shifts in dominant mental/cultural schema have been central to fertility changes (Lesthaeghe and van de Kaa 1986; Lesthaeghe and Willems 1999; van de Kaa 1987). The (first) demographic transition reflected schemas that encouraged all those who could have children to bear them, and stressed that parents' should direct substantial resources to their children (Ariès 1962, 1980; van de Kaa 2003). In contrast, the second demographic transition, including the emergence of sustained low fertility and associated demographic change such as increased rates of divorce and cohabitation, was motivated by the spread of individualism, including the concept that having children is optional and parenthood should contribute to individual self-actualization. This new schema is consistent with Giddens' (1991) description of the deinstitutionalized modern life course. A related explanation is Thornton's (2005) argument that a powerful cultural frame or schema, *developmental idealism*, conflates Western wealth and power with Western family forms and Western cultural forms. These ideas have power by association, and Western conceptions of the family may follow or precede economic globalization.

**Explanations stressing institutional change and differences**—The origin of fertility variation and change is often sought in institutional variation and change (see Ryder 1980). For instance, Rindfuss, Guzzo, and Morgan (2003) and Morgan (2003) stress institutional variation that affects (a) availability, acceptability, accessibility, quality, and cost of child care; (b) market substitutes for goods and services formerly produced in the home; (c) labor market accommodations (e.g., flex time); (d) public policy interventions (e.g., family leave); and (e) gender role flexibility and men's contributions to housework and child care.

McDonald (2000) argues that the transition from high fertility to replacement-level fertility is accompanied and encouraged by increasing gender equity within the family. Gender equity promotes lower fertility by increasing the likelihood that women's fertility intentions will be consequential and by increasing alternative avenues to satisfaction, status, and prestige. McDonald's arguments are consistent with those of social demographers (Calhoun and Espenshade 1988; Diprete et al. 2003; Kravdal 1992; Rindfuss and Brewster 1996) and economists (see Easterlin 1980, 1987; Englehardt, Kogel, and Prskawetz 2002; Willis 1973) that gender change increases the opportunity costs of mothers' forgone labor market opportunities. Once fertility is low, gender equity may rise further in individual-oriented institutions (e.g., education, the economy, politics) while remaining relatively low in family-oriented institutions. As a result, fertility can fall to very low levels in societies characterized as more patriarchal but remain closer to replacement levels in more egalitarian contexts (Gauthier and Hatzius 1997; Rindfuss et al. 2003).

Esping-Anderson (1999) identifies institutional clusters that combine different types of labor markets, the state, and the family. Thus, the fertility rate under a social democratic regime (such as Norway) may vary from that in a conservative regime (such as Italy) owing to the balance of the family, state, and market in managing social risks. Defamilialization, or a state's willingness to absorb the responsibilities traditionally relegated to the family, is one response that may allow for earlier and higher fertility (see Brewster and Rindfuss 2000).

**Explanations stressing technological change**—Potts (1997) argues that effective contraception plays a key role in fertility decline and subreplacement fertility. Humans are genetically predisposed to seek sexual relations, to love and support their own children once they are born, and to be socially and sexually competitive; they are not predisposed to have a certain

number of children. Low fertility thus results from severing the link between sex and reproduction by contraception and abortion.

In an argument focused on the United States, Goldin and Katz (2000) argue that the Pill altered women's career decisions through both direct and indirect routes. The Pill allowed a larger group of women to invest in expensive, long-duration training without paying as high a price in terms of abstinence or postponement of unions. In addition, the Pill had a large effect on career and marriage (and by inference, fertility timing) through social multiplier effects.

Regarding technological change more generally, several arguments stress the interaction of technology with economic development and increased productivity. Galor and Weil (1996) argue that technology, by increasing capital per worker, raised women's wages relative to men's. These higher wages reduced fertility owing to the higher opportunity costs of childbearing. This lower fertility, in turn, led to greater investments in technology (i.e., increases in level of capital per worker).

**Explanations stressing multiple domains and their interactions**—In these explanations, the putative causal forces are not derivative solely of economic, ideological, institutional, or technological change. Goode (1963) argues that industrialization, family change, and ideological change are sets of mutually reinforcing factors that were sweeping the globe because of their joint attractiveness: industrialization because of the greater wealth and standard of living it brought; Western ideology because of the widespread desire for greater freedom and choice in life decisions; and the Western family because of its free mate choice, companionate marriage, and low fertility. More recently, Bumpass (1990), Mason (1997) and Thornton (2005) have embraced key aspects of this argument.

**Idiosyncratic explanations**—Other explanations stress the unique details of particular contexts and their unique intertwining. For instance, the historian Ginsborg (2003: 74) explains very low Italian fertility as the distinctive “intertwining of the old and the new in family strategies.” Ginsborg does not dispute some transnational influences, but he also stresses Italian-specific factors that distinctively combined with transnational factors. Many demographers and sociologists have advanced similar arguments (e.g., Morgan 2003 on the exceptionalism of American replacement-level fertility). Recent studies of East and Southeast Asia highlight the path-dependent nature of fertility transitions within the regions and their differing causes (Atoh 2001; Atoh, Kandiah, and Ivanov 2004; Cho 2002; Gubhaju and Moriki-Durand 2003; Prachuabmoh and Mithranon 2003; Yap 2003; Yi 1996).

## Key Questions

### *How Are Fertility/Parenthood Patterns and Trends Changing?*

**Why is this important?**—Describing trends and variations in parenthood provides an essential foundation for demographic and family research as well as public policy. Descriptive research points to important developments that require explanations and also focuses explanation on the key elements of change. One of the key questions facing the United States today is whether current near-replacement levels of fertility will be sustained, and if so, how? The answer to this question has implications for the nation's ability to support its dependent populations,

both young and old; for the solvency of Medicare and Social Security; and for needed investments in future generations of productive workers and citizens. Because most Americans want to be parents, the answers also have implications for the well-being of American individuals and families.

**What do we need to learn?**—Fertility in the United States is monitored through the Vital Registration system, census data, and a variety of survey data collected by federal statistical agencies. These data sources are discussed later in the chapter, along with suggestions for modest changes that would strengthen the monitoring of general fertility patterns and trends. Of particular importance is ensuring that adequate data are in place to measure the fertility of immigrant populations and the patterns of fertility among second and later immigrant generations. Traditional strategies define generations at a point in time and can lead to faulty conclusions regarding whether the fertility of immigrants will converge to levels observed for natives (see Parrado and Morgan 2008). In addition, assimilation into U.S. culture (particularly of successful Hispanics or Asians) and intermarriage pose challenges to understanding effects over multiple generations, as identification with a group can vary dramatically by individual. That is, the children of mixed parentage (say one Hispanic and one non-Hispanic white parent) may choose to no longer identify with the immigrant group (and to identify themselves only as non-Hispanic white in their survey responses). Such identification removes the most assimilated immigrants (perhaps those with lower fertility) from the second, third, or later generations and thus biases immigrant stock populations toward showing continuing differences.<sup>6</sup>

Further, we lack sufficient sample sizes to estimate levels and trends for many immigrant groups. Trends and variation within immigrant populations should be examined both contributing to and influenced by changes in socioeconomic, racial, and ethnic differences in fertility timing and number of children in the United States.

Concerns with the welfare of parents, children, and families dictate examination beyond the number and timing of births to the circumstances surrounding birth and parenthood. Monitoring the circumstances of pregnancy and birth provides markers associated with child well-being—to what extent are children born as a result of an unwanted or unplanned pregnancy; to what extent are they born to a married, cohabiting, romantically involved, or unattached couple? Multipartnered fertility—a life-course concept that refers to having children by more than one partner—is known to be common in some subgroups, but we have very limited information on this at the national level (Guzzo and Furstenberg 2007).

Most of our data on childbearing focus on births to women, but how many men are achieving or forgoing parenthood? Male fertility is not well documented in the United States, in part because of the difficulty of obtaining accurate fertility histories from men (Rendall et al. 1999). Births outside marriage and at very young ages are particularly underreported. One could argue that if the motivation for monitoring male fertility is men's experience of parenthood, then these reporting problems are less worrisome because the underreported births tend to be those that do not result in social—rather than biological—parenthood (Bachrach 2007). On the other hand, variation in men's involvement as social parents raises an interesting and important question: what is the impact of men's level of parental involvement on the well-being of men, their partners, and their children? Addressing these questions requires data from fathers who are distant or estranged from their children as well as those who are more involved.

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<sup>6</sup> Hout and Goldstein (1994) provide an interesting example. In the post-WWII United States, the popularity of identifying as Irish (as opposed to other ethnicities such as German) contributed greatly to this group's size.

A further question is the extent to which gay and lesbian couples are able to achieve parenthood, and through what means. Analysis of census data (Black et al. 2000) suggests that about one-quarter of same-sex coresident couples live with the children of at least one partner, although many of these children have been born within prior heterosexual unions. Monitoring trends in this population is challenging because of a lack of large representative samples of gay and lesbian couples and because of data limitations in the census and many surveys.

Improved tracking of the use of assisted reproductive technologies and incidence of adoption is important, as is monitoring both the “successes” and “failures” of these options. We have basic information about the number of children born as a result of the most aggressive and expensive assisted-reproductive technologies—IVF and egg donation (see CDC Reproductive Health 2006)—but surprisingly little about even the numbers of couples suffering infertility who do not have access to IVF, or the number of children conceived as a result of intrauterine insemination, donor sperm, or the use of ovulation-stimulating medication. When it comes to how these methods are viewed and deployed by couples and the medical establishment, our knowledge is very thin indeed.

### ***Fertility Intentions: What Do They Mean and How Do They Matter?***

**Why is this important?**—As noted above, dominant cultural schemas emphasize the importance of fertility planning. Among recent U.S. births (those in the five-year period prior to the 2002 NSFG; see Chandra et al. 2005: Table 21), an estimated 65% resulted from intended pregnancies. Studies have repeatedly demonstrated the power of reported birth intentions to predict subsequent fertility (Schoen et al. 1999). Although intentions predict fertility levels better at the aggregate than individual level, individual intentions remain one of the most powerful predictors of individual-level fertility, especially when measures include dimensions such as certainty and timing (Miller and Pasta 1995; Morgan 2001; Rindfuss, Morgan, and Swicegood 1988). Finally, many studies have demonstrated the predictive power of having experienced an unintended pregnancy for behaviors such as contraceptive sterilization. In short, intentions are important because control over and planning for childbearing is both expected and valued in contemporary society, and the formation and implementation of intentions are important processes leading to fertility in many cases (Bongaarts 2001; Miller 1986).

In fact, in the existing literature, one cannot overstate the centrality of fertility intentions, planning, and decision making. Specifically, the dominant models of fertility view intentions as a proximate variable to contraceptive behavior and, in turn, observed fertility. A host of more distal (i.e., not proximate) variables—anchored in culture or other aspects of social structure—affect observed fertility by influencing the intention to have children. This model has been used to predict future fertility; intended parity (the sum of births to date and those intended in the future) has been used to estimate future levels of individual and cohort levels of fertility.

The empirical inadequacy of this model—that is, the failure of intentions to accurately predict individual and aggregate levels (see Quesnel-Vallee and Morgan 2003; Westoff and Ryder 1977)—has increased the importance of several bodies of work. First, different or more elaborate models are needed to understand unintended fertility or its converse, an undesired long wait to pregnancy or fewer births than intended. Specifically, contraceptive failure and sub/infecundity become potential explanations for intent-behavior inconsistency.

Further, the important concept of “unmet need” has been defined as nonuse of contraception among those at risk of pregnancy by those intending no more children. Lowering



unmet need by making birth control knowledge and methods more available has been a major focus of public policy in many contexts. Research and modeling have also addressed why intentions may change over time. This research elaborates intentions to include aspects of timing (e.g., by asking “do you intend a child in the next two to three years?”), the context (by specifying “if things work out as you expect” or “if you could have as many as you wanted”), or the life-cycle or reproductive stage of the individual (by focusing on sequential, parity-specific decisions).

Recently, however, the relevance of fertility intentions has been challenged by both those within and outside the demographic community (Barrett and Wellings 2002; Klerman 2000; Luker 1996, 1999; Santelli et al. 2003). This challenge has derived from numerous sources. The high proportion of unintended pregnancies in the United States despite widespread knowledge of and access to contraception has raised questions about what it means to intend a pregnancy or birth. These questions are buttressed by qualitative research (Edin and Kefalas 2005; Luker 1996) that reports high levels of ambivalence toward pregnancy among populations with high unintended pregnancy rates. These studies tend to suggest that the acceptance of birth planning as a “good thing” does not appear to translate into effective planning behaviors in these populations. Others (Johnson-Hanks 2006, 2007) have suggested that women in some settings may take an “opportunistic” approach to life-course decisions such as having a baby—an approach that eschews specific future plans in favor of a range of “goods” to be achieved as circumstances permit.

**What do we need to learn?**—The current focus on fertility intentions and planning is contributing to a much richer understanding of these processes in contemporary U.S. fertility patterns. This research, which is examining the meaning and dimensions of fertility intentions and characterizations of pregnancies as “unintended,” will inform both monitoring of key indicators and theory about the processes leading to childbearing.

Theoretical development may benefit from greater attention to the psychological aspects of fertility plans and intentions. What influences whether individuals make plans regarding their reproductive futures? If individuals do not make such plans, what is the meaning of intentions reported by survey respondents? What do individuals’ schemas about childbearing look like in the brain and how do variations in this relate to variations in the specificity and tenacity with which they are held? What influences the power of these schemas to drive behavior in particular situations? How are differences in schema between members of couples resolved, and how are partnership dynamics affected by discordant schemas about parenthood? What internal and external factors influence changes in schema over time? Answers to these questions will depend on interdisciplinary collaboration with cognitive and other psychologists, neuroscientists, and cultural anthropologists.

Finally, much greater attention should be paid to which aspects of fertility are the focus of planning. Most existing work focuses on intentions regarding the number of children, although reports of unintended childbearing take timing into account. The value of intentions research for future fertility studies would be greatly enhanced by finding out what is important to people as they consider and plan their reproductive futures—timing, circumstances (such as partner and economic status), quality, quantity, or gender composition of children—and designing research that attends to those dimensions that are most likely to motivate fertility behaviors.

## ***How Do Developmental Processes Shape Fertility and Parenthood?***

**Why is this important?**—Research on fertility has long recognized the importance of family background characteristics such as parental education, religion, and whether one lived with both parents in adolescence as predictors of the timing and circumstances of first birth (Rindfuss, Morgan, and Swicegood 1988). However, the processes that lie behind these markers of childhood experience are often assumed rather than investigated. There are a number of exceptions, however.<sup>7</sup> Wu (1996; cf. Thornton and Camburn 1987; Cunningham and Thornton 2006a,b) shows that the positive association between the number of parental figures a young woman has lived with (i.e., a measure of an unstable household of socialization) and a nonmarital birth is not the result of low or fluctuating income that might accompany household instability. This finding thus disputes one possible process that might lead to nonmarital births. More effort is needed in addressing the developmental processes that transform infants into reproductive-age adults, and the social and economic context in which these developmental processes occur. These factors are the mediators of intergenerational effects on fertility and the likely source of many of the most deeply held motivations, attitudes, and ideas about childbearing and parenting. Understanding these processes, their relationship to genetic endowments and environmental influences, and their implications for later fertility behaviors could help to enrich our scientific understanding of fertility patterns as well as address ongoing policy concerns.

**What do we need to learn?**—In the past decade, an impressive literature has arisen that emphasizes the interplay between genetic predispositions and environmental influences in the social, emotional, cognitive, and physical development of children (Boyce et al. 1998; Halfon and Hochstein 2002; Repetti, Taylor, and Seeman 2002; Shonkoff and Phillips 2000). This line of research will expand rapidly in future decades, fueled by advances in genetics and neuroscience. Advances in this field could help to fill important gaps in our understanding of the role that developmental processes play in mediating environmental effects and life-course events on fertility. Why and how does a history of family instability or early abuse influence fertility timing? To what extent does childhood poverty influence developmental processes related to fertility? What impact do educational experiences have and how do they operate in ways consequential for later reproductive behavior?

Developmental processes lead to the establishment of “identity” in adolescence and later years (Erikson 1959). What can we learn from psychology about how identity formation may mediate the link between childhood experiences and later fertility? How is gender identity shaped by biology and family and educational experiences? How do fertility-relevant identities emerge and change over the life course? With multiple identities possible, how is one assigned or chosen? What key events in early and later life produce identities supportive of parenthood?

Similarly, how do people learn schemas that relate to having children and being parents? What specific schemas matter for reproductive practice? How are these schemas inculcated over the life course? How do they change? What influences whether schemas that are learned through childhood exposures (such as a particular style of parenting and a normative family size) become valued or rejected in adulthood? How do these processes relate to the process of identity formation?

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<sup>7</sup> See Chapter 6 of Thornton, Axinn, and Xie (2007) for an extended discussion of such effects on union formation.

Finally, tracing developmental processes beyond childhood is also important. Research shows family-related attitudes are influenced both by family background and ongoing experience (Cunningham et al. 2005; Cunningham and Thornton 2005; Moors 2000). What experiences early in parenthood motivate desires for additional children? Which ones are associated with firm decisions to have no more children? How do reproductively relevant actions at time 0 influence the development of the person, her resources, networks, or dispositions at time 1?

### ***What Can Advances in the Genetic and Biological Sciences Do for Research on Parenthood?***

**Why is this important?**—The close connection between human biology and human reproduction has shaped the field of fertility research from its beginnings. Until recently, the number and timing of children have been closely tied to the biological processes that determine reproductive capacity and the technological strategies devised to prevent unwanted fertility. However, biological influences on fertility and parenting are not limited to biology’s effect on reproductive capacity. They also include the role of biology in cognitive and emotional processes. These are intimately involved in human development, in the formation and implementation of goals and desires, in the ability to avoid unprotected intercourse, and in decisions about parenting. These are unlikely to play a major role in fertility variation and change by themselves but are likely to constrain and channel the effects of environmental factors as well as being influenced by the environment directly.

**What do we need to learn?**—In recent decades, important work has developed in evolutionary psychology, endocrinology, neuroscience, and genetics that could help to build an understanding of fertility patterns that is more broadly biologically informed. Research in evolutionary psychology and anthropology has explored the potential for evolved patterns of mate selection and parenthood strategies (Daly and Wilson 2000; Kaplan and Lancaster 2003). Research in endocrinology has examined the critical role played by reproductive hormones (Carter et al. 2007) in sexual behavior and bonding between sexual partners and mothers and infants (Cameron 2003; Young 2003) and the neural pathways that mediate hormonal effects. This literature has also pointed to genetic factors that influence these neural pathways (Young 2003).

In addition, cognitive psychology and cognitive neuroscience have identified important cognitive biases and processing limitations that may play important roles in accounting for some fertility behavior. Key distinctions from social cognitive neuroscience (such as between automatic and controlled processes; Lieberman 2007) may help us understand family-related behavior beyond the laboratory (in more “naturalistic investigations”; Lieberman 2007: 276). Insights from social cognitive neuroscience may help us understand the activation of particular schema (vis-à-vis others) given a specific situation. It may be fruitful to explore the role of “mirror neurons” in this process as well as the biological bases for social influence related to sexual and fertility behaviors. The relationship between these cognitive processes and hormonal pathways is a particularly important issue for understanding fertility.

Together, the contributions of these fields could help to deepen our understanding of fertility patterns. Questions such as why people fail to act in accordance with their fertility “intentions” as reported on surveys, why emotional and social factors appear to override “rational” self-interest in sexual situations, and why parental investments in children can range from neglect to extraordinary devotion are likely to have some biological bases. It will be

important to better understand the degree of variation in the underlying processes across persons (owing to genetic variations, for example) and how these processes are affected by environmental conditions and events.

### ***How Are Dyadic Processes Related to Parenthood?***

**Why is this important?**—Human conception normally requires sexual intercourse of two persons, and the vast majority of people still become parents through sexual intercourse between a man and a woman. Thus, couple-based (i.e., dyadic) processes are central to fertility and to a variety of central questions affecting both our scientific understanding of parenthood as well as key policy issues. Understanding how unintended pregnancies occur and how decisions are made about how to resolve them requires us to understand interactions between sexual partners, and the roles that power and status imbalances, individual attributes, and social norms play in determining the outcomes of these interactions. A focus on dyadic processes underscores the intersection between union formation and fertility. To what extent is fertility behavior and decision making driven by the nature of the dyadic relationship, and to what extent does it influence how that relationship proceeds? Nonmarital childbearing is a central focus of recent public policy, as is investment in children by non-resident parents.

**What do we need to learn?**—Although limited progress has been made in addressing reproductive issues among men (Ku, Sonenstein, and Pleck 1994; Marsiglio 1998; Tanfer 1993; U.S. Department of Health and Human Services 2006), the vast majority of fertility research still focuses on women. Further, fertility research has generally focused on explaining the behavior of individuals rather than dyads (for exceptions see Miller and Pasta 1996; Morgan 1985; Thomson, McDonald, and Bumpass 1990). Some samples of dyads exist in relevant studies (e.g., NSFH and Add Health), but their exploitation in fertility research is limited. Research that addresses the fertility and parenthood decisions of dyads faces significant challenges, but creative ways of addressing these are worth exploring.

Key questions to explore in the context of dyadic studies involve the processes leading to planned or unplanned pregnancy and those that situate childbearing and parenthood within particular kinds of unions. Ethnographic studies (Anderson 1999; Edin and Kefalas 2005) suggest that in some communities, schemas about sexual relationships (e.g., the decision of not using birth control, or wanting to have a baby to have someone to love) actively promote childbearing. How do these schemas translate into dyadic interactions? As the focus of numerous pregnancy-prevention interventions, interpersonal dynamics that contribute to the risk of unintended pregnancy are relatively well theorized (if not studied in actual dyads). Interpersonal dynamics that contribute to delay of parenthood are not well studied, but they may be important, as suggested by research on adopting a baby (Daly 1988).

With respect to the union context of childbearing, research on nonmarital childbearing will continue to be important. Will nonmarital births continue to rise as a proportion of U.S. births, and will they remain as sharply differentiated by parents' educational status as they are now? What influences whether cohabiting couples have children together? It will be important to extend recent work on this topic (Manning 2001; Raley 2001) and to explore the causes of changes in this propensity. Will multipartnered fertility (having children by more than one partner) continue to increase in the future, and why? Most important, what dyadic processes

mediate the influence of external events and conditions on fertility outcomes? How do dyads mediate the process of fertility change at the aggregate level?

Finally, although attention to dyadic relations with a sexual partner is key, future research should examine other relationships that may affect fertility behavior. Arguably, other relationships—with mothers, siblings, or friends—may provide the support, “framing,” and care needed to carry a pregnancy to term and to decide to parent. This point is echoed in other chapters—that is, individual schemas regarding significant others vary by life domain and stage in the life course and are not necessarily limited by coresidence. This important point is made in Stack’s (1974) classic work and continues to emerge in contemporary ethnographies (Roy and Burton 2007).

### ***How Is Parenthood Affected by Cultural Schemas?***

**Why is this important?**—The importance of ideational factors (e.g., values, attitudes, beliefs, etc.) in fertility and parenthood is well established (Lesthaeghe and van de Kaa 1986; Thornton 2005; van de Kaa 1987). Despite this, demographic research on becoming a parent has tended to emphasize individual attributes such as education, income, and marital status rather than the values and beliefs that individuals hold. Likewise, when contextual factors are considered, the focus tends to be on material factors such as policies and access to day care rather than the shared cultural norms prevalent in a population. The expansion of research on individual- and aggregate-level schemas could greatly inform knowledge not only about their direct impact on fertility, but also about the ways in which they interact with other resources and constraints to influence parenthood.

**What do we need to learn?**—Research on ideational factors related to U.S. fertility has focused mainly on attitudes and intentions (Pagnini and Rindfuss 1993; Quesnel-Vallee and Morgan 2003; Thornton and Young-DeMarco 2001). However, the range of ideational factors that influences fertility and parenthood may be far broader. We suggest that the term “schema” denotes a class of concepts that includes not only attitudes, motivations, and intentions, but also prototypes, beliefs, and mental maps for particular types of action. We call for broader exploration of these schemas in the domain of the family to enrich our understanding of fertility decision making and the behavioral sequences that lead to both planned and unplanned fertility.

The work of Lareau (2000, 2002, 2003) has stimulated interest in the schemas of parenthood that guide Americans’ parenting practices and investments in children. The costs of rearing children have long figured in economic models of fertility (Becker 1960; Hotz, Klerman, and Willis 1997), but the questions of how perceptions of cost arise and how they may differ across groups have not received significant attention. To date, this research is both limited and contested (Dunn, Kinney, and Hofferth 2003), and the links to behaviors and decision making leading to parenthood have not been explored. This topic offers rich opportunities for future work exploring these links as well as research on the relationship between cultural representations of “good families” or “good parenting” and the material resources that organize reproduction and parenthood.

Attention to the causes and mechanisms of ideational change concerning the family is an important topic for research. How do cultural schemas related to fertility and parenthood change? One fruitful approach may be to analyze reproductive patterns using social network models of ideational diffusion (e.g., Billari et al. 2007b; Kohler, Behrman, and Watkins 2007). Social

history approaches should also be considered. For example, one could study how the social history of abortion in the United States produced the existing pro-life and pro-choice schemas regarding appropriate resolutions of unplanned or unwanted fertility. Has the pro-life movement valorized teen childbearing as a noble choice at a difficult juncture? How has this social history and these schemas influenced the availability of abortion services? A further approach is to examine the effects of external “shocks” such as policy changes, economic booms, or new technologies on the development of new or altered schemas.

### ***How Is Parenthood Affected by Technologies?***

**Why is this important?**—For the past century, the world has experienced unprecedented advances in technologies that enable humans to accomplish feats unimaginable in previous eras. Technological advances have transformed how people obtain the necessities of life, interact with others, maintain health, and plan or achieve parenthood. Over time, the introduction of new technologies has thus had profound demographic effects, and these demographic impacts of technological change are certain to continue.

**What do we need to learn?**—Continued research is needed on the impact of contraceptive technologies on fertility and the circumstances in which parenthood occurs (Akerlof, Yellen, and Katz 1996; Goldin and Katz 2000). For example, the introduction and increased use of Depo-Provera and emergency contraception among teens may be partially responsible for the dramatic decline in teen pregnancy in the United States (Abma et al. 2004). However, this link has not been firmly established. Likewise, research on the effect of advances in new reproductive technologies (ART) on fertility patterns is a topic that has received little attention. In addition to increasing the prevalence of multiple births, a question is whether these technologies have encouraged the delay of childbearing among highly educated women.

The role of technologies in influencing both the material resources available for achieving or preventing parenthood and schemas relating to parenthood is another potentially exciting area for research. The development of new technologies is generally driven by ideational factors that create potential demand, but once new products exist, they also reshape socially shared values and norms. For example, has assisted reproductive technology affected the meaning of and perceived control over reproduction? What meaning and valuation do people assign to in vitro fertilization as a means of creating a family, and how is that affected by the existence, safety, and cost of new technologies? How are cesarean and vaginal births viewed as technology changes?

Although contraceptive and proceptive technologies are the most directly associated with parenthood, the effects of other technological developments should also be examined. Has the advent of “Baby Einstein” products influenced the views of prospective parents about the requirements for rearing children? Have transportation and communications technologies made it easier to envision parenting while holding a job? To what extent have household technologies and our abilities to outsource household tasks enabled parents to combine childrearing and labor force participation, or increased couples’ willingness to have children despite increased union instability?

## ***How Do Social and Economic Institutions Affect Parenthood?***

**Why is this important?**—In contemporary societies, environmental constraints and resources are strongly structured by religious, familial, political, and economic institutions and structures. Because of their importance, these structures also provide powerful levers for policy. Although these effects have been widely studied in fertility research, future research must continue to attend to them, as relations between fertility and these environmental constraints and resources are certain to change over time. Future research can also be enhanced by increased attention to types of institutions and structures that have been relatively neglected in recent years, as well as enhanced theory that addresses both the schemas and material resources and constraints that these structures provide.

**What do we need to learn?**—What is the magnitude of contemporary religious differences? In the past, a significant body of research explored religious differentials in U.S. fertility, but with the convergence of Catholic and Protestant fertility, attention to this topic waned. Recent years has seen a resurgence of interest among family scholars in the differences in family patterns and ideologies between conservative Protestants and others (e.g., Glass and Jacobs 2005; Glass and Nath 2006; Wilcox 2004). Relatively little of this has attended to fertility per se, however. These differences deserve exploration. As noted earlier, data from the NSFG suggest few differences by denomination but substantial differences by some measures of frequency of religious participation or intensity of religious beliefs (see Hayford and Morgan 2008) and geographic patterns suggestive of “culture war” footprints (Lesthaeghe and Neidert 2006). How are religious differences intertwined with other group differences in economic status, political affiliations, and place of residence? Are patterns of difference consistent with differences in schemas relating to the family held by members of different religious groups, and if not, why not?

A clear priority for continued research is the adaptation of fertility patterns to changes in the economy. Here again there is a rich foundation of research on which to build. Of particular interest at the beginning of the twenty-first century are the impact of globalization on job security and the nature of available employment, the strategic importance of education, and economic disparities. The effects of economic conditions on fertility are likely to be mediated by other social and cultural changes. Fertility in the United States has remained stable during the last 40 years in the face of dramatic changes in the economic and social environment. Why is this, and how did it happen?

A related question is the role of institutions in changing the relationship between economic factors and fertility outcomes. In European and OECD countries, the cross-sectional correlations between the Total Fertility Rate (TFR) and the female labor force participation rate reversed between 1975 and 1999 (Billari and Kohler 2002; Rindfuss et al. 2003; Brewster and Rindfuss 2000). In 1975, fertility was lower in countries where more women were in the active labor force; in 1999, it was higher. Child care availability and acceptability, gender change, and changes in the economy are all seen as having mediated the degree of incompatibility between women’s labor force participation and fertility. A likely research design to illuminate such institutional variation is likely to include across-population (often cross-country) comparisons. Such data must be collected and challenges of cross-population comparisons must be confronted (see DiPrete et al. 2004)

The effects of policy changes on fertility also deserve further exploration. The jury is still out on whether the restructuring of U.S. welfare programs in the 1990s contributed to the dramatic decline in teen fertility (Hao and Cherlin 2004; Lopoo and Deleire 2006; Ryan, Manlove, and Hofferth 2006). The intersecting roles of welfare requirements, new contraceptive technologies, economic conditions, and family resources deserve careful scrutiny. Analyses should consider the ability of a variety of institutions to condition the effect of secular changes and idiosyncratic events and responses to them in producing an environment more or less conducive to childbearing and parenting. Effects of changing policies relating to abortion and new reproductive technologies will also be crucial to study.

Finally, the bifurcation of American fertility patterns by socioeconomic status should continue to be a focus. Most research to date focuses on the urban poor. There is a need for in-depth studies of other populations, as well as analyses that address the influences on fertility patterns across the socioeconomic spectrum. These analyses should address the role of class-linked structures, including educational and occupational systems, in contributing to both material resources and schemas that affect parenthood strategies.

### ***What Drives Change and Variation in Parenthood?***

**Why is this important?**—Despite the importance of fertility and parenthood in shaping both population structures and individual lives, and despite major contributions through research over the past half-century, the goal of fully understanding why fertility changes on the individual and aggregate level, and why fertility levels and pattern vary in particular ways across subpopulations and time periods, remains elusive. Although it may never be possible to *predict* aggregate fertility trends with accuracy over the long-term, enriched theoretical approaches and new data and methodologies have the potential for deepening our understanding of the dynamics of fertility change and variation on the individual as well as aggregate level.

**What do we need to learn?**—A key lesson from existing work is the importance of individuals' fertility timing and its links to their eventual number of children. This life-course approach views parenthood as a series of sequential actions. A challenge for future research is to understand how other evolving domains of life and evolving social contexts affect parenthood and how it is experienced. Thus, questions about causes must incorporate their impact on this set of sequential behaviors (i.e., fertility timing) and must include factors from different conceptual levels (e.g., at the individual level, evolving individual human capital; or at the aggregate level, availability of affordable and high-quality child care).

Other questions highlighted in this section are inspired by the theoretical work pursued by the Parenthood Group, but many other lines of research may be equally productive. The Theory of Conjunctural Action (TCA; see Chapter 3) motivates attention to both the schematic and material elements of structure. Expanded attention to schematic elements could answer such questions as, “What is the social ecology of schemas and resources salient to reproduction? How are they distributed? and How is that distribution changing? For example, is childlessness or the one-child family gaining more acceptance, and in what population groups? To what extent are schemas related to fatherhood and male household responsibilities changing, and in what population groups? How are schemas related to abortion and new reproductive technologies distributed in geographic and social space?”



The TCA also implies that we need to understand the social ecology of reproductively relevant conjunctures, that is, of specific contexts in which childbearing becomes possible. Subgroup differences could result from groups facing very different situations or from bringing different schemas and resources to bear in those situations. For example, poor and less-educated women are more likely to have a first child at a young age. Does this result from different situations or from invoking differential schema in a given situation (e.g., an unsupervised opportunity to have sex, an opportunity to prepare for sexual activity by acquiring condoms, accepting coital independent methods)? Do the poor and less educated confront these situations more often than their wealthier and more-educated counterparts? Or do they invoke different schemas and behave differently given these situations?

A further question for research is the interplay of material and schematic elements of structure in bringing about change and variation in parenthood. For example, how are public discussions about abortion distributed in social and geographic space? These discussions are observable phenomena—such as sermons, newspaper columns, and political debates—that contribute to framing and reinforcing dominant schemas. Under what conditions do public discussions alter framing at the individual level and individual decisions about abortion? To what extent do they contribute to changes in the distribution of abortion services via decisions made by abortion providers?

In addition to responding to environmental cues, individuals also change their environments through their actions. Over time, individual actions change the social, economic, and political structures salient to reproduction. This micro–macro interplay is a key mechanism for family change, and understanding how it occurs is a priority for future research. Research on diffusion processes (e.g., Kohler 2001) is poised to make important contributions in this area. More research on innovation is needed to complement these studies. Potential areas for research include Internet dating and fertility postponement. How have early users of Internet dating sites reduced or altered the barriers for subsequent users? Are they helping to diffuse new schema via their personal networks? Are they supporting an “industry” that will refine its product and advertise it more aggressively? With respect to delayed childbearing, how have the experiences of women with late childbearing and the “events” associated with these experiences (e.g., publication of books such as *Creating a Life*, Hewlett 2003) altered how women think about childbearing and the support for fertility delay among networks of friends and professional advisers (such as medical doctors)?

### **Existing Data Resources**

Vital registration and census and survey data provide information sufficient to describe in broad brush strokes U.S. trends and differentials in the timing, quantum, and circumstances of fertility and parenthood. The vital registration data allow yearly estimates of number of births by age, parity, race, ethnicity, nativity, marital status, education, and certain other characteristics. However, these data do not measure key variables such as cohabitation and income. Also, estimating fertility rates using vital registration data requires denominators (estimates of the population at risk of having these births) from the decennial census or from intercensal estimates. Undercounts or overcounts of particular groups can severely bias estimates for subgroups. Morgan et al. (1999) examine the weakness of these data for estimates of some key fertility parameters for subgroups. It is widely suspected that undercounts of the Hispanic population

inflate estimates of Hispanic fertility. Indeed, the Census 2000 led to a re-estimation (and lowering) of Hispanic fertility estimates in the years prior to the Census 2000 (Hamilton, Sutton, and Ventura 2003).

The NSFG provides rich data on a broad range of measures related to fertility, infertility, contraceptive use, adoption, and use of infertility services, and can relate these to relatively complete marriage and cohabitation histories as well as a wide range of socioeconomic and other independent variables. The NSFG sample size is limited, but its new continuous interviewing design will eventually permit researchers to merge data over long periods of time to analyze small subgroups. As a cross-sectional study, it is best suited for tracking trends and variations in parenthood, although the retrospective data allow for the construction of longer time series and analytic research. Its new sample of male respondents allows researchers to examine male fertility and family formation, although the limitation of eligibility to those aged 15–44 may exclude a nontrivial proportion of men who become fathers at older ages.

The Current Population Survey (CPS) collects some data in its June supplement but discontinued the collection of marital and fertility histories as of 1995. These histories were valuable to researchers for their very large sample size and historic depth and were used widely to examine trends in, and links between, aspects of fertility, marriage, and marital disruption (see Goldstein 1999; Pollard and Morgan 2002; Rindfuss et al. 1988). Fertility histories obtained in the Survey of Income and Program Participation (SIPP) were intended to take the place of those collected in the CPS, but they have not received similar use. Reasons include the complexity of these data and the more abbreviated fertility histories in SIPP. The future of the SIPP is now in question; if it continues it will likely be redesigned and is unlikely to provide similar data.

The American Community Survey (ACS) obtains information about births in the previous year but does not, and probably will never, collect fertility histories.<sup>8</sup> Thus, these data will be valuable for tracking fertility trends and differences and provide a parallel data source to vital registration for estimating *some* key trends and differences. Adding new questions (for example, on fertility or marriage) is extremely difficult. However, key questions on age at first marriage, age at first birth, and current parity are both important and feasible. For estimating key fertility parameters, the single most important addition would be a question on current parity.

Other national data resources include the Add Health study, the National Longitudinal Survey of Youth (NLSY), the Panel Study of Income Dynamics (PSID), and the NSFH. All are longitudinal cohorts, and as such are more useful for explaining individual behavioral trajectories than change over time. The existence of two cohorts of the NLSY as well as the Children of the NLSY permits some modeling of intercohort variation. The NLSY surveys are strong on educational and labor force content. Other surveys have varying strengths for addressing issues related to fertility. Add Health is strong on adolescent contextual influences and romantic relationships and unions, and also collects genetic information. The PSID is strong on economic factors and family histories. The NSFH is strong on measurement of family process and factors related to unions. Many of these studies obtain measures of male as well as female fertility.

Some resources exist at the subnational level, although none have been designed with fertility explanation in mind. The Fragile Families study focuses on families formed through nonmarital childbearing but not on fertility per se. However, it has become an important data source for the study of some fertility behaviors such as multipartner fertility.

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<sup>8</sup> A question on births in the previous 12 months is asked in the 2008 ACS questionnaire. Number of marriages and date of most recent marriage are also asked. See [www.census.gov/acs/www/Downloads/SQuest08.pdf](http://www.census.gov/acs/www/Downloads/SQuest08.pdf).

Although the United States thus possesses a rich set of data resources related to fertility and parenthood, the data are limited in some ways. In most data sets, subgroup analyses and decomposition of trends into proximate factors are compromised by deficiencies of sample size or content in available sources. Few data sources provide detailed information on immigrant status or generation, and none have the content and sample size needed for research on the use of new reproductive technologies.

Available data are inadequate for tests of the theory of family change and variation we propose (see Chapter 3). Existing surveys provide inadequate measurement of culture/schemas, with measures largely grounded in an intentions-behaviors framework and/or superficial measurement of attitudes. Surveys are weak in contextual measurement, especially in the ideational domains as well as with respect to the dyadic aspects of fertility decisions and the role of social interactions noted above. Available longitudinal surveys, therefore, often lack adequate measurement of the full range of factors contributing to fertility behaviors, preventing adequate testing of competing hypotheses and control for confounding influences.

### **Recommendations for Moving Forward**

The predominant evidentiary strategy in the study of fertility change and variation has depended on quantitative analysis of nationally representative survey data. Analyses tend to produce what we call “deep description”—knowledge not only of the trends and variations in fertility quantum, timing, and circumstances but also disaggregated knowledge of the population subgroups and proximate behaviors associated with specific outcomes. Longitudinal data have been extensively used to study the determinants of fertility at the individual level and to test hypotheses about group differences. Cross-sectional data have been used to test hypotheses about change over time. Measurement of contextual (e.g., community, policy) influences has increased in recent decades, but inference about contextual effects from observational data remains controversial. Causal inferences in the demographic literature are often defended on the grounds that empirical results agree with theoretical predictions and with the testing of competing explanations, and are frequently not based on study designs—qualitative or quantitative—that allow causal inferences of the determinants and pathways of family and fertility change. For example, only to a limited degree have causal arguments been supported by ethnographic investigations that use a variety of interview, observation, and documentary methods to understand the meaning and causes of fertility behaviors. This sort of work has been pursued primarily by scholars working outside the United States, often in developing countries (for example, Axinn and Yabiku 2001; Barber and Axinn 2004; Bledsoe, Banja, and Hill 1998). Natural experiments and experimental designs have been used even less.<sup>9</sup>

Important gaps also exist in our understanding of the “whys” in terms of the dynamic interaction among the social and economic environment, life-course events, and fertility, although some simulation-based models have recently been used to explore interactions that were previously beyond the scope of analytic models (e.g., Greenwood, Seshadri, and Vandenbroucke 2005; Ríos-Rull 1996; Todd, Billari, and Simao 2005). Existing theories nevertheless flounder in the complexity of the life course, the dynamics of preference formation

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<sup>9</sup> Important exceptions include Rosenzweig and Wolpin (1980) and Angrist and Evans (1998). See Rosenzweig and Wolpin (2000) for a critical review of the use of natural experiments to identify causal dimensions of fertility and related behavior.

within specific social contexts, the role of altruism and emotions with respect to children and partners, and the specific characteristics of human cognitive processes when faced with dynamic decisions under uncertainty. Existing theories are also limited in their ability to explain the mechanisms through which, and under what circumstances, micro-level behaviors influence change at the aggregate level, although network- and simulation-based approaches have successfully begun to explore these micro–macro interactions (e.g., Bruch and Mare 2006; Kohler 2001; Rindfuss et al. 2004; Sandberg 2006).

From our assessment of the literature, we therefore encourage the development of theory and explanatory frameworks that tie together environmental influences on fertility, biological processes, individual developmental and life-course trajectories, and aggregate patterns of fertility in populations and social groups. Treatment of ideational or cultural processes are viewed as a necessary, but insufficient, element of such frameworks. Given the immense amount of empirical evidence and willingness for interdisciplinary collaboration, progress toward such a theory is within reach. This theory needs to confront the period (not cohort) nature of change (Bhrolchain 1992). It must incorporate diffusion processes (see Casterline 2001; Kohler 2001), and acknowledge the influence of interaction and networks in constraining behavior and the effects of “new behavior” in altering institutional constraints (see Hammel 1990; Kohler 2001). It must also allow for the influence of secular, cyclical, and idiosyncratic factors and for the contemporary interpretation of these “objective” conditions.

We have taken on the challenge of developing a new, interdisciplinary model of family change and difference (see Chapter 3 and Johnson-Hanks et al. 2006). This theoretical framework builds on the work of William Sewell (1992, 2005) and integrates empirical and theoretical innovations from diverse social and behavioral sciences. In particular, we argue for an approach to family studies focused on the instantiation and transformation of social structure in specific contingent situations. This structure organizes social action both by inculcating social actors with intuitions, habits, and inclinations, and by influencing the situations (or conjunctures) that social actors will face at specific times. The resolution of conjunctures remakes structure, both reinforcing and transforming it. The framework is designed to be consistent and integrative with knowledge from the developmental and biological sciences.

Work on this model and others that might compete with it should continue, focusing on the development of the specific theoretical models and their application in concrete, middle-level theories that are empirically testable.

### **The Parenthood Group recommends three general steps for advancing research on fertility and parenthood.**

- **Researchers should exploit existing data resources to address the questions outlined in Key Questions section as much as possible.** Existing data have not been fully exploited and could be used to pursue many of the key questions raised above. More extensive analyses would help to inform the development of new studies and the modification of ongoing surveys. For example, participants in the NLSY 79 cohort have now largely completed their childbearing. Tapping this database could provide important insights into delayed fertility and fertility forgone. The Add Health survey is now interviewing women and men in their prime childbearing years. These data sources will continue to provide valuable resources for important investigator-generated research applications.

- **We underscore the importance of continued monitoring of fertility and parenthood trends and variations and suggest modest expansions in federal data collection on these topics.** Descriptive research documenting trends and variations in fertility quantum, timing, and circumstances must continue at levels sufficient to guide both policy and explanatory research. Top priorities at the national level include continued documentation of trends by marital and cohabitation status; major racial, ethnic, and socioeconomic groups and immigrant status; variation across religious groups; and tracking the relationship between education and economic roles and fertility. Investments in tracking male fertility should be made commensurate with data quality. To achieve these goals, it will be critical to maintain the quality and content of vital registration natality data and continued support for NSFG. Expansion of the overall sample size and increasing the age range (particularly for men) in the NSFG should be considered. In addition, the reinstatement of fertility history data similar to that formerly collected by the CPS in an appropriate federal data collection with a large sample size should be considered. Our view is that such resources would be best spent in enlarging the sample size of the NSFG. Another attractive option is including a question on current parity in the ACS that would allow timely estimates of key fertility parameters (e.g., parity and age-specific estimates for a number of subgroups across time). Descriptive research on gay and lesbian fertility and the use of assisted reproductive technologies is also important, but may be more difficult at the national level; small descriptive studies that can be linked to more limited national data may be useful.
- **We recommend the continued expansion of theories that are brought to bear on studying fertility and parenthood.** To evaluate contemporary causal models richer data and appropriate analytic designs will be necessary. Of course, the data and designs needed depend on the theory to be evaluated. In the next chapter, we develop a promising theoretical approach and develop the implications of this approach for analysis and new data collection. Other theoretical frameworks would require a similar focus on measurement, methodology, and research design.

### Chapter 3

## Theory Development by Parenthood Group: A Theory of Conjunctural Action

S. Philip Morgan, Christine Bachrach, Jenna Johnson-Hanks, Hans-Peter Kohler

In this chapter, the EFC parenthood group describes how it organized its work and the rationale for that organization. Our strategy and work led to the development of a broad theory of social change and difference that builds on the work of social historians and theorists. We call this the *Theory of Conjunctural Action* (TCA). By “theory,” we mean an organized system of knowledge that applies in a variety of circumstances to explain some set of phenomena. In this view, theories are conceptual frameworks through which empirical observations are organized and interpreted (see Calhoun 2002: 480–482 for a discussion).<sup>1</sup> Theories in the social sciences seek to capture the fundamental processes of human behaviors and social interactions as tersely as possible; good theories therefore simplify from reality to draw attention to specific elements or processes, necessarily ignoring others. Our aim in developing new theory is to complement and extend, rather than replace, existing theory in the social demography of parenthood.

In the second part of the paper, we briefly describe this theory and follow by illustrating the theory with examples from the fertility literature. Finally, we discuss the implications of our approach for subsequent research and the necessary next steps to make our approach broadly useful to social scientists.

At the outset we also offer some disclaimers and caveats. First, this document has modest aims, related to its length, audience, and—perhaps most important—the fact that this work is still ongoing. The central aim is to outline succinctly the TCA. The page restrictions require that we omit many of the empirical examples and extended reviews of the recent literatures in psychology, neuroscience, evolutionary science, genetics, and other fields on which our theoretical development is heavily based (for greater detail see Bachrach et al., 2008). We have maintained some of the citations as signposts toward the relevant literatures, but only in the briefest fashion.

This chapter is oriented to other social demographers, and specifically to scholars already working on fertility and parenthood. For this reason, we draw our examples from the familiar material of the demographic transition and more recent work on low fertility, and we contrast our approach with others to this topic. In part, we use familiar examples because much in the document is necessarily *unfamiliar* to our social demographer colleagues.

A third caveat is that the TCA draws heavily on social theories of practice, particularly following William Sewell (e.g., Sewell 1992, 2005) and on theory and evidence from cognitive and social psychology. To avoid creating new vocabularies for existing concepts, we retain some of the technical terms from these literatures. Thus, some of the lexicon here is unfamiliar to social demographers, making the reading more difficult. However, there are only a half-dozen

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<sup>1</sup> We realize that this use of “theory” is not shared across all disciplines. The reader should feel comfortable substituting another term, such as *framework*, *model*, or *paradigm*, if this use of the term *theory* contradicts standard usage in her/his discipline.

“new” terms,<sup>2</sup> and we define them carefully. Most important, substituting alternative words creates other kinds of confusion, particularly if our readers pursue these concepts in the intellectual traditions where these terms originate.

Finally, we acknowledge that our work is not complete and that we do not have answers to some of the important questions. For example, we currently have only incomplete ideas about how some aspects of the theory should be operationalized in survey-based social demographic research; or, although we have focused on thinking across paradigms and disciplines, many potential connections—or conflicts!—between relevant literatures remain undeveloped.

### **The Path We Chose and Its Rationale**

The Parenthood Group did not begin its work with a predetermined theoretical framework but rather with the realization that existing theories of fertility level and change have both empirical and conceptual limitations. In particular, we were struck by the many empirical and conceptual advances in sociology, anthropology, psychology, and biology over the past two decades, and by how little these advances have transformed the social demography of fertility. Concretely, the Parenthood Group saw three limitations in the existing literature that the development of a new theory could address.

1. A need to integrate ideational and material drivers of societal change. Few existing theories of fertility level and change go beyond acknowledging the potential importance of both ideational and material factors for societal change to focus on how the integration between them works, and to what effect.
2. A need to incorporate knowledge about the mechanisms of human decision making and action into theories of family change. We now have 25 years of empirical evidence about the importance of heuristics and biases, uncertainty about goals, conflicting emotions, and related factors for understanding human behavior. Nonetheless, most theories of parenthood still assume some variant of rational choice without adequate attention to cognitive processes.
3. A need to integrate contemporary understandings of institutions, culture, and selfhood with models of individual action, through the development of preferences, for example. In anthropology and sociology, scholars have made considerable progress in understanding the mutual constitution of persons and contexts. However, these theories have generally not been integrated into theories of fertility.

By focusing attention on these limitations in the existing literature, the Parenthood Group hoped to address some persistent empirical puzzles. Although we do not discuss all of these in this short document, the kinds of anomalies we address include the stability of U.S. fertility over the last 40 years in the face of dramatic change in the economic and social environment, the considerable body of data showing that the preponderance of U.S. pregnancies and births are “unintended,” and the cross-national variation in fertility showing that fertility is higher in countries where more women are in the active labor force.

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<sup>2</sup> Conjunction, construal, event, material, schema, and structure.

The group also envisioned key questions for future fertility research that required a fresh look at theory. For example, can the near-replacement levels of fertility currently seen in the United States be sustained? Existing theories suggest various answers. Microeconomic theory suggests a focus on the costs and benefits of children. Others would point to processes of ideational change that will universally lead to greater secularism, individualism, and lower fertility. Still others would point to global economic processes that reduce the certainty of employment contracts. We sought a theoretical frame that could integrate these various processes and relate them to one another. Another key question is the effect of advances in new reproductive technologies on fertility patterns, a question that requires attention not only to the costs and benefits of specific timing patterns but also to the impact of new technologies on the meanings of, and perceived control over, reproduction. A third key question is whether nonmarital childbearing will continue to rise as a proportion of U.S. births, and whether it will remain as sharply differentiated by educational status as it is now. These questions require attention to both ideational and economic change, as well as to institutions, habitual practices, and networks of interaction across the socioeconomic spectrum.

The Parenthood Group started with a broad question: What features should be incorporated into a theory of family change and variation? We identified the following features as crucial:

1. *Consilience*<sup>3</sup>: It must be consistent with what we know from other disciplines, including social history, psychology, and biology, and incorporate recent scientific progress in understanding human behaviors at various levels, ranging from the social embeddedness of human behaviors to the inner workings of the brain.
2. *Multiple scales*: It must be able to explain both aggregate patterns of human behavior and changes in these patterns. To do this, it must address both the causes of individual behaviors and the mechanisms that link individual behaviors to aggregate patterns and vice versa, over time. It must be able to account for rapid period change as well as less dramatic and more gradual cohort change. It must also be able to account for dramatic and persistent difference across groups.
3. *Agency and structure*: The key causal mechanisms must acknowledge the role of both individual agency (the ability of individuals to make decisions and act to change the environment) and the environment (in influencing individual actions and decisions). Attention to agency implies accounting for the understandings of persons involved as well as the processes that produce action; attention to the environment implies attention to both the material and ideational elements in the environment that can suggest, constrain, or facilitate action.

Our goal was to explore the sciences for theories and concepts that might be usefully integrated into a model of family change and variation. We would then integrate them, assess the compatibility of various insights, and translate this theory into language accessible to broad social science and scientific audiences.

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<sup>3</sup> *Consilience*, or a “jumping together” of knowledge from different domains, is a term popularized by Wilson (1998: 8).



Our efforts focused first on explanations for macro-level change; that is, change in cultural, social, and economic institutions that we take to be the primary drivers of family change and variation. Our search of the literature on macro change identified as particularly promising the “duality of structure” argument of Sewell (1992, 2005) that, in turn, builds on the work of other social theorists, particularly Giddens (1979, 1984). Sewell eschews the confusing distinction between culture (or ideology) and structure (or economic base); he argues that these are mutually determined and constructed. Furthermore, Sewell’s conceptualization includes micro–macro linkages, including the importance of specific historical events that could transform structure very quickly. The Sewell approach embraces the path dependence of social structure, viewing existing beliefs, norms, and organizations as part of the initial conditions that give rise to new institutions and to the transformation of existing ones. Sewell’s work also explicitly treats individual agency as dependent on social structures, such as institutions, and identifies mechanisms through which individual action can affect those structures in turn.

Next, we began to map Sewell’s conceptualization of macro-level change onto common social science conceptualizations of individuals’ life courses. For instance, an individual’s life-course events parallel macro-historical events: they have histories that matter, and can also alter the structure of the life course (i.e., transform identity and affect subsequent behavior). This innovation produced a parsimonious theory of structure and change operative at both the micro and macro level that could account for path-dependent macro structure and change and for the tendency for structural change, particularly in relation to fertility, to be relatively sudden and pervasive.<sup>4</sup>

Next we related Sewell’s theory of structure to knowledge generated from a variety of disciplines and subject areas. This effort required substantial help from other scientists. We settled on a strategy of small conferences that would bring together experts from relevant disciplines. We asked these experts to tell us about their fields and models and then to react to the theory we were constructing. We translated their insights into a single set of concepts and asked them if our translations were consistent with their discipline-specific understandings.

The first such mini-conference took place in June 2004. We convened a small group at NICHD that included experts on “culture,” “structure,” and “identity.”<sup>5</sup> See Appendix 3.A for meeting details, including summaries and highlights of the proceedings and discussions. We read the invitees’ work and discussed its implications for our evolving conceptualizations. Although not all participants preferred our terms and categories to their own, we did not detect fundamental differences in basic understandings. These interactions were important for refining our conceptualizations. These conceptualizations and an initial statement of the theory were described in the draft paper that became the focus for subsequent discussions with colleagues in the EFC group, with other colleagues, and at two additional conferences.

Highly important to our work, we next organized a conference on “Religion and Family” at UCLA in February 2006 (see Appendix 3.B for details). Our rationale for this conference was that some of the interesting and large differences in the contemporary American family fall along lines of religion and religiosity. We invited scholars doing empirical work on religion and

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<sup>4</sup> This approach is related to work in social psychology that tries to map micro and macro in a similar way. See Lawler et al. (1993) and Ridgeway (2006).

<sup>5</sup> Non-EFC attendees: Katherine Ewing, Linda Garro, Rachel Kranton, Annette Lareau, Miller McPherson, Lynn Smith-Lovin, and Greg Urban.

family.<sup>6</sup> We read their work and assessed the extent to which their findings and explanations were consistent with our emerging conceptualizations. We also asked these scholars to read the then-current version of our theoretical statement and assess its potential usefulness to them. William Sewell also attended this conference and commented on our attempts to adapt his conceptualizations to understand family change and variation. The attendees, including Sewell, saw substantial potential and innovation in our approach, both in the area of fertility and parenthood as well as within the broader field of social sciences.

A third conference was held at Northwestern University in June 2006 on the topic of “Consilience and Family Change.”<sup>7</sup> See Appendix 3.C for details. The goal of this conference was to assess our understanding of cognitive processes represented in our emerging conceptualization. In short, we argue that “schemas” as used in our development of Sewell’s approach (representing virtual structure or “mental maps”) are highly consistent with emerging understandings of cognitive processes in linguistics, developmental psychology, and elsewhere. This conference sharpened our understandings of these concepts and provided broad confidence that, while simplified, our approach captures well important aspects of cognitive functioning. Given the co-evolution of the human brain (cognition) and culture, our conceptualizations are highly consistent with evolution.

We continued to refine our conceptualizations through standard mechanisms such as presenting our ideas to interested audiences and through submission of articles for peer review. Using this feedback, we continue to refine our model.

### **A Brief Introduction to the Theory and Key Concepts**

Using the strategy we described above, we have developed a theoretical approach for understanding family change and variation. Our group’s work has focused on elaborating this theory and evaluating its applicability to a range of important issues in the domains of parenthood and family. The fullest development of our ideas is presented in a monograph, *Understanding Family Change and Variation: Structure, Conjecture and Action* (Bachrach et al., in preparation).

#### ***Human Action Depends on Mental “Schemas”***

The most basic premise of TCA is that all stimuli and experience are filtered by an individual’s brain on the basis of stored (but modifiable) mental “maps,” “frames,” or “schemas” (hereafter schemas). Some of these schemas can be articulated and recognized by actors quite easily, others less so or not at all. As a result of human neural architecture, we are predisposed to form schemas as well as having the basic characteristics for some specific schemas at birth (see Lidz and Freeman 2003). Innate neural circuitry allows humans to learn language, to perceive distinct colors, and to initiate interactions with others (such as parents). This innate circuitry interacts with the environment to determine the actual language learned, the number of colors perceived, and the nature of social relations with others. However, humans also have the ability to learn

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<sup>6</sup> Non-EFC attendees: Brad Wilcox, William Sewell, John Bartkowski, Jen’nan Read, Sally Gallagher, and Eli Berman.

<sup>7</sup> Non-EFC attendees: Sandy Waxman, Doug McAdams, Thom McDade, and Jennifer Richeson. We also had a meeting on these issues with Matthew D. Lieberman (at the second UCLA conference).

schemas de novo and to store them in neural circuitry. As a result, our reactions to many stimuli, although learned, appear virtually automatic. Cultural variation in norms about how people manage physical proximity while interacting provides an example (also Waxman, Medin, and Ross 2007).

Humans have the capacity for active problem solving in many situations. Goleman (2006) refers to this as the high road of cognitive activity: an energy- and time-intensive process of evaluating options and choosing courses of action. The prefrontal cortex, larger in humans than in other animals, makes these mental processes possible. This “high road” of decision making has been the focus of much social science theorizing. One specific type of this “high road” decision making is the explicit calculation of costs and benefits associated with some variants of rational choice theory.

The TCA enriches social science models of explicit calculation by incorporating an explanation for behaviors resulting from reflexive, schematic, or automatic mental processes. It also sheds light on the conditions under which behaviors are the product of conscious *decision making*, weighing the pros and cons of the various alternatives in an actor’s choice set, or are *automatic* and follow mostly from an actor’s established schema. TCA further makes explicit how even prefrontal “high road” cognitive activities rely on mental schemas. For instance, the schema that marriage should be based on romantic love sets the stage for the kinds of mental calculations that may lead to a proposal of marriage; the schema of what constitutes a “good parent” informs calculations of the cost of raising a child. Even the construction of a “ledger” of costs and benefits of a given future action is a schema borrowed from accounting.

Although individuals within any social group may differ in the set of schemas they hold, an important aspect of schemas in TCA is that many are shared and mutually reinforced in social communities. Some shared schemas constitute an important element of group identity. The sum of shared schemas comprise what Sewell calls “virtual structure.” Shared schemas are important because they allow for effective social interaction and joint actions of social groups. Moreover, shared schema may give rise to patterned behaviors; that is, similar behavioral responses of individuals in comparable environments.

This premise is grounded in a large and compelling body of evidence, mostly from psychology (DiMaggio, 1997; D’Andrade and Strauss 1992; Mellers, Schwartz, and Roitov 1999; Slovic et al. 2002; Tversky and Kahneman 1981), but also resonating with work in cultural and cognitive anthropology (see Holland et al. 1988; Shore 1996), and in neuroscience (see Lieberman 2007; Linden 2007).

### ***Artifacts, Rituals, and Institutions Codify Schemas in the Perceptible World***

The second premise of the TCA is that society is organized materially as well as schematically. Any material form or reserve of value that has an existence outside of the schemas it manifests we call a “material,” or material structure. Although materials are not necessarily physical objects, they invariably do have some perceptible form, be it tangible, visual, or auditory. They are not only things like land and capital, but also architectural styles, legislation, or musical performances; not only schools, but also curricula, lunch schedules, and teaching techniques; not only a wedding ring, but also the spoken vow to remain faithful to one’s spouse. Many materials have direct implications on individual behaviors by regulating the available set of behaviors or “choices,” and by affecting the costs and benefits of choosing some behaviors versus others. However, an important aspect of TCA is that materials personify schemas in the world of

objects; they instill and reinforce them on the minds and bodies of social actors. Like schemas, materials can be mobilized to advance a line of social action; unlike schemas, they exist in some directly shareable form. Thus, the notion that babies are best born to married couples is a schema, whereas a radio campaign to advocate that schema, a welfare policy that provides disincentives for nonmarital childbearing, a social club that mobilizes public opinion to prevent nonmarital pregnancy, and a family planning clinic are all materials.

### ***Structure Emerges from the Interplay of Virtual and Material Structures***

This third premise is Sewell's fundamental contribution. Sewell (1992, 2005) rejects the opposition between schemas and materials but instead sees them as fundamentally interdependent and mutually constitutive. This does not mean that there is, or needs to be, a one-to-one mapping of schemas to materials: materials like amniocentesis and adoption agencies manifest a range of schemas; schemas like the primacy of the nuclear family to give meaning to a range of materials. The product of the interaction of schemas and materials over time we call "structures." For example, the structure we call the nuclear family would not exist without *both* examples of such families in the world *and* the ability of individuals to learn schemas about such families, store them, and use them to motivate or evaluate their own and others' family behaviors.

Sewell shows that schemas are personified in existing material objects, such as tools, laws, paychecks, schools, and the layout of communities. These material structures in turn enable members of social groups to learn, recall, and share the schemas they embody. This key insight provides a mechanism to integrate ideational and material explanations of the world, yet it also greatly complicates the task of unpacking and testing the theory.

It is important to note that this approach does not equate a society (or culture) and a structure. Instead, we treat societies as "sites of a multitude of overlapping and interlocking cultural structures" (Sewell 2005: 209), some of which permeate an entire society, while others are constrained to a limited domain of action or population subgroup. Just as multiple materials may relate to a single schema or multiple schema to a single material, multiple structures may relate to a given substantive focus. Sometimes even contradictory structures pertain to the same domain. This flexible/contested character of structure characterizes culturally dense domains, such as family and fertility, where legal, religious, emotive, and economic logics overlay one another.

### ***Individuals' Positions in Social Space Influence Their Experience of Virtual and Material Structures, as well as the Identity Structures They Develop about Themselves***

As McPherson (1983, 2004) and his colleagues have demonstrated, many aspects of patterned social behaviors can be modeled and understood by considering individuals who are located in an  $n$ -dimensional space defined in terms of characteristics that shape patterns of social life, such as income, education, race, and so forth.<sup>8</sup> Structures are unevenly distributed across this social space; for example, poor people are more likely to experience welfare systems and rich people investment counselors. As people age and make various life-course transitions—such as completing school, marrying, divorcing, or suffering from sickness—their experience of structures changes accordingly. As individuals cognitively and socially develop, they form

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<sup>8</sup> McPherson (2004) refers to this as "Blau Space." For lexical simplicity, we instead use the term *social space*.

identities, or schemas about who they are and how persons like themselves should behave (Erikson 1959). This process of identity formation is likely to differ according to a person's location in social space (Burke 2004; Cerulo 1997; Cooley 1902; Howard 2000). Identity brings order to the individual life course by providing internal clues regarding the appropriate schema for this person at this place and time. Identity also signals to others how a person will behave and reason and thus facilitates social interactions (for related uses of the concept of identity, see Akerlof and Kranton 2000; Smith-Lovin 2005).

### ***Conjunctures Are the Setting for Behavior; Their Construal Shapes Behavior***

The circumstances or situations in which individuals find themselves are highly relevant to behavior: action never occurs in the abstract but rather in concrete configurations of context. In its basic form, this aspect of TCA is shared with many other social science theories in which behaviors depend on the environment that individuals encounter. Within TCA, however, the role of local contexts is more refined and flexible. In keeping with Bourdieu (1977: 78; see also Sewell 2005: 220–223), we use the term “conjuncture” to refer to the historically contingent, temporarily salient aspects of context that situate action. People are constantly interpreting the conjunctures they experience: they read each conjuncture by determining “what is this an example of?” In this process of “construal,” individuals process the range of stimuli present in any conjuncture and draw on available schemas to assign meaning to what is happening. The process of construal is usually automatic, that is, guided by schemas of the “low road.” Usually, one does not choose to read a situation in one way or another (see, for example, DiMaggio 1997; Shore 1996). However, this process can produce conflicting meanings and identify choices that require serious evaluation of options. The process of construal selects schemas that identify and justify possible courses of action, of which one may be a weighing of costs and benefits of alternative choices.

### ***The Outcomes of Conjunctures Reinforce or Transform Structure***

When an individual resolves a conjuncture by taking or not taking action, the outcome of the conjuncture—which we call an “event”—either reinforces or transforms structure. Actions consistent with existing schema and normative use of material structure reinforce it, while new or innovative behavior changes structure, albeit usually only in localized ways. Thus, humans change their social context by living in it; that is, our lives are structured, but that structure is constantly being remade through specific actions in concrete situations. This insight is of course widely shared across the social sciences.<sup>9</sup> What a TCA contributes to this broad consensus is a parsimonious mechanism through which the constant reconstitution occurs; the interplay of material and virtual structure in specific conjunctures gives rise to events which reinforce or transform the structures themselves.

When we look historically, change over time is the direct product of transformative events. However, this raises two new questions. First, under what conditions are transformative events likely? Second, what about variation across social groups? Short of exhaustive comparative social history, can we say anything systematic about cross-group variation under the TCA?

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<sup>9</sup> See Kohler (2000) and Pred (1984) for maximally different incarnations of this basic observation.

**Under what conditions are transformative events likely?**—We hypothesize that transformative events are most likely under three conditions. First, they are likely in ambiguous conjunctures; that is, in conjunctures that are not easily construed under existing schemas. Second, they are likely when the “fit” between a schema and material that previously constituted a single, relatively coherent structure has deteriorated incrementally over time. Third, they are likely when a completely new schema or material suddenly becomes available, whether through an explicit campaign (for example, a social movement, non-governmental organization, governmental program), population mixing and interaction (whether coerced or voluntary), or innovation.

Even when new materials or schemas are introduced and especially when they are not, transformative events entail the modification of either an existing schema or an existing resource (and sometimes both at once). Schemas can either be “stretched,”<sup>10</sup> or transposed; that is, a schema can expand its domain of applicability, say from infants to fetuses, or it can jump to applying to an entirely new social domain. For example, in trying to make sense of both a Biblical notion of male primacy and an increasingly gender-egalitarian society, some evangelical preachers teach that the husband is “the CEO of the family” (Bartkowski 2006, personal communication). Materials, too, can be either stretched or transposed. For example, in West Africa, a number of initiation societies have become rotating credit organizations; the institutional form remains, although its cultural meaning has changed.

Closely related to the question of when transformative events are likely is the question of what direction they are likely to take. We hypothesize that transformations are likely when they involve a relatively simple extension or close transposition of existing schema. For example, in the U.S. context, it would be relatively easy for debates around end-of-life issues to be transformed if the “quality” of death came to be viewed as a consumer good, with high value placed on individual choice for the place, time, and circumstances of death—as has occurred with giving birth among upper-middle-class women. Or these same debates could be transformed if religious leaders relabeled artificial respiration and feeding tubes “unnatural hubris,” borrowing from schemas already in play regarding in vitro fertilization and stem cell research.

By contrast, it is very unlikely that end-of-life issues in the United States will be reconfigured by people arguing that the terminally ill should act with honor to sacrifice themselves for the good of the group by quietly committing suicide, although this argument might gain traction in Japan. Although this kind of prediction requires knowledge of the specific structures in play, it also relies on two simple premises that emerge from the TCA: transformative events entail the transposition, or stretching, of materials or schema, and “close” stretches, or transpositions, are more likely than long ones.

**Variation across groups**—In the TCA one could account for variation through exhaustive comparative social history, tracing the sequences of transformative events in the two groups. However, there is also a more direct method, comparable to classic decomposition or proximate determinate approaches. We argue that we will observe differences (or changes) in quantifiable behavior as a result of differences (or changes) in the distribution or characteristics of *conjunctures* or in the distribution and characteristics of *construals*. This is parallel to thinking about differences in fertility rates as the result of differences in the proportion of women married or in marital fertility.

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<sup>10</sup> “Stretched” appears here in quotation marks to refer to a range of related processes including stretching, shrinking, and shifting.

Conjunctures of specific types are unequally distributed across social groups. For example, it is rare for a college student to face the problem of having the father of her baby convicted of a drug crime. This conjuncture, however, may be familiar among poor, urban black women. The distribution of conjunctures can also change over time or across the life course. For example, labor force participation places women in new conjunctures where family and work obligations may conflict. Or, conjunctures related to dating are more common during the transition to adulthood than in later adulthood. Given that action relates to the specific configuration of factors at play at the time, changes in the distribution of conjunctures will alter the distribution of demographic events that result from them.

How people *construe the conjunctures* they face matters directly for the kinds of demographic outcomes that result, and changes in the process of construal can lead to changes in demographic rates. For example, remaining in an unhappy marriage may be seen as “staying faithful to your wedding vows,” as “not being true to yourself,” or as being a “rational decision” given the costs of separation and the implications of these costs on living standards. This largely automated process of identifying “what is going on here” or “what is this an example of” makes certain courses of action in any conjuncture appear plausible, or even natural, while others do not even surface as options. Given a comparable set of conjunctures, differential practices of construal will lead to differential demographic rates.

### **Illustrating TCA with Substantive Examples from the Fertility Literature**

Key aspects of our current understanding of important family/fertility change fit comfortably within the TCA perspective. Let us use as an example the fertility transition, the decline of fertility from high to low levels. This section reinterprets classic work on fertility decline and on low fertility, unifying disparate and disconnected claims and results. As Mason (1997: 452) has said “our knowledge of fertility transitions is extremely rich and our ability to understand these transitions inhibited more by erroneous thinking than by any fundamental lack of knowledge.” The TCA framework helps identify some of the weaknesses in current thinking about fertility change.

#### ***Schemas in the Existing Fertility Literature***

Although referred to by other names and frequently underspecified, the import of schemas in explanations of fertility decline is widely accepted. Cleland and Wilson (1987: 30) argue that “explanations of the initial (fertility) decline must give fuller recognition to the role played by ideational forces.” Mason (1997: 450) states that causal models of fertility transition “need to be ideational in that they must recognize that changing perceptions ultimately drive fertility change.” This emphasis can be traced to Coale’s (1973: 65) classic preconditions for a fertility decline: fertility must be “within the calculus of conscious choice,” people must be motivated to have fewer children, and the means of fertility control must be available and acceptable. The second and third preconditions are linked to material structures and will be taken up below; the first precondition relates to schemas and is discussed at length here. Coale (1973: 65) states:

Fertility must be within the calculus of conscious choice. Potential parents must consider it an acceptable mode of thought and form of behavior to balance advantages and

disadvantages before deciding to have another child—unlike, for example, most present-day Hutterites or Amish, who would consider such calculations immoral and consequently do not control marital fertility.

In elaborating on this precondition, Van de Walle (1992) argues that some past societies (including many in the West) were characterized by “innumeracy in children,” and that new schemas were required for people to think explicitly about child numbers in the abstract and to link family size to child and family well-being. In fact, family size (i.e., seven vs. four vs. two) was not conceptualized as a family variable of great import or one under significant individual control. As a result, the number of children was left “up to God” or to chance. Van de Walle (1992: 489, 501) says:

Numeracy about children—that is, the perception of a particular family size as a goal in the long-term strategy of couples—may be a cultural trait present in some places and times and not in others; and that without this perception, it is unlikely that family limitation could exist.

...

Numeracy about children and the norm of an ideal family size appeared not long before the fertility transition. A fertility decline is not very far away when people start conceptualizing their family size, and it cannot take place without such conceptualizing. Social scientists have largely assumed that family norms are bred into little children everywhere with basic socialization. I submit that in our own Western culture the question was completely irrelevant before a certain date.

As a schema, this “numeracy about children” (i.e., the linking of a particular number of children to long-term family welfare) is general and underspecified. However, additional social historical work could elaborate these schemas by specifying the cultural logic linking number of children and family welfare.

Other work suggests that although people in many settings may have ignored child numbers, other aspects of reproductive practice were of great interest. Bledsoe’s ethnographic work in Africa during the 1980s and 1990s describes fertility-related schemas that link the timing of births and the health of the mother and the child. Bledsoe et al. (1994: 86) report that “whether people adopt contraceptive technologies and how they use them are mediated less by the original Western formulations of these technologies than by local cultural perceptions.” The number of children was not of primary concern and was viewed as frequently beyond women’s control. Thus, ideal, intended, and desired family size—ideas posed by Western scholars—were new concepts that fit poorly into existing schemas held by African women. Yet note the characterization by Bledsoe et al. (1994: 89) of the importance of birth spacing of Gambian women:

For a woman, bearing children steadily throughout her reproductive years is the most important way of securing her own welfare, demonstrating her commitment to her husband and his family, and showing respect for her family elders who gave her in marriage. But births are not supposed to occur at random intervals or in rapid succession. It is generally perceived that both breastfeeding and pregnancy place heavy strains on a woman. Because a mother can produce only a limited amount of nourishment at a time,



people contend, a new child should not be conceived before the previous one has finished breastfeeding. If the two children overlap, the one nursing and the other one in the womb, folk wisdom holds, the first will begin to suck the blood of the mother and of its unborn sibling as their nutritional demands mount.

Thus, as Mason (1997: 448) states, “strategizing is often...in terms of the gender composition of offspring, the spacing between children, the timing of births, or whether another child is desired at a particular point in time, rather than in terms of an *ex ante*, target number of children.” Schemas are the mental frameworks that make particular fertility components and behaviors perceptible and actionable, and that defines what those actions might be. Bledsoe’s analysis of fertility in West Africa shows how schemas matter for reproductive actions. The “folk wisdom” or taken-for-granted standards of propriety direct behavior; modeling behaviors oriented to child spacing as if they were concerned with limiting child numbers will produce inadequate understandings.

Additional uses of schema can be found in the work of Lesthaeghe and van de Kaa (1986; van de Kaa 1987). They link shifting schemas to both the decline of fertility and to current low (below replacement) fertility. Their causal interpretation hinges on a cultural shift in the dominant schema (see also Lesthaeghe and Willems 1999). Specifically, following Ariès (1962, 1980), van de Kaa and Lesthaeghe (see van de Kaa 2003) argue that there are two successive motivations for declining fertility.

The first, associated with demographic transition and especially with declining family size, assumes that all who could have children would bear them and that parents’ dominant orienting goals were to provide substantial resources to their children. Van de Kaa (2003: 78) says that altruism toward children defines this schema, a schema that Ariès claimed produced an enormous sentimental and financial investment in children. This investment required parents to limit the number of children.

In contrast, low fertility (i.e., fertility at or below replacement) and associated demographic change (i.e., fertility postponement, increased rates of divorce and cohabitation) are motivated by new ideas that place the individual and individual choice at the core of the unfolding life course; the contemporary challenge, they argue, is for individuals to construct a meaningful life in the absence of a clear normative life course (one not necessarily including parenthood).

This last schema is consistent with Giddens’ (1991) description of the deinstitutionalized modern life course. Whether to have children, and when, become choices that women and couples make as they construct stimulating and meaningful lives for themselves. Caring for children remains important, but in a context in which the decision to have children is optional and parenthood should contribute to individual self-actualization. Note that this reflexive or “postmodern” cultural schema is consistent with the behavioral components of what has been called the “second demographic transition”; for example, fertility delay, decisions to forgo childbearing, cohabitation, union instability. This emphasis on changed cultural schema does not deny structural changes, including economic globalization. However, the fundamental change, according to van de Kaa and Lesthaeghe, was a shift in the dominant interpretative frame (i.e., schema) through which these changes were viewed.

Van de Kaa and Lesthaeghe’s argument was developed to account for pervasive changes that occurred in the West, so the initial geographic scope of their argument was limited. However, low fertility is not just a Western phenomenon; it now characterizes much of East

Asia, as well. Thornton (2005) argues that a powerful cultural frame or schema—developmental idealism—conflates Western wealth and power with Western family forms and Western cultural forms. Thus, these ideas have power by association, and Western conceptions of the family can follow or precede economic globalization. These sets of ideas can have powerful effects on individuals.

To explain more fully, Thornton argues that a “package of ideas” (in our terms, a schema) has been disseminated internationally with profound consequences for family and demographic change. This schema, he claims, is known to both elites and ordinary persons throughout the world. Specifically, developmental idealism posits that societies progress through similar natural, universal, and necessary developmental stages, leading to “modern states,” which are industrialized, urbanized, highly educated, wealthy, and highly accepting of innovation. Accompanying this development are predictable family changes driven by the following package of ideas (Thornton 2005:137–146): (a) the modern society is good and attainable, (b) the modern (i.e., conjugal or Western) family is good and attainable, (c) the modern family is a cause as well as an effect of modern society, and (d) individuals have the right to be free and equal, with social relationships based on consent.

This schema makes sense of social change; that is, it provides a framework through which individuals understand the causes and determinants of social change, including the contributions of their own actions to it. The schema thus makes a difference for those who hold it. It also orients behavior because being “modern” entails, according to Thornton (2005: 139):

Extensive individualism, many nuclear households, older and less universal marriage, extensive youthful autonomy, marriage largely arranged by the couple, affection in mate selection, ... high regard for women’s autonomy and rights... (and encouragement of) family planning and low fertility.

Thornton claims the diffusion of this new schema is a major source of family and fertility change in developing and non-Western countries.

### ***Materials and Fertility Change***

As noted in the previous section, TCA defines the material components of structure as the artifacts, rituals, and institutions that both embody schemas and also have a concrete existence that do not wholly depend on schemas. In addition to being relevant in their own right as a determinant of individual’s actions, the material components of structure also embody schema in the world of objects and reinforce them. Thus, an innovative aspect of the TCA theory is that material structure affects behaviors not only through its direct effect but also through its indirect effect on the schemas held by individuals. As with the case of schema, the importance of materials is not new to fertility researchers. In fact, broad structural changes were seen as the primary drivers of fertility decline in early statements of demographic transition theory (for example, Davis 1963; Notestein 1945). We must stress, however, that material structures include not only economic resources or economic development. In explaining social behavior, we argue, institutions and conventionalized practices are as important as budget constraints.

Let us return to the examples above. Coale’s three preconditions resonate well with the TCA perspective because they include components linked primarily to schema (precondition 1, above) and to materials (preconditions 2 and 3). Precondition 3—effective means of birth

control—is a classic material resource that enables one to effectively act on smaller family desires. Like other material resources, its development and diffusion necessarily alters existing schema, although—as we saw in Bledsoe’s work—not necessarily in predictable ways. Coale’s precondition 2 states that “reduced fertility must be advantageous. Perceived social and economic circumstances must make reduced fertility seem an advantage to individual couples” (1973:65). A host of factors, many institutional, could change the motivation for large families. These include new institutions, such as reliable banking and pension systems, that provide old age security, or economic development that increases the demand for workers with higher human capital investments.

Coale is somewhat ambiguous in the surrounding text about the degree to which couples may vary in their *perceptions* of a given set of social and economic conditions. That is, does the second precondition concern the outcome of a formal calculation of the costs and benefits of reduced family size, or the cultural schemas through which specific couples make this evaluation? The second of these, clearly, is highly consistent with TCA, while the former is not.

During the past three decades, scholars have developed a sophisticated microeconomics of fertility based on Becker’s New Home Economics (Becker 1991). Initially portrayed as applying the theory of consumer durables to the analysis of fertility, rational choice models of fertility have become sophisticated and widespread.

The idea of a trade-off between child quality and child quantity, attention to the opportunity costs of mother’s time, and attention to the life-cycle implications of fertility behaviors have become commonplace in research on fertility change and parenthood (see Hotz et al. 1997; Kremer and Chen 2002; Rosenzweig and Wolpin 1980; Schultz 1997). Income, time, and human capital—things we would consider part of material structure—play central roles in most of these models. Thus, just as the schematic elements of structure have drawn considerable attention, so too have its material elements. However, it is important to emphasize that many of the most important aspects of material structure are excluded from these models; the institutions, routine social practices, and forms of built space that so compellingly organize our daily lives are rarely incorporated into microeconomic models of fertility. As McNicoll (1980) argued a quarter-century ago, institutional context matters.

### ***The Interaction of Materials and Schemas***

A third axiom of TCA is that schematic and material structure are mutually constructed, although sometimes imperfectly. This means that the question “which is more important, schemas or materials?” is usually unanswerable and arguably nonsensical. The intertwining of schematic and material structure, both synchronically and over time, is a key premise of the TCA. At any point in time, materials can only be mobilized—that is, used by social actors to pursue specific goals—in relation to some schema, and the schema generally defines the causal relationships between materials, individual actions, and various outcomes. At the same time, however, schemas cannot “float free” of material structures, or at least not for long. Virtual structures cannot develop or persist on their own; social institutions, the distribution of material resources, and the structure of social networks all maintain and diffuse particular cultural representations while constraining the development and diffusion of others. An important axiom of TCA, therefore, is that people internalize existing schemas from their public manifestations in material structure, opening a second pathway of how material structures affect individuals’ behaviors.

On this axiom, the van de Kaa and Lesthaeghe arguments, most of the microeconomic models, and Thornton's developmental idealism fall short. Van de Kaa and Lesthaeghe acknowledge changed resources as a condition allowing for emergent schemas, but they do not discuss in detail the interaction of schemas and materials. For instance, Lesthaeghe discusses virtual and material changes as necessary and jointly as sufficient, but does not focus on their mutual constitution (see Lesthaeghe, Neidert, and Surkyn 2006).<sup>11</sup>

In the Thornton framework, the relevant materials or resources necessary for invoking developmental idealism, through which the schema is represented, are not even discussed. Becker, and indeed most rational-choice-based approaches to fertility and parenthood, make the same error in reverse. That is, they ignore the values and metaphors through which economic alternatives become part of individuals' choice sets and are evaluated in decision processes. In other words, they ignore the process that produces the meaningful alternatives that individuals consider.

The relation of Coale's model to ours depends on how one interprets the term "advantageous." Coale conceptualizes fertility change as occurring once all three preconditions are met, such that one lagging precondition can stall change. Unless we view the second precondition as itself incorporating the interaction of material and schematic components of structure, then, Coale's model again treats materials and schemas as two necessary but independent contributors to fertility change and differentials.

Caldwell provides a nice example of the mutually constituted nature of schema and resources in his well-known analysis positing universal schooling as a key factor stimulating the onset of fertility decline (Caldwell 1980).<sup>12</sup> Caldwell's arguments blend schematic and resource changes to produce a powerful structural argument of fertility decline. Specifically, Caldwell acknowledges that schooling raises the "cost" of children due to the direct costs of tuition, books, and clothes required for attendance and because of the indirect effects on their reduced availability for work. However, he argues strongly that these costs both induced and were in turn reinforced by a "new way of thinking" about children. Facilitated by substantial reductions in infant and child mortality and expectations about increased returns to the investment in human capital, children became persons in whose human capital parents should increasingly "invest," and this perspective also changed the tasks that children could be asked or expected to do. Some traditional activities were no longer appropriate for educated children. The Caldwell argument characterizes the blending of schematic and resource change that produce fundamental social change.

Pollak and Watkins (1993) also address the interdependence of material and schematic elements in their review of economic (rational-actor) and cultural explanations of fertility decline. The authors point out that even in a definitive statement of the classical economic

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<sup>11</sup> For instance, Lesthaeghe et al. (2006: 696) acknowledge "the effects of macro-level structural changes and of micro-level economic calculus." They also acknowledge culture as an "additional force with its own exogenous effects" and that this culture is a "dynamic set of value orientations." But we do not see in "second demographic transition" (SDT) work sufficient attention to the mutual constitution of the virtual and material structure that is stressed in this axiom. An example of such mutual constitution is the U.S. "conservative and religious right ... openly and vocally trying to fight back (e.g., with amendments seeking to ban same-sex marriage, closure of abortion clinics)" (Lesthaeghe and Neidert 2006: 696). Detailed attention to such dynamics is central to the TCA logic and has not been central in SDT work.

<sup>12</sup> We are interested here in the *structure* of Caldwell's argument, not its empirical accuracy. Regardless of whether the direction of wealth flows reverses in the way Caldwell posits, the form of his argument provides a nice example of integrating material and virtual structure.

position that tastes are fixed and exogenous, “changes in unobservable tastes cannot be distinguished from changes in unobservable stocks of consumption capital or from changes in unobservable technology; hence, changes in tastes can always be described as changes in technology” (Pollak and Watkins 1993: 477). Similarly, in discussing cultural explanations of fertility change, they note that many cultural theorists reject a distinction between “opportunities” and “preferences”:

To borrow a metaphor from chemistry, such cultural explanations are not simply mixtures of opportunities and preferences, but new compounds whose elements—opportunities and preferences—are bonded together to form a new molecule with distinct characteristics. Or, to invoke a different metaphor, opportunities and preferences are the warp and woof of the fabric of culture. (485)

In sum, the arguments of Pollack and Watkins and Caldwell capture this interacting feature of schematic and resource components of structure. These works, however, stand in contrast to the majority of work on the fertility decline, which is characterized by the absence of dynamics between schema and materials. As in the TCA, work in demography should move beyond debates of “culture versus structure” (which roughly maps onto a schema versus materials debate) as primary determinants of fertility change.

Although material and schematic structure are interdependent within our TCA, they are not perfectly mutually determined, and the partial “misfits” between them are an important source of social change. For an example, let us return to the Western-held conception of the link between limiting family size and contraception. The introduction of family-planning programs in Africa was clearly intended to reduce average family size. However, these new materials (contraceptives) were made available for a purpose that did not fit the schema held by many African women. African women did see the value of contraception within their own schemas, which stressed appropriate fertility timing. They adopted contraception to postpone the next birth or as a substitute for abstinence.

As Caldwell, Orubuloye, and Caldwell (1992) argue, the result was a distinctly different pattern of fertility transition in Africa, one based on lengthening of all birth intervals (as opposed to limiting births once a desired number had been achieved). Also note that the new materials (in this case, contraception) can also in time facilitate changes in cultural schemas. People may adopt contraception for spacing, but as they use it over time and gain greater control over their fertility, they may come to reflect on the possibility of planning the number of their children. In time, use of contraception may be rationalized not only as a strategy for spacing but also as a means to limit the number of children, consistent with Thornton’s developmental idealism, for example.

### ***How Structure Matters***

Three of the basic components of TCA are represented in the existing fertility literature, although not generally in combination. Some existing models focus on schemas, others on materials, and a few models even attend to the interaction of schematic and material elements of structure. The TCA further posits that structure matters for demographic outcomes through two specific pathways: structure shapes us as individuals and as social actors through the schemas we learn, and structure influences the kinds of contexts we encounter.

**The self**—Material and virtual structure inculcate social actors with intuitions, habits, and inclinations, with self-narratives and aspirations. In turn, social actors embody these behavioral guides. That is, material and virtual structure shape—but do not solely determine—the Self, which we treat as consisting of a set of explicit self-ascriptions and notions of belonging, called *identity*, as well as a set of unarticulated, often corporeally embodied, inclinations, called *habitus* (on identity, see McAdams 2001; on habitus, see Bourdieu 1977).

The fertility literature is replete with examples. Many people, particularly in high-fertility countries, conflate female and adult identity with motherhood and parenthood. Specifically, in such contexts, teenaged girls desire to become adult woman, a status that entails having children. These identities can be reinforced by corporeal inclinations of sexual attraction and interest, or by the desire to care for a young child or to have someone to love. Schemas focus attention on parenthood as an avenue to womanhood and adulthood and saturate it with corporeal sensations.

**Conjunctures**—Virtual and material structures also influence the set of exigencies (or conjunctures) that social actors face. The huge literature in demography on sex preferences provides a simple example. Common forms include a preference for (often at least two) sons or a preference for a balance of sons and daughters. These preferences produce behavioral regularities that we want to explain such as the higher fertility (or greater likelihood of intending another child, or lower contraceptive use) of those with “unsatisfactory” sex compositions. In the United States, there is a preference for at least one son and one daughter, reflected in the higher fertility of those with two daughters or two sons compared with those with a son and daughter (Pollard and Morgan 2002). Although chance largely determines whether children will be male or female, the parents’ reactions (and thus their subsequent fertility) are driven by schemas of gender and gender-based parent-child or other social interactions. Specifically, at the heart of sex preference are schemas that make sons and daughters imperfect substitutes and their codification, for instance, in prohibitions against certain behaviors or gendered norms of succession and inheritance that favor sons (in the continuation of family dynasties or family-based companies).

In other contexts, gender-based patterns of desirable parent-child interaction, such as traditions of fathers playing sports with sons but not daughters, encourage additional births (see Pollard and Morgan 2002). In a TCA, the gender structures that explain sex preferences are latent most of the time; they become salient, and therefore motivate action, only in the specific circumstance of parents having attained their desired number of children but not having attained their desired, or the socially normative, sex composition of children.

A conjuncture, or the specific configuration of context relevant to social action, can be conceptualized at a variety of scales. Sewell focuses on moments of potential historical transformation. In some of our work, we have experimented with the idea of treating each menstrual month as a conjuncture: duration of time when factors across various domains (such as employment, relationship, physical well-being) congeal in a specific way, holding the potential for change (pregnancy) or a reinforcement of the status quo ante. These months are also embedded in an individual life course, which is further embedded in the macro-structures of a time and place. These structures provide constraints and stability to behavior but variation and uncertainty are pervasive.

Ryder (1973: 503) once said that the relevant fertility behavior is “whether to permit the next ovulation to come to fruition.” This conceptualization fits well with the biological realities of human fertility and provides an extreme version of a sequential decision-making model. That

is, decisions about births are not only made one at a time, but decisions about the next birth are made with very short time horizons—on a month-by-month basis. We avoid conceptualizing fertility-relevant behavior each month as an explicit decision. Rather, depending on the exigencies of the conjuncture and its specific construal, the intention for an immediate pregnancy may not ever arise as a possible option. Or, given stability in circumstances, a person may simply continue with an existing habit or practice. In fact, in our framework, individuals rarely calculate costs and benefits, but rather rely on appropriate available schemas.

The result of human action in a conjuncture is an event. Events remake structure, both reinforcing it and transforming it. Although nearly all events reinforce some aspects of structure and transform others, we distinguish between “reinforcing” and “transformative” events, depending on which aspect is more salient. Note that the focus on conjunctures and events is nicely operationalized by the standard practice in demography of treating “time units of exposure” (i.e., person months or years) as the units of analysis and vital events as the focus of inquiry. That is, many of the methods from classical demography are consistent with this view of human action and social structure.

As we use the term, “events” vary in scale in the same way that structures themselves do. Thus, at the individual level, demographic vital events may be prototypical examples of structural change. Marriage and the transition to parenthood are major foci of social demographers because they transform the structure of the life course dramatically. At the aggregate level, events are larger, often more dramatic, but for that reason more complex. Sewell (2005) uses the example of the taking of the Bastille, and cites Sahlins (1995) on the apotheosis of Captain Cook in Hawaii. In both cases, social actors applied existing schemas to novel circumstances, and thereby—albeit unintentionally—transformed the material and virtual structures themselves. Specifically, Sewell describes how the Hawaiians used their existing religious schema to interpret Captain Cook’s initial arrival as auspicious but his unexpected return as ominous. Thus, both Cook’s initial treatment as a god and his murder on his return become intelligible. Applying existing schemas to novel circumstances can produce unintentional changes or intended ones. To provide an example from the fertility literature, Greenhalgh (2007) describes the emergence of the Chinese one-child policy as the adoption of neo-Malthusian logic and an “engineering model” of how to solve the government-perceived population dilemma. One can understand these events in retrospect, but it is difficult to see how the motivation and implementation of the Chinese one-child policy in this matter could have been anticipated. Nevertheless, such examples emphasize an important tenant of our theory that, despite their unpredictability, conjunctures, construal, and resulting events are fundamental to an understanding social and family change.

### **Implications of This Approach for Subsequent Research**

The TCA poses challenges to the long-standing and productive tradition of the statistical analysis of differences among individuals in population research. It forces attention on subjective phenomena and macro-level structures that are difficult to measure directly, and it encompasses complex behavioral and social processes that could never be captured all at once in conventional statistical approaches to hypothesis testing.

TCA may be seen most usefully as a “theoretical orientation” that defines and integrates a set of common mechanisms that produce family change and variation.<sup>13</sup> As a theoretical orientation, the TCA<sup>14</sup> is comparable to (although far less developed than) structuralism or rational choice theory. Theoretical orientations are perspectives on the social world that focus research attention on specific processes while ignoring others. For this reason, debates between theoretical orientations are “not strictly resolvable by empirical research findings” (Calhoun 2002: 481); the salient question is whether the theoretical orientation provides a useful lens for approaching some set of phenomena. We have tried to make the case that TCA does provide a useful lens for integrating some widely disparate findings and making sense of a large swath of family behavior.

People, and indeed theoretical orientations, evaluate theory using different criteria. TCA is not a theory that states laws, as required by the standard, deductive philosophy of natural science, but rather an explanation of the processes that produce outcomes. In this model of science, which Gorski (2004: 19) calls constructive realism, “a causal model is a simplified, linguistic representation of one or more real causal processes.” In this context, explanations are evaluated by empirical adequacy rather than prediction. Competing explanations should be assessed by “how well supported they are by existing evidence, relative to other explanations. ... The (relatively) best models are those having (in descending order of importance) the strongest evidentiary basis, the greatest explanatory power, and the widest theoretical scope” (Gorski 2004:21). Lieberman and Lynn (2002) also argue for this general approach to evaluating theory, and point out that it is, in fact, the process through which social science has generally advanced. We believe that it is the only way to evaluate the overarching models of the world implied by the TCA.

However, the TCA also provides a basis for generating falsifiable hypotheses based on some discrete aspect of the TCA that concern the outcomes of specific conjunctures or social processes. As discussed in section 2 (A Brief Introduction of Key Concepts), these hypotheses will be of two kinds: some will be contextually specific claims about which schemas and materials matter in a given case, while others will concern general claims of the TCA. Examples of these general claims include: schemas are unequally distributed across social space; transformative events are more likely in ambiguous conjunctures; and close transpositions of schemas are more likely than distant ones. Testing these kinds of general claims will require repeated empirical investigation. No single study can conclusively evaluate them. Smaller, historically specific hypotheses concerning the materials and schemas that matter in concrete instances should, in principle, be more easily tested.

The tests of both kinds of hypotheses must rely on either experimental designs or one of the many approaches to causal inference developed for use with observational data. Moffitt (2005: 106) recently reviewed these latter approaches and their underlying assumptions. He concluded that there is no single valid approach to addressing the problem of endogeneity, and that “most of the methods that have been used in the past are open to serious objections” because of their simplifying assumptions, their failure to address the mechanisms involved in producing an outcome, and the costs inherent in sacrificing external to internal validity. He encourages more attention to theory, mechanisms, and the threats to exclusion criteria, and calls for a weighing of evidence produced by approaches with different strengths and weaknesses.

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<sup>13</sup> Calhoun (2002: 481) refers to broad, orienting theories of this type as theories of the “third kind.”

<sup>14</sup>Or, more accurately, TCA with its close intellectual brethren, including not only Sewell’s own conjunctural history, but also Giddens’ theory of structuration (1984) and Bourdieu’s theory of practice (1990).



In this brief section, we outline the data collection and analytic strategies that will enable researchers to make progress using the TCA. Of course, we expect that traditional forms of data collection and analysis will also continue. What we propose here are extensions and additions, not replacements. The TCA also implies a substantial methodological agenda to develop new measurement tools and design strategies.

### ***Richer Attention to Schemas***

A number of surveys now include measures of ideational factors. These could be refined and expanded. Schemas, being virtual, must be inferred from their material expression in speech, ritualized behavior, or material objects. Scientific methods for measuring schemas come from a variety of disciplines. Anthropologists use inferential methods based on observation, textual analysis, and interviewing to tease out the underlying meanings and motivations in peoples' lives. Psychologists and quantitative social scientists have developed a vast array of questionnaire measures—from single items to complex scales—to measure attitudes, beliefs, and values. Researchers from a variety of fields have experimented with indirect methods that combine certain aspects of qualitative and quantitative approaches. These include:

- Vignettes (e.g., Nock, Kingston, and Holian 2006)
- Card sorts (e.g., Worthman, DeCaro, and Brown 2002)
- Other controlled tasks (e.g., Sweder 2003)
- Discourse analysis (Urban 1991)

Demographic surveys have included measures of attitudes and beliefs for many decades. However, schemas come in different forms, which may require different measurement approaches. For example, learning what the term “family” means to someone may require different techniques than learning someone’s notion of the proper way to create a family. Another challenge is that people can hold multiple schemas simultaneously. This is in part a theoretical challenge: we need theory to guide our prediction of what schema or schemas an individual will draw on in a particular conjuncture.

But any theory will invoke new methodological challenges. For example, Johnson-Hanks et al. (2006) developed a typology of schemas including “deep” and “visceral” schema. The former are fundamental in the sense that other schemas build on them (e.g., the American schema that problems can be solved by “segmenting tasks” and “hard work and persistence”). The latter are sedimented and accompanied by corporal sensations (e.g., belief in God or drugs that comes from the relief produced by a prayer or a pill, respectively). If these types of schema are more likely to be deployed, then we must find a way to measure depth or viscosity. If we believe that schemas that are integrated into identity are more likely to be deployed, we must focus on identity.

Moving away from questions that ask people to articulate their beliefs and toward techniques for inferring schemas indirectly (such as using scenarios, discourse analysis, or card-sorting activities) may reveal more about the schemas motivating family behavior. These techniques could be refined in conjunction with contemporary research in cognitive and social psychology. This implies a methodological agenda that includes:

- Systematic research to devise and evaluate ways of measuring different kinds of schemas

- Continued work on the identification and evaluation of novel methods of measuring “known” schemas in the context of large surveys
- Techniques for embedding open-ended tools to identify schemas not previously identified by researchers in the context of large surveys
- Continued work on methods of reducing social desirability bias and other threats to valid schema measurement
- Techniques for measuring the viscerality of schemas or other factors thought to influence their likelihood of deployment.

### *Greater Focus on Structure*

Material and virtual structures are often represented in collective narratives and collectively shared schemas, social institutions, interaction rituals, and artifacts. As a result, structures that are central for explaining family outcomes cannot be understood solely using individual-level data. Their analysis should be more systematically integrated into the social demography of the family. This can be done in several ways:

1. **Embedding:** research methods should be applied in combination (see Axinn and Pearce 2006; Axinn et al. 1991; Cherlin et al. 2004). In particular, nationally represented sample surveys with embedded ethnography and embedded experiments are likely to reveal the interplay of structural and individual forces. Researchers have used varying approaches to embedding. Debate continues on the techniques most likely to maximize the efficiency of mixed-method designs so that qualitative insights can be integrated into quantitative measurements.
2. **Cross-context comparison:** Ethnographic teams with similar foci across variable and contrasting social contexts offer a way to reveal which aspects of structure matter (e.g., Linda Burton’s NICHD-supported work in the Three Cities Study and in rural areas; see Cherlin et al. 2004]; Daniel J. Smith’s NICHD-supported five-country, five-investigator comparative ethnographic study entitled “Love, Marriage, and HIV”). Likewise, comparable surveys administered across variable contexts can provide strong tests of specific causal models (e.g., see NICHD-supported project on women’s status and fertility in Morgan et al. 2002).
3. **Social history:** There is a rich intellectual tradition in the social history of the family, relatively little of which is directly integrated into demographic models and theories of family variation and change. Closer collaboration with historians and historical sociologists offers a relative easy way of enriching our understanding of social structural forces.

A final question that TCA raises with regard to measuring structure is whether the “materials” typically measured in demographic research are sufficient to capture the key elements of structure in a study of family change. TCA points to two “functions” of materials, *both* of which can influence and be important for understanding individuals’ behaviors: they serve as a resource for action (e.g., one uses money to purchase child care or contraception, a partner to have sex, a car to drive to work), and they manifest and convey schemas (e.g., film

portrayals of families, bridal magazines). In the design of studies, both aspects of materials should be considered when designing measurement instruments.

### ***Greater Concentration on Events (Both Transformative and Reinforcing)***

The TCA stresses the importance of how conjunctures are repeatedly resolved—by the same individual over time or by many individuals in temporal and/or geographic proximity—both to reinforce and to transform structure. Thus, the observation and analysis of specific conjunctures, in which transformation is possible though rarely occurs, offers particular analytic purchase on the processes of stasis and change. The ethnographic and social historical methods noted above allow for this kind of focus. Experience sampling methods, in which informants are asked to report on the characteristics of context and their perceptions and behaviors specific to scientifically sampled time segments, could also be useful. In a related approach, research under way by Jennifer Barber et al. will use frequent communication with informants to identify situations in which unprotected sexual intercourse could have occurred and to study the circumstances and motivational factors that influenced outcomes in those situations.

A focus on conjunctures and events can also be achieved through the use of natural experiments and quasi-experiments. This subclass of transformative events provides substantial leverage for quantitative analyses because they can be usefully viewed as exogenous to the existing structure. At the aggregate level, natural disasters—such as Hurricane Katrina in New Orleans or the tsunami in Indonesia—provide nearly ideal natural experiments, but many policy interventions (e.g., variable legislation across states) also provide the opportunity for important quasi-experimental work. Similarly, at the individual level, certain events can be usefully viewed as external to the structure of the individual or family life course (such as the birth of a son versus a daughter, being assigned to a school cohort based on birth date  $x$  as opposed to  $x + 1$ ).

### ***Innovation***

Finally, many of the methods we will need to build a comprehensive theory of demographic variation and change have not yet been developed. We encourage the development of new measurement strategies for key concepts and processes, both in the TCA framework specifically and related to demographic processes broadly. For example, this will entail careful measurement of schemas, attitudes, intentions, and the process of construal, almost certainly in conjunction with cognitive psychologists and developmental psychologists. A second important methodological problem concerns the units of analysis: given that we argue that context matters, is it possible to sample contexts rather than individuals? In particular, how could we sample conjunctures? These questions amount to a methodological agenda to bridge the gap between traditional demographer's science, the "thick" methods of anthropologists, and the laboratory methods of psychologists. We call for creative, interdisciplinary work to open up the methodological alternatives.

## **Conclusion**

In our work on TCA, we have begun to integrate the multiple mechanisms responsible for change and variation in social institutions such as the family. We sought a framework that was

consistent with what we know from other disciplines; explained both aggregate patterns of human behavior and changes in these patterns; and incorporated the roles of both individual agency and the environment. Our goal was ambitious and is not yet fully realized. The task of specifying and elaborating the concepts and mechanisms encompassed in the TCA is best viewed as a work in progress, requiring not only the involvement of demographers but scientists from many other disciplines. We envision several interrelated challenges.

1. There is a need to further develop and articulate the relationship between TCA and numerous contributions within the social, behavioral, and biological sciences. Some examples include symbolic interactionism (Blumer 1969; Goffman 1956), social psychology (Burke 2004; Ridgeway 2006), social network and diffusion theories (Kohler 2001; Rogers 2003), behavioral and institutional economics (Fehr and Fischbacher 2004; Henrich et al. 2004; Ostrom 2005), genetics (particularly gene-environment interactions; Hernandez and Blazer 2006), evolutionary biology (Stearns 1992; Wachter and Bulatao 2003), and work in evolutionary psychology on brain-culture co-evolution (Barkow, Cosmides, and Tooby 1992; Wright 1995). In addition, it will be important to better define the relationship between TCA and the major frameworks and theories currently used in demographic research on family and fertility. These include rational choice theory (e.g., Becker 1991), human development models and life-course theory (Elder 1998, Heinz and Krüger 2001), models driven by ideational change or technological change (Goldin and Katz, 2000; Greenwood and Guner, 2004; Lesthaeghe and van de Kaa 1986; Mason 1997), and evolutionary frameworks for fertility and the family (e.g., Kaplan and Lancaster 2003). Finally, the framework's characterization of identity needs further development (e.g., Akerlof and Kranton 2000; Smith-Lovin 2005). How does this concept relate to biological predispositions such as personality traits, and how does it develop in response to individuals' experience of the world?
2. Some find the basic concepts of TCA, such as schemas and conjunctures, overly broad and diffuse. Although these broad concepts will remain useful in characterizing classes of phenomena that share common characteristics, the utility of TCA will be enhanced by better specifying the elements of these classes, the similarities and differences among them, and the relevance of such differences to the processes of social change and variation.
3. The micro-level mechanisms involved in producing social change and variation need further development. This work on the mechanism of social change and variation entails at least three aspects. First, the existence of multiple and sometimes conflicting schemas requires us to address the process that leads individuals to construe conjunctures through one schema but not others that they "know." Second, TCA does not identify a specific "engine" for motivating human behavior, such as the self-interest of rational choice theory. Currently, it is agnostic and allows for several possibilities. TCA raises the question of whether all behavior is in fact motivated, or whether some is simply made routine. Another question is whether there is a single underlying motivation or "driver" for behaviors, or if multiple factors guide human behaviors in various situations, including (rational and boundedly rational) self-interest but also social motivations such as the desire to "fit in" or tendencies to follow previous behaviors or behaviors of others.

These questions need further exploration. Third, the role of social interactions within the overall framework of TCA needs further development. For instance, many conjunctures occur when the actor is embedded in a web of social relationships. Within a network a person's position (and his or her power derivative of this network or network position) is likely to affect how conjunctures are resolved. In addition, social network structures and positions may strongly influence the conjunctures a person encounters. For instance, a teenager with a network containing more delinquent friends is likely to face different conjunctures than does a teenager with friends who are school or career oriented. The schemas that are invoked in a particular relationship are also often affected by social networks, and social interactions are one of the key driving forces of the evolution of schema over time.

4. The TCA sketches out the interrelations between the individual and structure in broad strokes that deserve further elaboration. The relationship between schemas embedded in individual brains and the concept of schemas that are socially shared needs better definition. The mechanisms through which individual action transforms structure need further development, particularly with reference to concepts of power. Not all individual actions have the same consequences for structure, and developing theory that elaborates the conditions under which individual action matters for structure would be a useful extension.
5. To meet these challenges, we must build bridges across scientific disciplines. Although demography is itself an interdisciplinary field, the TCA implies a broader set of collaborations than demographers have yet undertaken. The most notable gap is the need for contributions from cognitive psychologists to elaborate the concept of schemas, but the TCA also points to the value of more extensive links to social history, anthropology, social psychology, and social neuroscience. It will not be enough to "borrow" theory from other disciplines; we must actively engage scientists from other disciplines in our project of explaining family change and variation. We must develop strategies to enlist them in making their own disciplinary contributions to understanding the processes outlined in the TCA.

Perhaps the greatest challenge for TCA is demonstrating that the framework is useful in advancing knowledge about family change and variation. As an integrative framework that organizes the contributions of many different sciences into an explanatory whole, the TCA may be able to contribute in a number of ways. The Parenthood Group has begun to illustrate its utility as an explanatory framework for a range of substantive problems. Bachrach, Smock, and Hoelter (2008) apply TCA to social class differences in the timing of childbearing; Johnson-Hanks and King (2008) apply TCA to changing views of adoption and assisted reproduction; Morgan and Welsh (2007) use TCA to explain key features and changes in the digital divide; and Abbasi-Shavazi et al. (2006) use TCA to explain key social and political changes that led to the recent and dramatic decline in Iranian fertility.

As discussed in the previous section, TCA can also motivate the development of measurement strategies by pointing to gaps in the existing toolkits. We have argued the need for advancing the measurement of schemas relating to family and fertility as well as aspects of the material world not yet captured in demographic research. TCA also underscores the importance

of qualitative approaches that use multiple measurement approaches to gather an in-depth understanding of a social field.

Because the TCA explicitly incorporates the endogeneity and path-dependence of social change, empirical tests of the whole theory are likely to be intractable. However, as argued above, it can provide a basis for generating falsifiable hypotheses, based on some discrete aspect of the TCA and, with adequate measurement tools, for testing them. Finally, TCA can be used to guide the construction of simulations that model processes of family change. Using techniques such as agent-based modeling (Epstein 2006; Epstein and Axtell 1996), these simulations can be used to examine the implications of explicit behavioral assumptions for aggregate patterns of change and variation. This approach has already been used productively in understanding disease dynamics (Epstein 2006; Morris and Kretzschmar 2000). Only such efforts can demonstrate the usefulness of the approach we have described above. We find the approach useful and have invested our own energies here, but the ultimate test lies in the usefulness of these ideas to the broader scientific community.

Our concrete recommendations include the following research agendas, which are closely linked to TCA. Of course, other theoretical approaches might suggest somewhat different agendas. But our contention is that theoretical progress is most likely when data collections are linked to specific theoretical models. Thus, these recommendations are specific to TCA but revisit and extend those general recommendations offered in Chapter 2.

- **Researchers should exploit existing data resources as far as possible to address questions from a TCA perspective.** Existing data have not been fully exploited and could be used to pursue some key questions from the TCA perspective. For example, religious institutions provide family relevant schema and diverse materials that instantiate these schemas. Further, a strong religious identity increases the likelihood that religious schemas will be invoked in a given conjuncture. Given social demography's long-term interest in religion and demographic behavior, existing data sources contain information to examine hypotheses linking religion to fertility and family behavior (see, e.g., Glass and Jacobs 2005; Hayford and Morgan 2008). As a second example, TCA's focus on conjunctures maps well with demographers' concepts of exposure and, in some cases, to demographic events. Life history calendars, for example, can be used to produce "risk segments" (i.e., conjunctures) for when particular behaviors might occur. Thus, conjunctures for large and representative samples can be examined. Likewise, some life-history events define a conjuncture (e.g., an unplanned pregnancy) where a subsequent behavior (having an abortion or not) can be examined. Thus, TCA can be useful as a guiding perspective in reanalyzing existing data.
- **Methodological studies should be conducted to improve both monitoring and analytic studies linked to TCA.** Some of the agenda suggested by TCA requires new methodological and pilot work. A key question is how best to measure the schemas that individuals know and those they are most likely to invoke. Studies are needed that identify the set of schemas in a particular field. These studies are most likely to entail observation and intensive interviews. Once a set of schema is identified, there may be a small number of simple questions that can indicate whether a person knows, or even has a strong attachment to, a particular schema. But these operational links must be demonstrated. At this point, work in the TCA paradigm will necessarily be multi-method,

including an ethnographic—or at least rich qualitative—component. New research that seeks to identify methods to identify schemas and their associated materials without extensive qualitative research would therefore be very valuable.

- The second step, which is to **determine which of the known schemas will be invoked in a conjuncture**, also requires attention. Priming research in laboratory environments provides models that may be amenable to survey research. Vignettes with randomly varying components provide one possible model (see Nock et al., forthcoming).

New conceptual and methodological work is needed to study the co-evolution and co-dependence of schemas and materials. One approach to this may come from work on priming in social psychology, but its transference to representative samples of social context through survey research requires attention. Another approach could come from comparative historical work, in which theoretical frameworks similar to TCA are common. Still another approach may involve the use of simulation models.

We also recommend the development of strategies for sampling conjunctures and for measuring the relevant schema and materials that may be important in a particular construal, and the associated resolution of the conjuncture. Again we recommend building on the demographer's concept of "risk segment," with attention to gathering multilevel data about particular conjunctures. For instance, daily sexual diaries might be used by couples to capture the nightly conjunctures associated with going to bed. Or, subjects could be called on cell phones at particular times and asked to respond to a question and then asked about their immediate environment.

- **TCA requires new analytical studies of fertility and parenthood that likely involve new data collection.** At the heart of TCA is the repeated conjoining of micro and macro factors across the unfolding life course. To model this process, linked longitudinal data must be collected at multiple levels of analysis. The best current example is Axinn and colleagues' study in Nepal (see Axinn and Yabiku 2001; Barber and Axinn 2004; Ghimire et al. 2006). The investigators conceptualized the data collection as linked "life histories" of individuals and communities. Such data collection is expensive and arduous; thus, it must be informed by clear theory on the dimensions of person and context that must be measured. In the context of TCA, measurement at the contextual level is needed of both changing materials that enable and constrain action (which are the focus of community-level measurement in Axinn and colleagues) and of the changing mix of schema that are available to guide action. Clearly, this data collection must follow the methodological and conceptual work described above that identifies what and how data will be collected.

## Chapter 4

### Rethinking Change and Variation in Unions

Lynne M. Casper, Peter D. Brandon, Thomas A. DiPrete,  
Seth Sanders, and Pamela J. Smock

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**M**arriage is an institution in which intimate relationships traditionally between a man and a woman are recognized by the State, religious institutions, and society at large. Marriage involves a social or religious component as well as a civil contract; the civil contract is created through a civil process and governed by the matrimonial laws of the State. These laws regulate many aspects of married life and the dissolution of marriages should they end in divorce (e.g., the division of marital property). In many religious traditions, the bearing and rearing of children is viewed as central, and civil law recognizes this principle with laws that define parental rights and responsibilities toward children in marriage and in divorce.

There is much evidence that married men and women enjoy higher levels of well-being than those in other marital statuses in several key life domains. In their book *The Case for Marriage*, Linda Waite and Maggie Gallagher (2000) document some of these benefits. Married men, for example, earn more than other men, and at the same time marriage does not double the cost of living. As a result, married couples enjoy a higher standard of living than other households. Married men and women also report lower levels of depression and distress, which is reflected in lower rates of alcohol use. Perhaps through greater wealth or through enhanced mental health, married men and women also enjoy greater physical health—mortality rates, for example, are significantly lower than among single men and women.

Not only do married men and women do better on many outcomes, their children do better as well. Single parenthood or step-parenthood is associated with children's lower levels of schooling, increased risks of becoming poor in adulthood, health problems, and a host of other disadvantages lasting through adulthood (McLanahan and Sandefur [1994]; see Cherlin [1999] for an assessment of the effects of divorce on children that concludes they are typically modest). Children living with two biological, married parents experience lower rates of abuse, substance abuse, and behavioral problems. They are less likely to be sexually active as teens and, as a result, have lower rates of teen nonmarital childbearing.

Whether the relationship between marriage and the well-being of men, women, and their children is a causal one is contested. However, two trends make understanding the extent to which the relationship is causal important. First, changes in couple relationships in the United States since the mid-twentieth century have been profound. (See Casper and Bianchi [2002] for a detailed review of these changes.) In the 1950s, a young woman would likely marry by her twentieth birthday and begin having the first of three children shortly thereafter. Her husband would be the principal breadwinner with a relatively stable work career while she remained at home to rear the children, typically living near her parents or in-laws. By the 1980s, however, this scenario had changed dramatically. Women were having at least one fewer children than



their mothers, marriage was increasingly postponed, and intimate unions outside marriage achieved new prominence as nonmarital cohabitation began to increase rapidly. Researchers typically link these changes to cultural, social, economic, and technological changes, including advances in birth control, the “sexual revolution,” more egalitarian gender arrangements, greater female labor force participation, and declining wages for less-skilled men. Although the 1950s was admittedly a unique time for American families, the preceding illustrates how rapid change in unions can occur.

The second important trend is the growing popularity of other types of relationships (e.g., cohabitation) and the decoupling of marriage from childbearing, which has occurred at substantially different rates across different racial, ethnic, socioeconomic, and immigrant groups, to name but a few of the relevant subpopulations. Although the median age at marriage has risen for all racial and ethnic groups, it has risen much more rapidly for African-Americans than for whites. In the 1950s, the median age at first marriage for white and African-American women was almost identical at age 20. By 2000, the median age at first marriage had risen to 24.5 years for white women and 28 years for African-American women.

Further, the propensity to delay childbearing until marriage also varies greatly among subgroups. Today, although slightly more than 30% of births to white women occur outside marriage, 75% of births to African-American women do. There is also variation by women’s level of education. Among the most disadvantaged group—African-American women lacking a high school degree—90% of births occur outside marriage.

Do falling marriage rates, rising cohabitation rates and rising rates of children living without two coresident biological parents imply that men, women and their children will forgo the associated benefits of marriage? This question is a complicated one. It requires us to address what it is about marriage that accounts for its association with better outcomes for men, women and children.

Some scholars have argued that marriage is fundamentally different from all other forms of unions and that its benefits are unlikely to be replicated in other unions. They argue that the promise of permanency is what makes marriage as an institution more beneficial to individuals than cohabitation. This anticipated permanency arises from the high social and legal cost of leaving the relationship. Such permanency fosters two important features. The sense of, or belief in, permanency creates incentives to invest in the relationship, and, as Gary Becker argued three decades ago, permanency allows each person to direct his or her time and resources to different tasks within the marriage, thus encouraging each to specialize in maintaining the joint enterprise.

The ramifications of the classic economic theory are stark. Arguably, if legal institutions and society in general do not significantly adapt, there will likely be negative consequences for men, women, and children. Further, because the decline in traditional marriage is increasing more rapidly among the less advantaged, different marriage patterns may lead to increasing polarization and social stratification across racial-ethnic and class lines.

An alternative view is that the benefits of marriage accrue largely from being in a good, loving, and stable relationship, something not necessarily unique to marriage as a union form, however. Furthermore, the ability to sustain loving unions may not depend on legal recognition currently unique to marriage. For example, although data and research are sparse, the best available evidence suggests that gay and lesbian couples, who are forced to form extra-legal unions, face many of the same issues as heterosexual couples and experience similar levels of stability in their relationships.

It is as yet unclear whether the institutionalized aspects of marriage can be replicated as society adapts to a world in which long-term unions occur outside marriage and where children are regularly reared without living with two biological parents. Even if traditional marriage has the productive effect ascribed to it, its benefits might largely accrue to families where home production is central to family life. Classic economic theory presupposes that the marriage “benefit” stems, at least in part, from the joint rearing of children. Today, however, an increasing number of couples are childless, many by choice. That people continue to form intimate unions even in the absence of a desire to have children underscores the value individuals place on interpersonal connections that are ultimately paramount in their lives. To the degree that other union forms share this interpersonal connectedness, and to the degree that this is a primary driver of forming intimate unions, the decline of traditional marriage may have limited consequences on well-being.

The debate over the benefits of marriage brings to the forefront the limits of our theoretical understanding of unions. What is it that generates benefits of adult intimate relationships to men and women? What processes translate the form and qualities of parental relationship to children’s psychosocial development? What leads to the ability to form meaningful romantic unions? What relationship dynamics allow a couple to sustain a romantic union? How important is the expectation of permanency and are there extra-legal ways to accomplish it? We believe that the most fruitful way to understand the consequences of a rapid shift in union forms is to develop stronger theory on these fundamental questions.

### **The Changing Context of Couple Relationships and Its Importance**

Family forms and intimate relationships have been shifting remarkably rapidly. Socializing children has traditionally been viewed as one of the most important roles of the family (e.g., Parsons and Bales 1955) and in particular of marriage. However, this task is now also performed by cohabiting families. More broadly, in view of trends in divorce and the greater instability of cohabiting versus marital relationships, families are increasingly rearing children with the involvement of many parental figures, some of whom do not live in the child’s primary residence and who may enter and leave a child’s life. In addition, older couples are increasingly deciding not to marry. Given the aging of the population, these trends have important ramifications for the quality of care that children and the elderly receive and, consequently, for their health and well-being.

New types of relationships—such as cohabitation, gay and lesbian civil unions, or “living apart together”—hold the potential for enriching our understanding of why marriage is being postponed (or abandoned altogether in some subgroups), why divorce rates remain high, and why remarriage rates have fallen off. They also represent the vanguard of family change, providing clues about the future of families. In addition, they provide crucial information about the changing context in which children are reared and intergenerational relations occur, how these contexts may vary across groups, and the consequences of these relationships for the social and economic well-being and health of these subgroups. Studying couple relationships also encourages research and data collection that link theoretical perspectives about social change or the social locations of population subgroups with the prevalence, roles, and meanings of intimate relationships and transitions into and out of them.

Although massive changes in the economic, political, and cultural environment have been linked to macro-level family changes, the mechanisms through which such changes affect individual behavior are not well understood. In addition, it is likely that there have been large shifts in the expectations that partners have for each other and the “rules” under which marriage and couple relationships operate. For example, has the nature of what partners expect from each other changed over time? Has there been a shift in power between men and women? Has there been a change in negotiation processes within relationships, and, if so, how might this affect union formation and dissolution? Have there been shifts in the meanings people attach to unions? Furthermore, how do the answers to these questions differ across subpopulations in the United States? Understanding family change and variation requires learning not only what is going on *inside* intimate relationships, but also about the parent-child and intergenerational relationships in which they are formed and embedded.

The Unions Group sought to understand and explain subgroup variation and change in couple relationships. By assessing existing research, theory, and scientific methods in this area, the group sought to develop innovative models for research and data collection that can ultimately constitute a coordinated program of research capable of significantly enhancing our understanding of change and variation in unions at both the individual and the societal level. To this end, this report provides a series of research recommendations representing the inspirations, thoughts, and research of scholars across multiple disciplines.

### **Approach Used by the Unions Group**

We used five strategies to achieve our goal of understanding and explaining subgroup variation and change in couple relationships: (1) solicit views of the population community about gaps in the literature, approaches for filling these gaps, and other scholars who should be invited to participate; (2) commission papers on areas identified by the population community, and charge authors with providing specific recommendations to move the field forward; (3) assess and unify recommendations; (4) assess survey data to explore the potential of augmenting existing data collection for expanding our information on union formation and function; and (5) seek input from discussants and participants at the Duke Explaining Family Change and Diversity conference.

#### ***Invitation to Participate to Population Scholars***

The Unions Group was originally formed out of the seven investigators funded under the NICHD contract and NICHD staff. Tom DiPrete, Seth Sanders, and Lynne Casper at NICHD headed the group with a charge to reach out to the population science community to solicit views on key questions to be answered and to solicit recommendations on how to address them. Although the original seven investigators had concrete ideas on some important gaps in the literature (as outlined in the original proposal), their views were limited in important ways. First, the set of disciplinary backgrounds of the original team was limited. Second, although the team had gender diversity, there was a clear absence of ethnic diversity and associated perspectives in our original work. Third, every member of the original team was a full professor with many years of experience, and the ideas of the younger generation of population scholars were not well represented. Finally, the research agendas of the original team were largely U.S.-based, and

although the goal of the work group was to understand union formation, dissolution, and dynamics in the United States, comparisons with other countries and methods and data developed in other countries are clearly relevant.

The Union Group's approach was to solicit opinions from a wide set of population scholars, giving them maximum flexibility to express their views on the future of research in union formation, dissolution, and dynamics without imposing traditional approaches to these issues. We did this to seek innovation and to potentially draw in scholars from allied fields that ordinarily would not be identified as "population science." This had the great benefit of allowing scholars to speak about what they knew without the worry about how it fit into a research world where their knowledge was limited. We saw our job as the collating and translation of ideas so that these ideas could be of benefit to more traditional population scientists. We also saw as part of our job the expansion of the group's leadership. Our approach was not only to solicit ideas, but also to co-opt some interested population scientists to play a leadership role in the project.

We started our work by compiling a list of approximately 100 population scientists and other family scholars who we believed were experts in some aspect of family formation, dissolution, or dynamics and solicited their views on major gaps in the literature and potential ways of filling them. (Our original invitation for participation is found in Appendix 4.A.) Specifically, we asked them to provide feedback on the following questions:

1. What are the major gaps in our descriptive knowledge of major trends and subgroup variation in intimate unions?
2. What are the major gaps in our understanding of the explanation for these trends and subgroup variation?
3. For the major gap or gaps, what is most needed to fill these gaps? Do the gaps exist from lack of data? From lack of adequate theories? Or do they stem from both theoretical and data deficiencies?
4. For major theoretical or data gaps, what offers the most promise for filling the gaps?
5. Who else should we be talking to? Which areas of scholarly inquiry have we omitted that might help in making progress on our agenda?

We compiled the list of scholars with several objectives in mind. We approached scholars who represented different perspectives on these issues. This included traditional family demographers, particularly those involved with major data collections on the family; scholars from allied fields who rarely are involved in population research but whose research centers on the family; scholars who are working on family issues outside the United States; scholars whose work represented non-traditional approaches in the population sciences, particularly ethnography; scholars who would bring a sensitivity to family issues specific to minority communities, including the African-American and gay communities; and younger scholars who might bring a fresh perspective and would likely benefit from and be guided by the recommendations that are implemented from this project.

Our solicitation to participate yielded three concrete results. First, it helped us focus our agenda and led us to identify 16 substantive areas of focus in which major questions remain about change and variation in unions; these areas were also consistently identified as important for the future of research. Second, it gave us access to a wide network of diverse scholars who

had the appropriate expertise to address these questions. Finally, it allowed us to expand the leadership of our group. Peter Brandon, from the Australian National University, and Pamela Smock, from the University of Michigan, agreed to play leadership roles and have been doing so since 2005. Lynne Casper agreed to continue her leadership role in her new position at the University of Southern California. Rosalind King from NICHD joined the group in 2006. The additional leadership gave the Unions Group a much broader perspective.

Many of the ideas and recommendations from our group originated with conversations from this effort, including understanding dispute resolution and couple dynamics using methods developed in family therapy research; studying gay and lesbian families to help understand the role of gender more broadly in couple dynamics; collecting information on the dating process to better understand matching; the potential (and limits) for the use of Internet dating information to understand couple formation; the changing nature of cohabitation as an alternative to traditional marriage; and the links between marriage formation and the labor market. These and other issues that we believe will help move forward research on union formation, dissolution, and dynamics are explored in our volume of compiled papers. Appendix 4.B describes our plan of action and summarizes the key questions and recommendations we received from our solicitation.

### ***Commissioned Papers and Unions Conference at the University of Southern California***

Our next strategy was to commission a set of 13 papers based on the 16 topics we identified as important to the field. The topic areas of the chapters include economic, demographic, anthropological, and psychological theories of intimate unions; the perceived and “objective” value of marriage; cohabitation; gay and lesbian relationships; racial and ethnic variation in intimate unions; adolescent dating relationships; methods to collect better relationship data; work–family issues; changes in marriage; and cross-national comparisons of union formation and dissolution. We next approached leading experts in these areas to write “thought pieces” on each of these topics. The papers’ titles and authors’ biosketches appear in Appendix 4.C.

The goal was for the experts to assess current knowledge and attempt to provide answers to a set of standard questions as they apply to the area they were researching. These questions aided in standardizing the format of each paper. The questions were:

1. Which changes in families over time or variation across subpopulations might your topic area help explain, and how might it help explain them?
2. In your opinion, what are the key theoretical issues outstanding that need exploration?
3. In your opinion, what pieces and types of data collection are needed to more fully establish models in your area and to address the outstanding theoretical issues you believe need exploration?

The authors were first asked to prepare a memo providing a detailed outline of the material they planned to cover in their chapters. Two members of the Explaining Family Change (EFC) group read each memo and provided feedback to the authors requesting that they 1) address specific areas to cover gaps in our knowledge, 2) delete other areas of coverage that overlapped with other chapters, and 3) devote more or less discussion to specific areas to even out coverage. The authors took these memos into account as they prepared their first drafts.

We held a conference at the University of Southern California in September 2006, where the initial drafts of these papers were presented. The goals of this conference were 1) to educate the EFC research group about the chapters that were commissioned by the Unions Group, 2) to provide chapter authors with feedback for revisions from members of the EFC group and the Unions Group, 3) to discuss how the chapters could be better integrated, pinpoint gaps in knowledge, and identify intersections with the EFC's goals, and 4) to obtain input from all workshop participants on the best targets of opportunity for advancing research in the area of intimate unions. The agenda and participants for this conference appear in Appendix 4.D.

The sessions were structured to facilitate the achievement of these four goals. Authors were given 15 minutes to present their paper drafts and were instructed to focus heavily on recommendations for future research. Three discussants were assigned to each paper; whenever possible, one discussant from each of the EFC groups was assigned to provide remarks to maximize integration across groups. Each discussant was given seven minutes to raise questions, suggest revisions, and provide general feedback. Subsequently, 20 minutes were set aside for all workshop participants to raise questions and comment on the papers. This format generated some intense discussions that were captured by note takers.

Two members of the Unions Group reviewed each paper. Memos were generated for each author requesting revisions. The contents of the memo included suggestions by the two reviewers in the Unions Group as well as suggestions that were made by the discussants and workshop participants at the conference. Every effort was made to encourage authors to dedicate at least one-fifth of the manuscript to recommendations.

Currently, we are completing the review process and have begun receiving the revised chapters. Our plan is to publish these chapters in an edited volume. Duke University Press has expressed interest in such a volume; we are in ongoing negotiations with them. The table of contents and abstracts for this volume are provided in Appendix 4.E.

### ***Discussant and Participant Comments at the Duke Explaining Family Change and Diversity Conference***

We presented a summary of these recommendations at the Duke "Explaining Family Change and Diversity" conference. The conference was attended by approximately 75 family researchers who are widely considered to have expertise in some area of family change and variation. Larry Bumpass and Ken Dodge were asked to read and comment on this document and its appendices. Participants were asked to indicate what they viewed as the four most important areas for research advancement. The participants were assigned to one of six discussion groups in which they were given the opportunity to discuss their priorities. This document was revised to include the thoughts and suggestions of colleagues who participated in this conference.

### **Recommendations**

The key questions and recommendations provided in this report incorporate suggestions from the survey we conducted, the papers we commissioned, the discussants and participants at the conference we convened to discuss the commissioned chapters, the participants and discussants at the Duke conference, the discussants and participants at the 2007 American Sociological Association session devoted to Explaining Family Change and Variation, and the larger body of

work of the Unions Group and the EFC group as a whole. In some cases our recommendations rely heavily on the chapters we commissioned. We are especially grateful to the authors of these chapters for their willingness to think through the tough issues and to continue working with us over the past few years. Appendix 4.C contains a list of these authors, Appendix 4.F contains a list of all of the consultants we have worked with since 2005. Appendix 1.B lists the American Sociological Association discussants and the Duke conference participants.

Below we list and then describe **eight specific recommendations**, many with sub-recommendations. Some are what we would call substantive, some methodological, and some specifically related to data collection. Given that the motives for the methodological and data recommendations often stem from substantive gaps in knowledge, we do not artificially separate them.

1. Improving measurement of key family states and transitions to enhance monitoring and understanding of family change and variation.
2. Attaining a better understanding of relationship dynamics over time through collection of appropriate data and the development of new models.
3. Attaining a better understanding of cultural schema and its interplay with economic resources through the collection of appropriate data on cultural schema.
4. Advancing understanding of dating and entry into relationships.
5. Improving understanding of intimate union variation by race and ethnicity and among immigrant families.
6. Studying cross-national variation in intimate unions.
7. Understanding the intersection of work and family.
8. Studying the role of biology in intimate unions.

For each topic, we first explain its importance. We then discuss what we know and what we do not know. Finally, we recommend how we might advance understanding of what we do not know.

***Recommendation 1: Improve the Measurement of Key Family States and Transitions to Improve the Monitoring and Understanding of Family Change and Variation***

**Why is improving measurement for monitoring important?**—First, just as the United States needs leading economic indicators and national product accounts, it also needs to monitor social indicators of the health and well-being of the population. Basic family statistics, including indicators of union formation and dissolution, are important to this social accounting. Second, national estimates of trends and subgroup variation of cohabitation, marriage, and union dissolution serve as critical benchmarks against which to assess the quality and representativeness of smaller-scale studies on the causes and consequences of union formation and dissolution, and family change more generally. Third, these broad, national, periodic, representative descriptions of family structure and transitions uncover the “puzzles” to explain and motivate new theoretical and empirical developments.

**What is problematic about data for monitoring unions and family change and variation more generally?**—In our interviews with the population community, we heard repeatedly that several key data sets used to track trends in basic demographic patterns have been lost during the past 15 years. This includes data to estimate marriage and divorce rates, as well as

basic demographic trends in the population at the time of marriage and divorce. We also heard a need to expand the tracking of basic statistics to include indicators that reflect recent and continuing family change. This includes the various forms of unions that have become common but are outside traditional marriage—different forms of cohabitation in the heterosexual and gay community, the various family arrangements for childrearing following divorce, and the emerging trends in couple relationships among older men and women.

Unlike many other Western countries, the United States currently has no nationally representative, ongoing survey dedicated solely to monitoring family change and variation, let alone change and variation in intimate unions. A good deal of research on intimate unions still employs or relies heavily on the 1987–1988 National Survey of Families and Households (NSFH) and its two follow-up waves. Many surveys contain pieces needed to monitor intimate partnerships and family change and variation more generally, but investigators must select pieces of information from a number of data sources. None of the existing data sets alone is satisfactory for the task.

Below we discuss important areas that require monitoring and the data available to assess each area. The mainstays for describing family relationships, including the current marital status and living arrangements of the population, are the decennial censuses and the Current Population Survey (CPS), particularly the March supplement and also the June fertility supplement. The American Community Survey (ACS), slated as the replacement for the long-form census, may also become an important monitoring survey, particularly to assess subgroup variation. Expanded identification of cohabiting partners in the CPS and the ACS enhance the ability to identify this family form. These cross-sectional surveys are primarily useful for describing family forms and changes over time in distributions across family forms; they are less suited than other data sources for monitoring transitions between states, which occurs with marital disruption, the beginning of cohabitation, or the birth of a child, for example. To monitor such transitions, researchers have historically used either vital statistics data or retrospective marital and fertility histories. However, there are gaps in this measurement, described below.

A major challenge in making recommendations on areas of emphasis, and in some cases accompanying data collection, is the rapidly changing nature of couple relationships and the growing acceptance of non-traditional relationships. Given that it is not feasible to study all new or understudied forms of couple relationships, we balanced several factors when making our recommendations.

First, we privileged research on family forms that have rapidly grown in the population. Cohabitation has risen sharply in the United States, as it has in most Western countries. In the United States, the percentage of marriages preceded by cohabitation rose from about 10% for those marrying between 1965 and 1974 to more than 50% for those marrying between 1990 and 1994 (Bumpass and Lu 1999; Bumpass and Sweet 1989). In 1996, among women aged 25–29 who had been partnered, the fraction who either lived with the partner prior to marriage or who only lived with their partner and never married was 93% in Sweden, 85% in East and West Germany, 83% in Finland, 81% in Austria and Switzerland, 79% in France, 76% in Norway, and 63% in Great Britain (Kiernan 2001). In addition, there is recent evidence long-term cohabitation as a union status is increasing in prevalence. Between the early 1990s and the late 1990s the fraction of couples whose first cohabitating experience lasted five years or more increased from 10% to 14% (Kennedy and Bumpass 2007). Finally, contrary to popular impression, cohabitation is not a childless state. About one-half of cohabitating couples in which one partner was previously married have children in the household, and among cohabitating couples in which



both partners were never married, 35% have children in the household (Smock 2000). Our recommendation to fill the gap on cohabitating couple relationships stems largely from its importance to couples and children in the population.

Second, we privileged research on a family form—same-sex civil unions—that has not yet increased in the U.S. population but that we believe may well do so in the future. Our judgment is based both on other U.S. demographic trends and those in other Western countries that tend to lead the United States in both trends and family policy. For example, while same-sex civil unions sanctioned by the state are recent phenomenon in the United States, these registries have been available in Europe for some time, beginning with Denmark’s legislation in 1989. Today, 16 European countries recognize civil unions and we believe that the United States is likely to follow the trend in granting either marriage or a marriage-like status to gay and lesbian couples. This will give demographers a unique opportunity to study who avails themselves of the opportunity for state recognition of their relationships. Other trends such as the aging of the U.S. population are so pronounced that the special circumstances of couple formation among older Americans are likely to become more pressing.

Finally, we privileged research that we believe could shed light on theoretical issues in demography. For example studying gay and lesbian relationships may help us to understand the role of gender in relationship dynamics, the gender basis vs. human capital basis of household specialization, and the role of formal marriage contracts in the lives of couples. Studying dating relationships helps us to address at what stage assortative mating occurs and for what purpose, as well as how a scarcity of potential partners affects the timing of union formation, the type of union, and the characteristics of couples. Studying dating relationships also allows us to understand the process of human development that shapes men and women to be in a position in adulthood to form lasting and meaningful relationships.

### ***Gap 1: Measuring changes in marriage and divorce rates***

Our ability to monitor changes in marriage and divorce rates has declined during the past ten years. Beginning January 1, 1996, the National Center for Health Statistics (NCHS) suspended the comprehensive collection of detailed data on marriage and divorce from state vital statistics records. Monitoring of vital events such as entry into first marriage, divorce, and remarriage has been limited by the loss of the data registries. However, this registration system was always incomplete because the detail of data provided differed by state, and not all states reported detailed data by subgroup and area. Thus, unless improvements are made to the system that existed prior to 1996, it is not obvious that reviving our vital statistics system is a prudent way to improve the measurement of marriage and divorce rates.

Monitoring transitions into and out of marriage has primarily relied on retrospective marriage and fertility histories collected at five-year intervals in the June CPS between 1975 and 1995, and in the NSFH and the National Survey of Family Growth (NSFG). The NSFH and the June CPS marital and fertility supplement are no longer collected. The Survey of Income and Program Participation (SIPP) does contain union histories, but it provides limited information on public-use files about dates of entry or exit into unions. Given that reinstating the marital and fertility histories in the CPS is unlikely, we urge the Census Bureau to maintain and improve the fertility and union histories in SIPP and to explore ways to include more detailed data elements from these histories on the SIPP public-use files. Because of the Bureau’s current plans to restructure this survey, including the use of Event History Calendars, we believe that this is an opportune time to enhance fertility and union histories in the SIPP.

The NSFG collects a complete history on marriage and divorce, but until very recently, this was collected only periodically (data from 2002 are the most recently available, for approximately 7,000 women and 5,000 men in a limited age range). The NSFG's current effort to continuously interview 11,000 households between June 2006 and December 2008 is a promising sampling strategy. The most important enhancement that is needed to improve the usefulness of the NSFG for monitoring transitions into and out of marriages and cohabitations is an expansion to the age range. Currently, only individuals aged 15–44 are included in the survey. Expanding the upper age range would improve our ability to track movements into and out of cohabitation, particularly at older ages, as well as marriage and divorce.

Because the NSFG is a survey focused on fertility and reproductive issues, a substantially truncated interview would have to be administered to people aged 45 and over that focused almost solely on cohabitation and marital histories along with some important demographic information, and the amount of information collected from these older individuals would be substantially less than is currently collected for the younger population. Nevertheless, three features of the NSFG make it an attractive vehicle for collecting this monitoring information. First, the NSFG already collects these data for younger individuals. Second, it contacts households to randomly select individuals aged 15–44 so the marginal cost of interviewing older individuals would be much less than collecting complete marital and cohabiting histories in a new survey. Third, because the survey has moved to continuous interviewing, several years of data can be pooled to provide estimates of smaller subpopulations. However, it is unlikely that the age range of the sample will be expanded without additional funding; we do not recommend diverting funds from the core study to expand the age range of the sample.

The sample size of either the NSFG or the CPS is too small to assess many subgroup or geographic variations in union formation and dissolution. Efforts are under way to add questions to the American Community Survey that would enable researchers to construct expanded measures of marriages and divorces. One key question that should be added is the date of first marriage so that the beginning of the “at risk” period for marital status changes, such as separation and divorce, can be determined. Current plans call for dating the beginning of the current marriage in the ACS but not the first marriage (communication by David Johnson at the June 2007 EFC Conference at Duke University).

### ***Gap 2: Monitoring intimate unions in a world beyond traditional marriage: cohabitation***

The importance of monitoring cohabitation—to understand how this form of relationship is growing and how it differs across subgroups as well as how it is related to trends in marriage relationships—is widely accepted among population scholars. If cohabitation is replacing marriage, the trend has consequences for the family contexts in which children are reared. One of the measurement challenges as union formation moves beyond traditional, legally defined institutions like marriage is the survey respondent's understanding of terms for less formal partnering. For example, based on in-depth interviews with 115 cohabiting or recently cohabiting young adults, Manning and Smock (2005) report that many did not immediately understand the term “unmarried partner,” and some said they would not think such a term applied to them. Some found it confusing or said that the term did not resonate with them as a relationship category. This term is used by the Census Bureau, a vital source of basic data about the prevalence and characteristics of cohabitators, as well as other federal statistical agencies.

Smock, Casper, and Wyse (forthcoming) suggest that new terms may need to be tested for validity using in-depth interviewing (cognitive testing) across diverse populations, including gays and lesbians, ethnic minorities, and people of different classes.

Cohabitors who live with others (e.g., parents, friends) have often been missed in the Census or surveys that rely on each household member's relationship to the "head" or to a "reference person," unless one of the cohabitators is the reference person (Casper and Cohen 2000; Manning and Smock 2005). Fortunately, changes are underway in the CPS, ACS, and other federal surveys so that all records will include flags linking individuals to cohabiting partners within the household. The 2007 CPS identifies all unmarried couples living together regardless of who is the householder. Beginning in 2007, the CPS also now identifies both of a child's coresident parents regardless of each parent's marital status. These are important changes that facilitate monitoring changing family structure.

Despite these advances, there are concerns about the federal data collection system that provides basic data for monitoring trends in cohabitation. For example, the CPS has never included cohabitation histories and while the SIPP does ascertain union histories, it provides limited information about dates of entry/exit into unions on public-use files. This greatly constrains the utility of the federal data system to aid our understanding of the changing duration of cohabitating unions and the nature of their dissolution.

Relationships that are less formally defined than marriage raise additional measurement issues (Smock, Casper, and Wyse, forthcoming). Assessing the beginning and ending of cohabitation appears problematic. Cohabiting partners neither always agree on their relationship status nor remember exactly when their cohabitations began; the latter reflects that moving in together is often a gradual process with no clear marker, such as a wedding (Manning and Smock 2005). Many studies rely on specific dates; for example, linking the start date of a cohabiting relationship in relation to other dates, such as beginning full-time employment or childbearing (e.g., Guzzo 2006). Difficulty in recalling start and end dates may well lead to distorted interpretations about the links between various events and transitions in union status. This is perhaps most important in studies of the link, or lack thereof, between (stable) union formation and childbearing. Targeted efforts to improve the reporting of dates of events, including cohabitation, are needed. There is some research on methods to assist individuals in event recall; these findings can provide a foundation for these efforts. Collecting data from both partners on the dates of entry into and exit from relationships may help these measurement issues; the independent reports may also be of independent research interest.

In addition, partners may live together either part-time or in cycles (Binstock and Thornton 2003; Knab 2005). The twofold issue of the definition and measurement of part-time cohabitation has significant implications for assessing racial and ethnic variation in cohabitation prevalence and characteristics (Knab 2005). For example, young black males are much more likely to have many homes in which they hang their hats, and are therefore more likely to be undercounted or to be cohabiting part-time.

The monitoring of transitions into and out of marriages, cohabitations, and other relationships is also possible if cohort panels are refreshed. The National Longitudinal Survey of Adolescent Health (Add Health) contains complete marriage, cohabitation, and dating histories for young adolescents who will be followed as they age. To monitor change over time, it will be necessary to start a new panel; however, start-up costs will be lower than a completely new survey because the research design and survey instruments have already been completed.

### ***Gap 3: Monitoring intimate unions in a world beyond traditional marriage: gay and lesbian unions***

Interest has been increasing in understanding relationship dynamics of gay and lesbian couples. Starting with the work of Blumstein and Schwartz (1983), social scientists have recognized the potential for understanding when gender differences might have a biological base and when they likely do not by comparing choices in same-sex relationships relative to opposite-sex relationships. There is now a burgeoning literature on gay and lesbian families. This interest has led to sessions on gay and lesbian demography on several Population Association of America (PAA) programs over the past five years.

In a significant advancement, Cycle 6 of the NSFG collected data on same-sex sexual activity and sexual orientation. In response to a question that asked “Do you think of yourself as a heterosexual, homosexual, bisexual, or something else?” 90% of men aged 18–44 responded that they think of themselves as heterosexual, 2.3% answered homosexual, 1.8% bisexual, 3.9% something else, and 1.8% did not give an answer. The results for women are similar. To our knowledge, the NSFG is the only data set that can be used to monitor the size and growth of these populations. However, these data suffer from several limitations. First, the limited age range ensures that some people who identify themselves as gay and lesbian will be missed. Second, we do not know whether the gays and lesbians identified in the survey actually consider themselves to be in a union. Third, the data do not allow us to investigate transitions into and out of unions. Still, the ability to gather any information on same-sex sexual practices and sexual orientation is a major improvement.

Measurement issues for gay and lesbian couples extend beyond the issues discussed above for cohabitating couples (Gates and Badgett forthcoming). In the census data and most federal household-based surveys, gay and lesbian couples can only be identified by observing the presence of a same-sex unmarried partner in the household. Black, Gates, Sanders, and Taylor (2006) and Rosenfeld (2006) discuss how even a small amount of measurement error in the recording of sex can lead to many heterosexual couples being coded as gay couples, thus clouding inferences. In addition, there are now a host of legal statuses granted by states, such as civil unions and domestic partnerships, that accurately describe a couple’s legal relationship but are not reflected on survey questionnaires.

Adding direct questions on sexual orientation to surveys, especially those based on national probability samples, would help advance research in this area. An added benefit may be destigmatizing inquiries about sexual orientation and likely improving the quality of the data over time. However, even if questions directly ascertaining sexual orientation were added to some surveys, other issues pose challenges to studying gay and lesbian families. The low prevalence of gay and lesbian families in the population makes it difficult to get a representative sample large enough to provide reliable information. In addition, the large surveys that could support reliable estimation are federal surveys. Given the political sensitivities surrounding the issue, statistical agencies that field these surveys are unlikely to incorporate questions on sexual orientation, unless clearly justified by a public health interest.

Perhaps *the* central issue in studying same-sex couples is their low prevalence in the population. Even the largest national probability samples will still yield relatively small samples of sexual minorities. For these reasons, much more effort is needed to develop sound methodologies for oversampling or separately sampling sexual minorities within the framework of probabilistic sampling techniques (Gates and Badgett forthcoming). Such efforts serve at least two important research purposes. First, large samples provide the only real way to begin to

analyze the diversity of same-sex relationships and the potential differences associated with this diversity. Existing research documents critical differences in the dynamics of relationship and family formation between male and female couples and by race-ethnicity. We know little about differences that might also be affected by such factors as socioeconomic status or geographic location.

A second important outcome of efforts to specifically sample sexual minorities concerns advancement of survey methodology. Surveying sexual minorities could provide important insights into the development of more effective survey technology designed to sample populations of relatively small proportions within the general population. For example, respondent-driven sampling (Heckathorn 1997) offers a methodological approach designed for the sampling of hidden and socially stigmatized populations. In a variant of snowballing or chain-referral sampling techniques, the method employs both Markov chain theory and the theory of biased networks to develop a procedure for collecting an unbiased sample with known properties. Given some of the challenges—not the least of which is cost—associated with garnering a random-sample of sexual minorities through standard random-digit dialing techniques, respondent-driven sampling might provide a viable and less expensive alternative for developing large samples of sexual minorities that can provide information generalized to the larger population.

Although random samples such as NLSY or Add Health contain small samples of gays and lesbians and parents of gays and lesbians, they do contain thousands of heterosexual respondents. Thus, any attempt at an oversample can benchmark the collected sample against a random sample, particularly if the same recruitment method is used for both the lesbian, gay, and heterosexual population.

If a new cohort of Add Health were to be launched, it is unclear whether an oversample of gay and lesbian students could be achieved to produce reliable and generalizable estimates of transitions into and out of same-sex relationships. Still, the comprehensive nature of the relationship transitions data in the Add Health indicates that this is a promising opportunity to examine.

#### ***Gap 4: Civil Unions and Domestic Partnerships***

The dynamic policy climate surrounding the status of same-sex couples can provide insights into the institutional and social roles of marriage and the formalization of relationships. Studying same-sex couples makes it possible to ask old questions in new ways about the contemporary importance of the legal status of marriage in the lives of all families. A large literature spanning the social and health sciences has studied the impact of the legal status of marriage on individuals' and families' health and economic well-being. Marriage is associated with better physical and mental health, higher wages, changing time use, greater wealth accumulation, and greater longevity, although some evidence suggests that those effects may be changing over time (e.g., Gray 1997). Lifting the constraint among couples whose choice of marital status was exogenously constrained might help reveal the functions that legal marriage serves.

Thus, studies comparing married couples, those in civil unions, or registered couples would help identify what—if anything—is unique about marriage as a legal and social institution. This understanding could enhance theoretical development on the impact of marriage on both family and societal levels. Similarly, as originally suggested by Blumstein and Schwartz (1983), theoretical development should consider the utility of using same-sex couples as an

important counterfactual to further our understanding of the impact of gender and gender roles in relationship dynamics.

In accordance with Gates and Badgett (forthcoming), we also emphasize that gay and lesbian couples face a set of concerns that are currently either unique or much more important to these communities than to couples generally. Many of the issues that are prevalent among gay and lesbian couples may become more prevalent among couples overall as family forms evolve. These important issues include:

- For those rearing children, information is needed about how children were conceived and the nature of legal parental status both with any partners in the home and with other biological parents.
- Information is needed about access to domestic partner benefits and health insurance and the perceived relationship between educational and employment choices and sexual minority status.
- Information is needed on whether the support of friends offers a comparable substitute for family support. One anthropological study found that complex “families we choose” among gays and lesbians in the San Francisco area appeared to be at least in part related to the lack of support from families of origin and from the law (Weston 1991).
- More information is needed on the motivations and influences on same-sex couples’ entrance into legal relationships. Today, approximately 20% of the U.S. population lives in a state with some legal recognition of same-sex couples (Hawaii, Vermont, California, Massachusetts, New Jersey, Connecticut, and Maine), and 18 countries now or will soon offer recognition ranging from civil partnerships to full marriage rights. These jurisdictions are ripe for studies of the how the changing social and legal climate has affected relationship formation, development, and duration among same-sex couples. In at least some places, options for same-sex couples include commitment ceremonies that lack any legal standing, myriad legal documents and contracts that partially formalize a relationship, domestic partner registries, civil unions, and marriage. We know very little about which options lesbians and gay men choose, why they do so, and how those decisions affect outcomes for family stability and well-being.
- Now that same-sex couples can marry (or register) in a variety of jurisdictions, an important line of research concerns the stability of those relationships. Will divorce be more or less common among same-sex couples compared with heterosexual couples? On an empirical level, the extent to which couples use various reproductive technologies and surrogate parenting, adopt, or rear children from prior heterosexual relationships is virtually unknown.

It is also important to develop more inclusive theories of gay and lesbian family behavior. If theories of the family are intended to apply broadly to the range of family types, then increased attention to the constraints and contexts faced by lesbians and gay men will be necessary. Better theories would be able to address the unique aspects of same-sex coupling and family formation. For instance, theories about fertility and childrearing that are relevant to lesbians and gay men would need to include an awareness of the unique legal climate that complicates their decisions about adoption or pregnancy. In some locales, access to reproductive technologies is limited or

difficult, and legal parental ties for non-biological parents cannot often be guaranteed. In particular, added risks and expenses for legal counsel may be decisive roadblocks for lesbians and gay men who wish to parent.

Similarly, we would encourage scholarship that does not simply identify differences in family-related outcomes by sexual orientation but more carefully considers the reasons for those differences. For example, studies comparing children being reared in lesbian and gay families with those from heterosexual families should attempt to measure variables that might explain any differences in child outcomes. Qualitative studies and surveys employing innovative sampling designs could help us to answer many of these questions.

***Gap 5: Long-term cohabitators as a special population of study***

It may be important to learn more about long-term cohabitators (i.e., for at least five years). When Bumpass and Sweet (1989) wrote their influential article documenting the rise in cohabitation across cohorts, cohabitation was largely ending in marriage or breakup within a few years. However, long-term cohabitation is particularly prevalent in Scandinavian countries, where it is as common as traditional marriage. If cohabitation functions much like marriage, we perhaps should not be that concerned about distinguishing the two relationships. However, to the extent that the lack of formally sanctioned obligations in the United States puts children or adults at a disadvantage in terms of care and support, we should better understand the conditions under which long-term cohabitation replaces marriage. It may be that long-term cohabitators face particular barriers to marriage, such as financial reliance on a resource available only to “single” adults (such as health care), or hold beliefs that discourage traditional marriage (Casper and Sayer 2000). In-depth qualitative interviews would allow researchers to consider if particularly lengthy cohabitations should be classified—or at least understood—as a distinct group.

***Gap 6: “Older” cohabitators as a special population for study***

We need to know much more about older cohabitators, particularly given that the cohorts who have cohabited in large numbers are, or will soon be, moving into older age brackets. In addition, cohabitation is increasingly deemed legitimate, suggesting the practice may increase among older adults in general. Currently, there are very few studies on this subgroup, but they provide intriguing results. Brown, Lee, and Bulanda (2006), drawing on data from the Census 2000 and the 1998 HRS, find that older cohabitators (aged 51 and older) are disadvantaged economically and in other ways compared with married and remarried individuals. King and Scott (2005) find that older cohabitators are less likely to view their relationships as a precursor to marriage than younger adults.

There are also questions that must be addressed about the economic ramifications of marriage for older widowed or divorced individuals and whether there are disincentives to marry. As a financial adviser recently wrote, “There is a reason many wealthy senior couples choose to cohabit. It is financially simpler” (Pearson 2006). With respect to the older population, will adult children be more or less obligated to provide support to a step-parent or “partner of a parent” if their parent marries rather than cohabits? Questions such as these begin to tie cohabitation to the intergenerational well-being of subgroups that are policy relevant. Qualitative work on older cohabiting couples would be enormously useful to understand decision making about marriage.

### ***Gap 7: Couples “living apart together”***

As family trends continue to shift and marriage is either delayed or forgone altogether, couples may continue to experiment with new relationships and family forms. Living Apart Together (LAT) is a very new family form that some demographers believe has developed as a result of more widespread social acceptance of non-traditional family forms. LAT relationships exist when partners maintain separate households and finances and share living quarters only temporarily or intermittently (De Jong Gierveld 2004). Although married couples have lived apart for employment reasons, what is new for LATs is that they are not married and do not share expenses. Currently, very little data exists on trends in LAT relationships, particularly due to the lack of a solid way to measure this new family form.

Levin (2004) suggests three potential purposes for entering into LAT relationships. The first is the need to care for a child or other relative. This may be particularly true for older couples who have children from prior marriages or who have elderly relatives who need care. If a partner wants to maintain a romantic relationship separate from the relationship with the relative, LAT relationships offer a way to do this. That is, LAT relationships facilitate an individual’s ability to fulfill their need for romantic partnering but also intergenerational caregiving responsibilities. The second purpose of LAT relationships, according to Levin, is that the partners work or study in different locations. The final purpose is that it serves as an alternative to both marriage and cohabitation. Again, this is particularly true for older partners who may have negative experiences with either marriage or cohabitation. In fact, Levin also finds that LAT relationships are particularly common among older women. Thus, LAT relationships are, perhaps, a phenomenon of the older generations who have become disenchanted with more traditional relationship forms. Knowing more about how common these relationships are as well as when during the life course, and why and for how long individuals maintain them, might lead to a fuller understanding of the ties that bind not only romantic partners but also extended kin. Small-scale qualitative studies would help us to more fully understand these couples.

### ***Recommendation 2: Attain a Better Understanding of Relationship Dynamics Over Time by Collecting Appropriate Data and Developing Better Models***

Relationship dynamics encompass two primary areas—how couples negotiate the day-to-day activities of the family and how they deal with issues in the relationship itself. This idea is advanced in Stanley, Whitton, and Markman (2004) and Stanley (2003) and reiterated by Stanley, Rhoades, and Whitton (forthcoming). They suggest that two broad areas of relationship safety are present in healthy relationships—safety in the day-to-day interactions of the relationship and safety in a sense of a clear commitment to the future of the relationship. “Interaction safety” refers to the level of safety that couples feel in the day-to-day interactions needed to accomplish the routine tasks within the household. A healthy relationship will have a strong sense of connectedness, which is built on positive social interactions, forgiveness, love, and commitment (Amato 2007; Fincham, Stanley, and Beach 2007). Healthy relationships have very low levels of criticism and negativity and an absence of danger. Second, safety also comes from a clear commitment to the future of the couple, which provides a sense of security and a reason to invest in the relationship and sacrifice for the relationship.



**Why is this important?**—Why is understanding relationship dynamics important for the population sciences? We believe there are demographic, theoretical, and policy reasons that call for a better understanding of relationship dynamics.

Marriage has been postponed in the population and has declined in some populations, divorce remains high, new forms of intimate relationships are on the rise, and children are increasingly reared by single parents, parents who span multiple households, and parental figures who are unrelated to them (Casper and Bianchi 2002). Changes in the composition of the population, economic and political environment, culture, and technology have been linked to these macro-level familial changes. However, the mechanisms through which these changes affect individual behavior and result in macro-level change are not well understood. Understanding family change and variation may require that we increase the power of the microscope to view what is going on inside intimate relationships and, more broadly, parent-child and intergenerational relationships. Explaining change and variation in intimate union forms, and transitions into and out of them, is equally unsatisfying. When examining divorce, for example, we typically have related divorce risk to individuals' family structure as a child, the degree of homogeneity of relationships (especially education, ethnic-racial, and religion), the relative income of the man and the woman, or the age at which relationship started. Although these factors are good predictors of divorce risk, the mechanisms that link them to divorce risk are not well understood. What is the mechanism that leads to the intergenerational transmission of divorce? What is the mechanism that leads to two individuals from different faiths being less able to stay together? Why does control of economic resources by the wife relative to the husband affect the chance of a divorce? We believe that the answer to these questions requires better knowledge about how couples interact in day-to-day decision making and the perceived levels of commitment to the relationship and partners willingness to invest in it. One also suspects that the great degree of subgroup variation in the historic family structure in which children were reared, in the chances of partnering outside the group, and in the relative earnings of the man and woman in the couple will result in relationship dynamics that vary a great deal across subgroups.

Demographers use discrete categories to divide the population into categories. Although new family forms and relationships have been emerging, we are not yet very clear about how these relationships differ from one another in respect to relationship dynamics and meanings. For example, do cohabitators have the same communication style as married or dating couples? Do long-term cohabiting partners have yet a different style? Furthermore, do these couples attach different meaning to their relationships? Although we know some things about this (e.g., cohabitators are less committed to their relationships than married couples, and cohabitators are not a monolithic group in their reasons for cohabiting (Casper and Sayer 2000), we do not know how all of the relationships compare and contrast. A couples study that perhaps oversamples some of these groups would allow us to examine different facets within these relationships.

Economists now have several models of interaction between couples. These models predict how the expenses get divided and what happens when disputes cannot be resolved within a couple. However, the predictions of these models depend on the ability of couples to commit (in the economics sense) to their decisions, to cooperate in decision making, or to act uncooperatively but within the relationship when they cannot agree. Similarly, psychologists have developed a number of models regarding couple interaction, focusing on numerous dynamics such as problem solving, communication, negativity, commitment, and positive regard.

These diverse perspectives should be integrated. Careful description of the way interactions within couples actually occur will likely lead to better theoretical modeling of these interactions.

Finally, there is now an important policy debate surrounding “healthy marriage.” The 1996 welfare reform law that established Temporary Assistance for Needy Families (TANF) included the goal of increasing the number of children living in married two-parent families, and the debate has again emerged in the reauthorization of the law. Efforts have varied across states to meet this goal, and include everything from introducing a relationship and marriage education curricula to teach individuals and couples strategies to improve their odds of success, to more traditional mechanisms of reducing the disincentives to marriage within TANF. Part of the policy concern is clearly centered on children. There is a general feeling that children who grow up amid a healthy marital relationship are more likely to have such relationships themselves as adults. This is seen as one mechanism that could break intergenerational dependency on TANF.

**What do we need to know?**—In fact, as Stanley, Rhoades, and Whitton (forthcoming) suggest, we know a good deal from the psychological literature about the association between relationship dynamics and several important outcomes. Among adult members of a couple, higher measured negative interaction is associated with lower self-reported couple happiness (Stanley, Markman, and Whitton 2002), a greater likelihood of breakup and divorce (Gottman 1993, 1994), and higher levels of depression and anxiety (Beach, Sandeen, and O’Leary 1990; Halford and Bouma 1997). There is also evidence that children reared in households where parents display high levels of negative interactions have more mental health problems, have poorer school performance, and act out more often (Cummings and Davies 1994).

Yet there is also much we do not know about the association between relationship dynamics and important demographic outcomes. First, psychological measures have not been collected on population-based samples. Most psychological studies of couple dynamics involve samples of convenience or clinic-based samples. Therefore, even though the observed associations are strong, how strong they would be in the general population is unclear.

Second, little is known about the link between more traditional demographic correlates of union formation and dissolution and relationship dynamics. For example, although we know that adults who grew up without two biological parents have higher rates of divorce, we do not know whether these adults conduct their own relationships in a way different from adults who grew up with two parents and presumably on average had better role models for healthy relationship dynamics.

Third, we do not know how relationship dynamics vary across different types of couples (e.g., married, cohabiting, dating) and whether other categories of couples actually exist and can be identified based on their relationship dynamics.

Finally, we do not know whether relationship dynamics vary across racial, ethnic, and economic subgroups. This variation could occur because the circumstances and stressors differ for subgroups or because, for historical reasons, subgroups have adopted different cultural norms regarding appropriate couple interactions. Few large studies of relationship dynamics have been conducted on African-American, Latino, Asian, or Native American couples, although this is changing, at least for low-income couples, with the evaluations of the Supporting Healthy Marriages and the Building Stronger Families projects (see [www.buildingstrongfamilies.info](http://www.buildingstrongfamilies.info) and [www.supportinghealthymarriage.org](http://www.supportinghealthymarriage.org)). Almost no research has addressed couple dynamics among middle-income individuals of varying racial and ethnic groups.

**We believe that data collection on relationship dynamics should be structured to accomplish the following substantive goals:**

1. To measure and model relationship expectations and perceptions of the expectations of one's partner concerning key characteristics of the relationship, including the nature of relationship commitment (such as commitment to staying in the relationship, sexual fidelity, cooperative decision making), decision-making style of partner, fertility and parenting, household division of labor, and work and family balance.
2. To measure and model social interaction within relationships, decision-making behaviors, conflict and conflict-resolution behaviors, and social support.
3. To measure and model perceived relationship quality as both a potential cause and consequence of individual and joint behaviors of couple members, and as a potential mediating factor that affects these unions' rates of transition to dating relationships, cohabitation, marriage, and dissolution.
4. To measure and model how children affect and are affected by relationship dynamics and relationship quality.
5. To model how couple behaviors can be predicted by the starting conditions of the match and by the context within which the intimate union develops. For example:
  - (a) How are joint behaviors or relationship quality affected by the type and level of union/marital homogamy, relationship quality at the beginning of the relationship, or the connection between them?
  - (b) How are joint behaviors or relationship quality affected by the support networks (such as ties to friends and extended kin) within which union/marital homogamy occurs?
  - (c) How is the response of the couple to exogenous shocks (such as sickness or job loss) in terms of joint behaviors and relationship quality affected by the extent of union/marital homogamy or by the nature of the support networks of the couple?
6. To measure all of these factors within a survey instrument that also collects the traditional outcomes of union formation and dissolution as well as the traditional demographic correlates.

**How might we learn what we need to know?**—Understanding relationship dynamics requires data not just on observed behaviors of individuals in surveys, but also on important interrelated concepts such as individual attitudes, couple decision-making processes, social norms, and cultural schema. Measures of these concepts are often omitted from large survey efforts and are indeed likely to be difficult to operationalize given current knowledge. Theoretical work may be needed to refine these concepts and differentiate their meanings. Another issue is that reports on aspects such as attitudes, decision-making processes, social

norms, and cultural schema may reflect in part post hoc rationalization of individual behavior, especially when collected about retrospective circumstances leading to current choices.

Currently, there is no national survey focused on studying intimate relationships at all ages. Such a data collection effort faces several challenges. First, it is important to study relationships as they begin to take shape and as couples negotiate their lives together. Studying the beginning (and to extent they occur, the ending) of relationships is difficult because they are often not marked by a definitive event.

Second, although various surveys have some information on observed behaviors such as dating, sexual activity, and extra-relationship sexual activities, a wide array of important relationship behaviors are not measured. These include instances of forgiveness, sacrifice, acceptance, happiness, and emotional intimacy within relationships. In addition, several theorized key correlates of relationship dynamics involve the psychological makeup of individuals involved in relationships. There are some limited examples of how to measure key psychological constructs, such as a person's degree of altruism or trust, need to adhere to social norms, and mental health, or the expectations that individuals bring to relationships. These components are often omitted from large surveys and are indeed likely to be difficult to operationalize given current knowledge. However, building on experience from more specialized data collection settings seems fruitful.

Finally, relationship dynamics involve two people. There is a lack of data on the behavior and psychological makeup collected from each member of a couple. Even for those that are available, such as in the Fragile Families and Child Well Being Study and Add Health, the measures of relationship quality and dynamics are limited. Virtually no data exist on the economic decision-making processes within couples. Evaluations of large-scale interventions to promote healthy marriages or strengthen couples' bonds (e.g., the Supporting Healthy Marriage and the Building Strong Families) may offer great potential for improving our understanding of how to collect such data on couples from large, low-income samples.

**Sampling individuals and couples**—When to sample individuals as opposed to dyads will depend critically on which aspects of relationship dynamics and success are under investigation. Some aspects of relationship success might reside with the individuals involved. For example, trustworthiness and altruism are likely helpful in relationships. Individual psychological makeup, expectations about relationships, and relationship skills could be measured by following a cohort from adolescence and measuring these factors as they enter and exit relationships. This design has the potential of letting us understand the changes in relationship expectations and skills over time and changes in individual psychological makeup of key interpersonal preferences (that is, why individuals are as they are when they arrive at the point of entering committed relationships).

The psychological literature has emphasized relationship-specific attributes over the attributes of each individual in the relationship as predictors of relationship success. Relationship success might be as much a function of match between individual preferences and expectations, or of relationship skills that are either well suited or poorly suited for the couple. Data collection on relationships requires gathering information on both members of the relationship. A real issue is that we want to understand the correlates of success among those relationships that intend to be committed. Yet before the event, it is very hard to know whether an ongoing relationship at the point of a survey will develop into a committed relationship.

One strategy that has been used in the psychological literature is to study couples that have entered new cohabitating relationships. It is still the case that within a few years, most cohabitating couples will either split up or marry. By focusing on cohabitating couples, psychologists are able to measure many aspects of interpersonal preferences and relationship dynamics, and to assess whether these predict marriage (or long-term cohabitation). Also, when people marry, psychologists can study factors important for marital happiness and success that are in place prior to marriage. Following a sample of newly cohabitating couples from before marriage to several years into marriage, Huston et al. (2001) supported the view that couples who became distressed demonstrated characteristics of distress pre-marriage. Markman (1981) suggests that communication skills measured before marriage are strong predictors of marital success. Although these studies are pioneering, the samples are small, and attrition was considerable. However, they still provide evidence that studying couple relationships before marriage begins is important.

From a survey data collection viewpoint, surveying the nonmarital cohabiting partner of the individual respondent has the advantage of allowing for easy location of the partner. That is, such a strategy seems able to be implemented in a survey context. It also has the advantage that a large fraction will last for several years while others will fail within two or fewer years. This allows the study of how characteristics of individuals and couples are correlated with long-term success as well as giving the researchers a way of getting measures prior to marriage. However, there is the issue of generalizability. There is increasing evidence that cohabitation is a “sliding” into a relationship rather than an explicit decision. If so, cohabitating relationships may represent dating relationships more generally that for idiosyncratic reasons end up putting people into a position of being together for a longer period of time. A small project that looks at selection into cohabitation from existing data would be useful as it might give us an understanding of the generalizability of using this strategy. To what degree is cohabitation selecting more committed relationships to begin with?

Given the potential problems associated with beginning to observe couples when they cohabit, it would be preferable to examine dating relationships. The Add Health survey allows the opportunity to do this and has the added benefit of surveying both partners in a couple.

**Measuring relevant family dynamics correlates and their outcomes**—Stanley, Rhoades, and Whitton (forthcoming) discuss both the importance and measurement of key relationship factors such as communication, conflict dynamics, commitment processes, attachment, forgiveness, sacrifice, acceptance, and emotional intimacy. Many of these measures are consistently correlated with relationship success even when measured prior to marriage. What is unclear is how much of the intensive videotaped couple interaction measurement in these smaller-scale studies can translate into a survey setting. Although a major challenge is to determine whether measurement of key factors such as communication, forgiveness, commitment, and sacrifice can be implemented in surveys, we believe that these concepts are just as applicable to couples in a survey setting as to those in clinical settings or marital interaction laboratories and should be measured.

Typically, psychologists implement methodology that requires a laboratory, digital equipment, and several hours of observation and testing, although some interaction measures have been successfully adapted for use in home settings (see Wakschlag, Chase-Lansdale, and Brooks-Gunn 1996). The classical survey setting is quite different and a major effort should be made to evaluate whether questionnaire-based measures of key behaviors can be constructed.

The survey community has faced similar challenges in the past; for example in constructing measures of IQ from a small number of survey questions. While much work is to be done, we believe that adapting what has been done to a survey-setting is feasible.

First, some aspects of relationships are already collected via questionnaires. For example the “Exchange Orientation Scale” is constructed from a 19 question survey and higher exchange orientation is consistently associated with lower marital satisfaction.

Second, it may be possible that questionnaire-based measures can be developed that correlate well with the measures such as the “Couples Interaction Scoring System” developed with the use of videotape by Markman. There are already efforts underway to try and field these types of measurements in community surveys with sample sizes of 100 to 200 couples, one step towards population-based surveys.

Finally, to the degree that these measures are couple specific, it may be possible at one time during a survey, for example at the beginning of a relationship, to assess these factors in a clinical setting. This would not be the first time that respondents were recruited for an extensive evaluation in a facility outside of their home. In other contexts, the research community has experience on obtaining compliance from respondents when respondents are asked to complete onerous tasks.

An alternative strategy is to design an embedded study within a large-scale survey so that a specific subset of respondents and their partners participate in more intensive, observational measurement. This approach has been successful in the Embedded Developmental Study (EDS) of Welfare, Children, and Families: A Three-City Study, for example (e.g., Li-Grining et al. 2006).

Beyond measuring facets of couple dynamics, it is useful to measure a respondent’s view of social norms for relationships and expectations of relationships as well as attributes of individuals that might cut across any relationship for that individual. Four methodologies are ripe for developing these survey measures: 1) vignettes, 2) interpersonal preference games, 3) observing the interaction of couples outside of a laboratory or clinical setting, and 4) in-depth interviews and focus studies. The strength of these studies lies in eventually incorporating them into a panel survey. The Add Health survey is a particularly attractive survey for this endeavor, given its longitudinal nature, the youth of its respondents, and the various types of relationships on which it collects information.

Vignettes have been employed to measure attitudes and norms (e.g., Nock, Kinston, and Holian 2008). By comparing an individual’s willingness to assist various hypothetical people in need, one can investigate norms of obligation and social support. The vignettes, or stories, can be crafted to address many issues of interest. One can imagine asking a respondent about how he or she would behave in a situation that would measure key constructs important in the psychological literature, such as commitment and sacrifice. By examining responses to these hypothetical situations, we might learn something about how different individuals respond to similar situations without the need to observe them in the actual experience. These might be useful as measures of precursors to relationship success and might also shed light on subgroup differences in attitudes and norms of behavior. A small project of high value would be to develop vignettes that might measure the types of relationship dynamics found important by clinicians in relationship success.

A second innovative method being piloted to measure important interpersonal preference parameters is the use of structured games within a panel data collection effort (Hamoudi and Thomas 2006). These games evaluate the “desire to share” based on models used in behavioral

economics and psychology. Subjects received an “endowment” of money and decided whether to give some of it to another person (the “recipient”) and, if so, how much. First, the subject was shown a photograph of the assigned recipient, who was an individual from a distant community. The fraction of the endowment given to the stranger is interpreted as indicative of “pure altruism.” Second, each subject was given the name of a recipient from their village, but not a family member. Finally, the game was played twice more where the subjects were family members.

The experiment was done on a sample drawn from the Mexican Family Life Survey (MxFLS) and subjects were asked to share an “endowment” that reflected more than a month’s income for the typical rural Mexican household. Importantly, the stakes were real, and the consequence of sharing was to lower the amount kept for oneself. Survey-based measures were also collected using hypothetical questions. If these types of measurements are embedded in panel surveys, we can both cross-validate measurement of key parameters and study whether these key parameters are correlated with behavior in relationships over time.

We know a great deal about couples’ interaction and relationship quality from the psychology literature. However, very little (or perhaps none) of this is from population-based samples. Therefore, a third small project of high value would be to incorporate intensive, observational measurement of interaction in addition to psychological assessments of couples who are drawn from a standard survey-sampling frame. As a test, this might be done on an outgoing rotation group of a standard survey, as Thomas did when he used economic games to measure individual preferences. Understanding whether the psychological methodology can be adapted for surveys and extended to couples randomly drawn from the population (and not recruited into a special couples study) would be useful.

Although Nock et al. (2008) and Hamoudi and Thomas (2006) both used hypothetical questions as measures of key correlates of relationship success, an important method for assessing why individuals behave in particular ways or how they reach specific decisions is to ask them directly. The National Longitudinal Surveys of Youth (NLSY) have used these point-blank questions with success to ask women why their wills provide for children in the way in which they do. One could imagine similar questions on marital fidelity and sharing of resources, with follow-up questions on why individuals behaved as they did.

Finally, by gathering data from in-depth interviews or focus groups, one might gain some leverage on measuring relationship dynamics. In some ways, these ethnographic methods may be the most similar to collecting data in a clinical setting. We believe we can learn much from these alternative modes of soliciting information on how to best construct measures for larger surveys that can capture or approximate these ideas. The development of such measurement techniques will greatly enhance our ability to examine the processes leading to relationship success in large-scale representative samples of individuals.

A medium-sized project would be to conduct all of these types of analysis on the same sample. This should proceed after smaller individual pilots are conducted for feasibility but before fielding an ongoing panel survey.

**Collecting data from both individuals in a couple**—The discussion above makes the distinction between attributes of individuals and attributes that are couple-specific. For example, relationship expectations may play a major role in relationship success, but perhaps many expectations will lead to success only when they are shared. It also might be that what is important is that each partner understands the other’s expectations. Similarly, how couples react

to a given situation might be as important as whether or not the situation occurs. What is clear is that some important parameters can only be collected by interviewing both members of a couple. Evidence suggests, for example, that couples respond differently when asked to evaluate fairness of the distribution of housework (Smith, Gager, and Morgan 1998) and intentions for more children (Morgan 1985).

Very few panel surveys collect data from both members of a couple. Notable exceptions include the NSFH, Add Health, and the Supporting Healthy Marriage and Building Strong Families projects. Add Health is particularly promising as it contains data from both partners in dating, cohabiting, and married relationships. An added advantage is that the Add Health respondents are young, providing an opportunity to examine their relationships as they form and dissolve. Including more questions on relationship dynamics in the Add Health would make this data set even more valuable for exploring couple differences.

Other opportunities exist to collect auxiliary information from the partners of respondents in surveys that are now in the field. The NLSY97 is a potential vehicle for such data collection, as is the Child Development Supplement of the Panel Study of Income Dynamics (PSID). Each has respondents currently in an age range where many long-term relationships are still forming. Furthermore, each has sufficient information to determine when respondents marry and cohabit, and could easily collect information on the seriousness of dating. Surveying the partners of respondents who start cohabiting or a relationship (or begin a marital relationship directly) may be a cost-effective way of targeting resources to interviewing couples that, before the event, have a reasonably high probability of forming long-term relationships. A small project could then be undertaken to assess generalizability.

Although such data collection is no doubt expensive, it has very high scientific value. We also feel that many aspects of small projects could be built into existing longitudinal surveys, including vignettes tailored to assess relationship dynamics, games to assess individual preference parameters, ethnographic studies of relationship dynamics, and measures of cultural schema, if they can be developed and validated (see section 3 below). Clinical assessments within surveys are probably infeasible but serve as a way to cross-validate measures in the pilot stage.

### ***Recommendation 3: Attain a Better Understanding of Cultural Schemas and Their Interplay with Economic Resources by Collecting Appropriate Data on Cultural Schema***

**Why is this important?**—All stimuli and experience are filtered by an individual's brain on the basis of stored (but modifiable) mental “maps,” “frames,” or “schemas” (hereafter schemas). People employ mental maps to guide their actions in particular situations. Understanding the decisions people make regarding whether and when to enter a relationship, what kind of relationship they choose, and the meaning they attach to that relationship requires a better understanding of cultural schema. Few would contest that economic contexts also play a role in decision making about union formation and dissolution. However, much less is known about how cultural schemas affect these decisions and behaviors. Understanding the role cultural schemas play in unions is important, in part because identifying the different cultural schemas of population subgroups could go a long way in explaining social class and racial and ethnic variations in intimate union patterns.

During the past 30 years, the social world has changed dramatically enough that cohabitation has become a “taken for granted” living arrangement. Young adults today were



socialized in environments characterized by the already high levels of divorce, either in their own families or those of friends; others have simply absorbed the widely available information that many marriages end in divorce. Indeed, data from 18 focus groups (Manning and Smock 2005) strongly indicate that young adults perceive cohabitation to be nearly a necessity due to fear of divorce. By cohabiting, they believe they are reducing the risk of marital disruption (Smock et al. 2006). As Bulcroft et al. (2000) argue, people are engaging in a risk-management strategy for romantic relationships in an age of uncertainty.

Research consistently finds a substantial impact of parental divorce on young adult behavior. For example, parental divorce engenders greater acceptance of cohabitation among adult children and increases the likelihood of cohabitation (Axinn and Thornton 1993; Thornton 1991; Thornton, Axinn, and Xie 2007; see also Amato and Cheadle 2005, Cunningham and Thornton 2005). The same concerns are being articulated by less advantaged, unmarried parents; fear of divorce makes marriage seem a very risky proposition, suggesting that great caution is required when it comes to thinking about marriage (Edin and Kefalas 2005; Edin and Reed 2005; Waller 2002; Waller and Peters 2005).

The increased acceptance of cohabitation as a lifestyle choice constitutes a critical socialization that accelerates social change (Bumpass 1990; Smock 2000; Seltzer 2004). This feedback is further strengthened as cultural schemas about living arrangements, sex in nonmarital relationships, and the centrality of marriage shift alongside economic shifts (i.e., the decreased economic necessity of marriage for women and increasingly constricted economic prospects for many young men except the most well-educated). Another contributing schema, and one we believe has shifted less than typically suggested, is the link between the role of husband, and indeed masculinity itself, and breadwinning capabilities.

The interaction of cultural schemas and economic explanations in shaping union formation is demonstrated in recent qualitative studies indicating many cohabitators as well as unmarried parents, cohabiting or not, will not consider marriage unless and until they attain financial comfort and stability (Cherlin 2004; Edin 2000; Edin and Kefalas 2005; Gibson-Davis, Edin, and McLanahan 2005; Smock, Manning, and Porter 2005). These studies reflect the views not only of economically disadvantaged couples with children, but those in the working and middle classes as well, many of whom have not had children. These couples would likely have married just a few decades ago when, by and large, marriage was perceived as a trajectory in which economic struggles could be expected, especially in the early years of marriage (see, e.g., Rubin 1976). As cultural pressure to marry has declined, with cohabitation becoming normative and marriage increasingly decoupled from childbearing, marriage has been redefined as a signal of financial and personal achievement. Thus, by this view, it should be deferred until these goals are met, however defined and unattainable they may be for some social groups (Cherlin 2004).

**What do we need to know?**—How do we know a schema when we see one? We know little about the process by which society, or specific social groups, come to accept an emergent cultural schema as legitimate. A general issue is what data would be necessary to deepen our understanding about schemas and their evolution. Certainly, research mapping out why and how schemas and resources both contribute to the rise of different types of intimate unions and shape their changing characteristics lags far behind the demographic literature detailing the prevalence of and influences on intimate unions and other characteristics of couples (e.g., the division of household labor).

Thus, work that incorporates the theoretical literature with demography is an important next step (Johnson-Hanks et al. 2006). Admittedly, successfully identifying schemas in a way that would be useful to the demographic enterprise—and to family studies more broadly—would be complex and enormously challenging. Nevertheless, progress toward such a goal is a vital and cutting-edge undertaking.

**How might we learn what we need to know?**—A goal of an intellectual project of this order could be to find ways through a small-scale methodological project to identify cultural schemas and how they both change over time and vary across subgroups. Can a team design and execute a multipronged measurement strategy to get at an individual's "subjective" assessments of situations or "cultural" interpretations and also a way to evaluate what we learn from each approach? One strategy would be to form a multidisciplinary research team with a cognitive psychologist, anthropologist/ ethnographer, experimentalist, and survey researcher. The team would delve into how to map and understand schemas that either guide or justify behavior about important union formation decisions and behaviors. Some questions such a group might raise include: Can this be done by relying on (or adding) attitudinal or value measures to existing surveys? Could this be accomplished through open-ended questions in qualitative interviews or focus groups? Could we present individuals with various scenarios or vignettes and ask them how they think they would act and why? These kinds of techniques could potentially allow researchers to explore and understand the schemas that individuals access when making family choices and why a particular schema may be dominant.

#### ***Recommendation 4: Advance Understanding of Dating and Entry into Relationships***

**Why is this important?**—Understanding dating behavior is important for at least two reasons. First, dating is the process by which people search for appropriate partners—and reject inappropriate partners—prior to entering a long-term relationship. This process reveals much about the aspects of relationships that did not satisfy the individual. Second, dating also involves learning about intimate relationships—learning about other people's needs and desires as well as one's own. This learning may carry over into the quality of the match that is ultimately made, with implications for other relationships, such as how well children are reared, how connected an individual stays to his or her extended family, and how effective the family is as a means for intergenerational transfers and care.

**What do we need to know?**—Although there are formal models of dating in the economics literature (see Siow 1996 or Giolito 2005 as examples), several important aspects of these theories are unknown. First, how do people search? Do they just run into people randomly or do they direct their effort to places or networks where they believe success is more likely? Second, what do people see in each other that leads to a dating relationship? Third, does the "dating market" play a role? That is, are people more accepting of a partner who is not their ideal when there is a shortage of men or women to date? Very little is known about any of these questions.

Equally little is known about how dating and dating experiences change a person's needs, desires, and expectations in long-term partners. This development of what one thinks is a good relationship and how one resolves issues in a relationship is of paramount importance. In this

spirit, we recommend a few specific areas of research that might help ultimately explain long-term success in committed relationships.

### ***Dating and learning***

Adults do not marry or cohabit as blank slates with little prior experience with intimate relationships (Manning, Giordano, and Longmore, forthcoming). That is, “Mature patterns of romantic social interaction do not germinate and blossom during adulthood, but rather emerge gradually with experience and maturation acquired during adolescence” (Laursen and Jensen-Campbell 1999: 70). Typically, young adults have had many years of experience in dating and romantic spheres that influence their decisions in adulthood, either indirectly or directly. Yet most researchers interested in adult union formation and quality ignore relationship experiences prior to adulthood. We thus know relatively little about how these relationships form and dissolve, or about their impact on future events. It seems that adolescent relationships are ignored in part because they do not fit neatly into theoretical paradigms (Brown, Lee, and Bulanda 2006). For example, mate selection theories focus on longer-term relationships and economically-based decisions. Yet most adolescents do not marry their high school sweethearts, and economic factors are arguably not central to their adolescent romances.

Researchers should include not only adolescent dating in their studies of union formation, but adult dating relationships as well. Prior empirical studies move from adolescent relationships to adult coresidential unions. Further work is needed to explore how adolescent relationships influence the wide array of ways adults experience romance, and how these in turn influence union formation and union stability.

Sexual minority adults may be especially influenced by their adolescent relationships, in part because their relationship options are often constrained. Both same-sex dating and other-sex dating may be particularly salient to sexual minority youth identity (Diamond et al. 1999). Sexual minority youth may not have had the same socialization experiences in a dating context that would aid them in their adult relationships. Researchers should consider how the romantic and sexual experiences of sexual minority youth carry over into adulthood to better understand variation in adult same-sex relationships.

We also note that broad social change has led to shifts in the terrain of romance. The structures that supported more formal, regulated patterns of dating, love, and romance have weakened, making the world of love more uncertain and potentially risky (Beck and Beck-Gernsheim 1995; Bulcroft et al. 2000). Thus, personal history and experience may be more important in understanding union formation and maintenance patterns than in the past (Manning, Giordano, and Longmore, forthcoming).

Finally, research on adult dating relationships has focused on college samples (Brown et al. 1999). It is important to broaden our samples beyond college and consider how the full range of adult relationships influences union formation and maintenance.

### ***Dating as search***

Information on dating is a recent phenomenon in population-based samples, but many more details are needed. Basic information is collected about how often people date, how many people are simultaneously dated, and the value people place on these dating relationships. Add Health has collected information on whether teenagers are in a romantic relationship and how long the relationship has lasted (e.g., Carver, Joyner, and Udry 2003). In addition, The National Health and Social Life Survey (NHSLS) collected information on how people met sexual partners.

Although not all dating involves a sexual relationship (and increasingly many sexual relationships involve limited dating), the NHLS may point to other important topics to consider. A key piece of information is assessing why dating relationships did not progress to long-term relationships.

Dating has changed substantially over time and may vary substantially by subgroup. Although a small fraction of people today meet a partner over the Internet (see Sautter, Tippett, and Morgan 2006), the use of the Internet for dating is increasing in popularity. The ramifications of lowering the cost of searching for mates remain unknown. To the degree that the Internet allows people to meet outside their social networks, it may lead to less similarity among couples. However, the increased low-cost ability to find characteristics that one wants in a mate could increase homogamy if characteristics such as race and age are in fact important to people's assessment of a good partner. To date, research has shown that people do in fact heavily restrict searches to potential partners of similar backgrounds (Hortacsu, Hitsch, and Ariely 2006).

We believe that studies from Internet dating offer research possibilities not available before. Two key aspects can be evaluated. First, one can assess the characteristics of rejected dates. Second, one can assess the size, composition, and characteristics of the dating market, although these samples are select. Combined with random samples of dating couples (see Sautter et al. 2006), it may be possible to make more general statements about the dating population.

### ***Dating and the "market"***

The idea that dating takes place in a market where certain people or people with certain attributes may be in short supply is by now well established in demography. There is a long and rich tradition with the most influential example being the work of William Julius Wilson that links the shortage of marriageable men to the rise in out-of-wedlock childbearing. This work is almost always implemented by defining a set of people that are "marriageable" for any person in a data set and measuring the scarcity of that set of people. Typically the market is defined as the number of people within an age range of a respondent in a given geographic area. For example, a 30-year-old woman's marriage market is typically defined as the number of men of the same race ages 30-34 in the same metropolitan statistical area or state as the woman. This definition is refined in various ways including limiting the market to men who are "marriageable" in various ways, such as employed, not in prison, and so forth.

Very little is known about how the "market" varies across individuals. For example, a respondent's willingness to date across racial, educational, or geographic boundaries is rarely assessed, and this information could potentially allow us to make better use of existing data to characterize the "market" of a respondent.

One new source of data with potential for characterizing the market is data from Internet dating sites. This data source has the potential of allowing the research to see exactly how individuals screen their search and the types of people they contact for dates. Any effort to make these data, which are usually proprietary, more widely available could have great scientific value.

### ***Comparing cohabiting couples with those in serious dating relationships***

The literature on cohabitation typically compares cohabiting relationships with marital relationships, with some exceptions (e.g., Casper and Sayer 2000; McGinnis 2003; Rindfuss and Vandenhuevel 1990). McGinnis argues that greater understanding could be gained about cohabiting relationships if studies compared these relationships with serious dating couples. In

addition, many dating couples will be the cohabitators of tomorrow and the married couples of the future.

Thus, there are several key questions that could be addressed were there ample and parallel data on cohabiting and dating couples. Under what circumstances will couples choose to live together? How do different and combined resources come into play? Does social class, family background, immigration status, race, religion, or ethnicity (and the use of different schemas these may engender) help to explain couple decision making about dating and cohabitation?

Add Health collects data from both cohabiting and dating couples that can be used to answer some of these questions. However, older cohabiting and married couples are not represented in the Add Health survey. The Fragile Families and Child Wellbeing Study is also useful in this regard, but it has limitations. It is a study of children born between 1998 and 2000, the majority to unmarried parents. When weighted, the sample is representative of nonmarital births occurring in cities with at least 200,000 persons. An important feature of this study is that it includes mothers and fathers who were romantically involved—but not cohabiting—at the time of childbirth, as well as parents who were not romantically involved by the time of the child's birth, cohabiting couples, and a group of married couples. That there are longitudinal data on both dating and cohabiting couples is a tremendous boon to the research enterprise. The limitation is that the study focuses on fragile families. Although nonmarital childbearing is common and even typical among some population subgroups (e.g., those less advantaged economically), this leaves a large gap in what we know about dating and cohabitation among the majority who do not have children.

**Sampling individuals and couples**—Whether dating relationships break apart or progress into more serious couple relationships shares much in common with whether couple relationships are successful or not. Just as in recommendation 2 above, we need to confront when to sample an individual, when to sample both individuals of a couple, and what to ask each respondent. There we suggested that the dyadic issues of a couple be explored when cohabitation begins both because cohabitation is a marker of a committed relationship and because cohabitation increases the feasibility that a survey taker will be able to locate both members of a couple.

It is possible to learn a good deal about dating relationships just from an individual survey respondent. We recommend that as individuals are followed over time a roster of dating partners be collected including questions about the number of dates over a specified time period, what they did with that person including sexual relations, and how they felt about it. In addition, some information should also be obtained on dating opportunities they had but refused (and why) and dating opportunities they initiated but were refused. However, if one wishes to roll the process of studying the dyadic aspects of relationship formation back prior to cohabitation, then some feasible marker of a dating relationship must be used to start the interviewing of the second person in the dating relationship. There are feasibility issues to consider, including the number of dating partners required to be interviewed by any inclusion rule and the ability to locate and interview partners.

Given that we have little experience with this, it is difficult to make specific recommendations, except to suggest that a small study is warranted that would enumerate the likely number of partners and likely compliance rates. Several observations make us believe that defining and implementing such a marker is feasible. For example, the 1988 General Social

Survey (GSS) asks the number of sexual partners a respondent had during the past 12 months. In the population, only 10% had more than one partner. Even focusing on unmarried respondents, 36.4% had no sexual partners, 42.8% had one sexual partner, 11.9% had two sexual partners, and only 10% had three or more sexual partners. The average number of sexual partners among unmarried respondents in 1988 was 1.08. This suggests a broad definition of a dating relationship based on sexual relations would still be feasible to implement. This definition would not include dating relationships absent of sex, the number of which we do not know in the general population. And certainly other criteria could be used, such as dating the same person at two consecutive surveys.

Once a dating partner is recruited into the survey, it is vital to assess the same type of information collected for other couples. It is also important to interview the partner at least one time after the break up of a relationship. This will give a clearer understanding of factors leading to relationship dissolution and allow us to examine whether these factors are similar to those at play when cohabitating or marital relationships dissolve.

***Recommendation 5: Improve Understanding of Intimate Union Variation by Race and Ethnicity and among Special Populations such as Immigrants***

**Why is this important?**—Rightfully, much research has focused on entry and exit from unions and dynamics within unions for groups that make up the majority of the U.S. population. Non-Hispanic white couples make up the majority of the population; studies that survey a random sample of the population necessarily contain many of these couples. Studies on subgroup variation usually focus on differences in union formation, dissolution, and dynamics between the white and African-American population. Given the increasing diversity of our population, it is important to broaden our understanding of differences across subgroups.

**What do we need to know about trends and differences?**— As Raley and Sweeney (forthcoming) argue, explaining *why* race and ethnic variation in family patterns exists first requires a clear understanding of *what* these group differences are. Given the rapid pace of family change in recent years, information on past trends and differences across racial and ethnic groups may not accurately depict contemporary family patterns. Yet even as American society is becoming increasingly diverse, many of the data sources once available are vanishing. A relatively small number of nationally representative data sources have historically provided sample sizes sufficient to document family patterns for groups other than non-Hispanic whites in the United States. These have included data from the U.S. Census, vital statistics records, the CPS June marital and fertility histories, and to a lesser extent the SIPP and the NSFG. Oversamples included in the Add Health survey allow for race and ethnic comparisons of differences in the type and quality of relationships and transitions into and out of relationships. Ample sample size typically supports analysis for Mexican Americans, Central-South Americans, Puerto Ricans, Chinese, Filipinos, other Asians, non-Hispanic blacks, non-Hispanic whites, and Native Americans, as well as for immigrants.

In recent decades most of these sources of information on family patterns have been scaled back or even eliminated. For example, the U.S. Census stopped gathering information on age at marriage after 1980. The National Center for Health Statistics stopped reporting detailed information on marriage and divorce from vital statistics after 1995. The CPS stopped gathering detailed marital histories after June 1995. Funding for the continuation of the SIPP after the 2004

survey was recently in jeopardy (*New York Times* 2006), and even though it appears that it will continue, it does not include detailed information on dates of cohabitating relationships in its public-release datafiles. This restriction is important given that a large percentage of nonmarital births are to cohabiting mothers. Although the NSFG contains extensive information on family patterns, these data are limited by age and do not currently contain sufficient sample sizes to carefully document annual trends in family events within even our largest non-white racial and ethnic groups.

In addition to documenting basic trends and differentials in family patterns for specific groups, it is also important to look at key sources of heterogeneity *within* major racial and ethnic groups (Raley and Sweeney, forthcoming). First, immigration must be taken seriously in future efforts to document and understand racial and ethnic variation in family patterns. Approximately 13% of the U.S. population is currently immigrants, and patterns of immigration shape the significance of racial and ethnic categories (Lee and Bean 2004). Within ethnic groups, family patterns are shown to vary by ancestry and immigrant generational status (e.g., Bean, Berg, and Van Hook 1996). We also expect multiracial identity to become increasingly important to the measurement of race and ethnicity, as some estimates suggest that one in five Americans may consider themselves multiracial by 2050 (Lee and Bean 2004). Future work on diversity in family life should seriously engage knowledge about appropriate measurement and meaning of racial and ethnic categories.

**Moving toward more complete explanations**—Most prior research has focused on economic factors that influence family formation and dissolution. Although this line of research has been fruitful, Raley and Sweeney (forthcoming) suggest exploring other avenues, including cultural explanations. They also encourage research that examines the cultural variation of many dimensions of marriage, including gender roles, the development of trust and commitment, and the social interactions and institutional settings that shape social understandings about what constitutes a respectable marriage.

As noted previously, influential explanations for racial and ethnic differences in family patterns highlight the role played by social class differences across groups. Yet too often empirical work on minority families focuses only on relatively poor populations, despite the fact that patterns of family formation and dissolution among more affluent families offer important opportunities to test these theories. Such tests also require careful measurement of social class itself, which should ideally take into account both current standing and how access to resources changes over the life course.

For example, average income is 38% greater for white than black households, while average household wealth is almost 12 times greater among white households (Oliver and Shapiro 1995). However, most analyses of race differences in family patterns do not account for group differences in wealth. Other evidence suggests that the nature of the relationship between economic standing and patterns of marriage may tend to be nonlinear for some groups, such as black men (Banks and Gatlin 2005; Patterson 1998). Raley and Sweeney (forthcoming) call for careful measurement of economic and employment variables to more fully understand the contribution of these factors to racial and ethnic group differences in family outcomes. Yet distinguishing effects of economic from non-economic factors can be difficult, as these sources of influence may be highly intertwined. As Cherlin (1998) points out, culture is a response both to past and present historical conditions, which have included economic hardship for many racial and ethnic minority groups in the United States.

We also expect a potentially large payoff from collecting more data on subjective expectations for the future. For example, the context in which individuals make family decisions includes expectations regarding future economic trajectories. Both nonmarital cohabitation and marriage generally require sufficient resources to set up an independent household. A key distinguishing feature of marriage, however, may be the expectation of a long-term commitment, which requires not just economic stability in the present but also the expectation for maintaining a desired standard of living into the future (Hughes 2003; Oppenheimer et al. 1997).

Raley and Sweeney (forthcoming) argue that it may be at least as important to measure expectations regarding future economic trajectories as to measure past and present economic conditions (Oppenheimer 1988; Sweeney and Cancian 2004). Furthermore, evidence suggests that expectations for gender roles after marriage and for future marital stability may affect decisions to marry at a particular time and with a particular partner. Previously discussed issues of gender distrust often stem from expectations regarding the future behavior of one's partner (or potential partner). A growing literature offers guidance on approaches to measuring subjective expectations (e.g., Manski 2004), although additional work is still needed in this area. We also must better understand how people form expectations for the future, including how individuals cope with uncertainty and how they attempt to learn from their own experiences and from the experiences of others (Manski 2004). As decisions to form unions cannot be made unilaterally, and decisions to exit unions can be made by either partner, it seems particularly important to gather information on subjective expectations from both members of the couple.

Although economic resources and gender roles are important factors that shape decisions about whether and whom to marry, these decisions are also influenced by the development of trust and opportunities to meet potential spouses. These in turn are influenced by social context. Couples in communities with low levels of social capital—where there is little social integration and few overlapping relationships—may have more difficulty developing trust because others do not monitor the relationship and the social costs for infidelity are low.

Along similar lines, socially integrated communities can make a search for a compatible spouse more efficient through expanding social networks and providing information about potential mates. Raley and Sweeney (forthcoming) argue that our understanding of racial and ethnic variation in family outcomes would be enhanced by gathering richer data on the institutional settings in which families form and dissolve, such as workplaces, schools, neighborhoods, and religious institutions. Do members of different racial and ethnic groups tend to vary in where and how they meet partners? Does this affect the quality of the match? As Kalmijn and Flap (2001) argue, it seems likely that assortative mating is fostered by assortative meeting. Beyond facilitating a good match, are partnerships situated within these settings characterized by higher levels of trust and greater social and economic support from the broader community? Could this support include monitoring of one's partner? As Wilcox and Wolfinger (forthcoming) suggest, this monitoring may be one function served by religious congregations.

Finally, as Raley and Sweeney (forthcoming) argue, we need to know more about how expectations for marriage, cohabitation, and childbearing are socially constructed. The ethnographic research strongly suggests that the perceived resources necessary for marriage are often higher than those available to even the lower middle class. In addition to being able to set up independent households, young couples in some social contexts believe that they must be able to afford a real wedding, which at minimum will cost thousands of dollars.

Expectations along other dimensions such as relationship quality and parenting are also formed through social experiences. From what experiences and observations are these beliefs



formed? Raley and Sweeney suggest that one source might be the experiences of kin and close friends. Another might be the messages of religious institutions. Both kin networks and religious institutions are strongly racially segregated and thus for the expectations for marriage likely vary by ethnic group.

A third source for the development of expectations could be the media. One possibility is that youth in some contexts have few real-life examples of successful marriages and rely on media depictions for ideas about what marriage is and what it requires. It is therefore no surprise that their perceived material requirements for marriage are high. Knowing more about the perceived requirements for marriage and how these vary across social groups could provide an important step toward understanding racial and ethnic variations in marriage as these perceptions interact with the objective situation to shape decisions.

**Immigrant families**—As we have emphasized elsewhere, expectations about responsibilities for each partner in a couple may be important for the division of responsibilities and for relationship success. These expectations are not formed in a vacuum but instead depend on the social norms prevalent in the communities in which each partner is reared. Immigrants arrive in the United States having internalized the social norms of their home countries; this agreement in social norms may explain the assortative mating between immigrants in the United States. However, this assortative mating breaks down across generations of immigrants. Children of immigrants have likely assimilated in the United States and at least partially adopted its prevalent social norms.

This suggests that immigrants may provide an opportunity to study the role of social norms on union formation, dissolution, and dynamics. Unlike same-sex couples or LATs, immigrants now compose a substantial fraction of the U.S. population (12.5%). Further, many groups of immigrants now compose a large enough fraction of the U.S. population that samples of these groups would be large enough to study individually. This includes immigrants from Latin America, including Mexico, El Salvador and other Central American nations, and from Asia, including China, Japan, Korea, India, Vietnam, and the Philippines. Across these countries is enormous variation in social norms about marriage and the responsibilities of men and women within relationships.

As we discussed above, the key missing information for such studies is consistent measurement of cultural norms and expectations. Adding innovative data collection techniques would have substantial intellectual payoff.

### ***Recommendation 6: Study Cross-National Variation in Intimate Unions***

**Why is this important?**—The activities of this project underscore the importance of studying cross-national variation in intimate unions. The United States is one of several industrialized countries seeking to better understand intimate unions. The United Kingdom, France, Germany, and other European nations, as well as Japan, South Korea, Canada, New Zealand, and Australia have observed changes in rates of marriage, cohabitation, and remarriage. As in the United States, within these nations, variation in intimate unions is influenced by racial and ethnic backgrounds, immigration patterns, economic changes, women's educational and job mobility, and cultural expectations, to name only a few factors. Furthermore, many of these nations have grappled with the same scientific challenges and data collection concerns as those confronting the United States. For example, how best to monitor, document, and interpret trends and differentials in intimate unions and family formation patterns are prime concerns of these

countries, especially those with low total fertility rates.

Progress on understanding variation in American unions might grow and accelerate if we better appreciate other industrialized nations' studies and methods for studying the same phenomena. For instance, cross-sectional and longitudinal data sources in Japan, Australia, South Korea, and the United Kingdom offer a wealth of information on interactions between union formation, work, and family life that are germane to American family research. Recent research in France is thought provoking for American family researchers as several French studies document a strong cultural bias against any legal accommodation of cohabitation—heterosexual or homosexual—despite its high prevalence. A plethora of other examples exist, ranging from data sources for studying disincentives for cohabitation in Russia to individual-level diffusion models for studying cohabitation in capitalist former West Germany, socialist former East Germany, or familialist Italy. Active engagement now with a diverse set of international family researchers, along with careful comparisons of alternative approaches to studying change and variation in intimate unions, will enhance the study of the American case while putting it in comparative perspective.

### ***Recommendation 7: Better Understand the Intersection of Work and Family***

**Why is this important?**—The type and nature of work and intimate relationships and family forms continue to change: more women, particularly mothers of young children, are in the labor force, more families have dual earners, more people are working in the service sector, marriages have been postponed or forgone altogether in some groups, and fertility has been postponed and is very low among some subgroups (Casper and Bianchi 2002). Although we know these trends are occurring, we know very little about how work affects the entry into and exit from unions, relationship dynamics, and the mechanisms through which work and family decisions affect children's and adults health and well-being.

**What do we need to know?**—The study of how work environments affect partnering and marriage is still in its infancy, despite significant work during the past 10 years. In particular, we lack knowledge of how changes in economic institutions (not just earnings but also jobs and work schedules) affect workers' motivation and efficacy in forming committed relationships. We have not yet seen research that can determine the causal links between economic transformations and trends in marriage, cohabitation, and union formation and dissolution, let alone research on how economic transformations affect relationship dynamics.

Although we know that marriage is increasingly postponed or abandoned among young adults, tracking concomitant changes in work regimes and changes in partnering is difficult because of weaknesses in our major federal data collection procedures. Surveys such as the NSFG concentrate on family formation and fertility and collect much less detailed information on work histories, current working conditions, and job stability. Other surveys such as the NLSY panels and SIPP concentrate on economic mobility and earnings but fail to ask detailed questions on new forms of workplace flexibility and family processes. Few surveys of any kind ask questions about past experiences, motivations, and preferences that would enable researchers to test hypotheses about the underlying causes of observed associations between work and family variables (such as non-day work shifts and the increased risk of divorce).

### ***Combine detailed family data with detailed labor force data***

Given what scholars now believe are major dependencies between economic transformations and

family transformations, Glass (forthcoming) argues that new “work-family” longitudinal surveys are badly needed that contain (a) detailed information on work practices at each job held, including job benefits and formal and informal workplace flexibility, that can be paired with (b) detailed information on dating behavior, relationship expectations, and relationship formation and dissolution processes. This could be easily accomplished by adding on to existing longitudinal surveys such as the PSID, NLSY97, Add Health, SIPP, and Dynamics of Economic Well-Being System (DEWS).

There are several different types of data that could be collected to improve our existing knowledge base. We agree with Glass (forthcoming) that more data on the dating or marital search behaviors of single individuals would be helpful in longitudinal panels that tend to track only status transitions such as marriage, cohabitation, and divorce. It also would be helpful to know about how current work characteristics affect perceptions of the costs and benefits of marriage, or thoughts of dissolution among the already partnered. Better data on work hours, work shifts, formal and informal availability of flexible work arrangements such as parental leave, and patterns of use of flexible work arrangements would be incredibly helpful, especially if accompanied by questions on the decision-making processes used by workers to take or avoid certain job arrangements and how family obligations (or the lack thereof) condition responses.

Glass (forthcoming) also calls for better information on perceptions of for-profit (commodified) and nonprofit domestic labor substitutes in single individual and partnered households, as well as patterns of their use and changes in the utilization of services over time as household status changes. Finally, longitudinal data on work shift and work intensity changes should be paired with mental health, marital quality, and family interaction data so that workplace transformation processes can be directly linked to family interaction processes.

### ***Studying the allocation of time in paid and unpaid labor***

A final area of investigation should be the detailed qualitative study of decision-making processes used in the allocation of time in paid and unpaid labor in partnered relationships. Depending on the level of conflict between partners’ expectations or desires, the same allocation of labor could produce quite different relationship sequels. Although we have some existing research on the role of preferences in determining the outcomes of different courses of action (such as shifting to part-time work, becoming self-employed, outsourcing child care or cleaning), Glass (forthcoming) argues that there is still much to learn about the conditions under which work alterations lead to family distress or instability.

### ***Recommendation 8: Study the Role of Biology in Intimate Unions***

**Why is this important?**—People are biological creatures, inheriting an evolutionary history. This history may help us to understand human emotions and physical constraints, factors important to family decision making. It is difficult to think about why families exist without thinking about love. It is difficult to think about marital fidelity without thinking about impulse control. And it is difficult to think about marital conflict without thinking about aggression. While evolutionary biologists provide well-developed theories on the relationship between emotions and family choice, increasingly, microbiologists are finding specific pathways associated with these emotions. It now appears clear that both basal (base) and reactive levels of hormones vary across individuals, probably for genetic as well as environmental reasons. There is also increasing evidence that these differences are correlated with individual differences in behavior. Love, impulse control, and aggression, as well as other emotions likely involve

important hormonal processes, and understanding these may help us understand family behavior. Physiology—particularly reproductive physiology—may also play a role in family choice. It is difficult to think about childbearing without thinking about reproductive physiology and about men and women making choices within biological constraints to ensure, limit, and time reproduction.

Although we make recommendations for some promising avenues of research, we recognize that biological process varies little across sub-groups and likely has limited variation over time. However, the interaction between biological processes and aspects of choice or the development of cultural schema might be important in explaining changes in family behavior.

**What do we need to know?**—The biological basis for social outcomes is in its infancy and its application to the family context is nearly equally underdeveloped. There are two areas in which there has been progress in our understanding of the biological roots of family choice—reproductive physiology and behavioral endocrinology. Each area holds much more promise for advancing our understanding of the biological roots of family choice with additional development. We review what we have learned in each area and what needs to be done to advance our knowledge.

### ***Reproductive physiology***

Human beings, perhaps for evolutionary reasons, have physical limits and characteristics that constrain their choices. Some aspects of physiology have long been recognized and incorporated into demographic models. For example, Becker's theory of specialization is based on the notion that because women bear children and have a greater biological investment in them, women specialize in home production while men specialize in market production. Technological advances and changes in the return to physical attributes (with a changing economy), make revisiting these models worthwhile. For example, while male upper body strength gives men a comparative advantage for market work in pre-industrial and industrial societies, the movement to an information-based economy mutes this advantage.

We believe that continuing the tradition of embedding aspects of physiology into choice-theoretic models of family-related behaviors has great potential to help explain commonalities of family and fertility choices across societies. In addition, the interaction of features of physiology with changing levels of technology in a society may help explain changes over time in family and fertility choices.

Two aspects of reproductive physiology serve as examples. The age at menarche has declined over the last 150 years, although there is little evidence of large changes over the last 30 years. The age at menarche of non-Hispanic black girls is significantly earlier than that of non-Hispanic white and Mexican American girls (see Chumlea et al. 2003). This subgroup variation in exposure to pregnancy may be part of subgroup variation in teen pregnancy rates, but the connection is not well understood.

One undeniable fact about human reproduction is that women go through menopause, after which they can no longer have children. Although the age at menopause has not changed, other factors that have delayed childbearing may have made its presence more important. When marriage and childbearing were occurring when women were in their early- to mid-20s, the more limited time horizon for women to have children may have had little importance on whether women waited a few additional years to marry. Now with many women marrying (or re-

marrying) in their mid-30s, the more limited time horizon may loom larger for women wanting a family that includes children.

A better understanding of reproductive physiology may improve our modeling of marriage rates and assortative mating over the life course as well as our understanding of risk factors for early childbearing. For example, as a whole, the research suggests that half the phenotypic variation among girls from developed nations in the timing of menarche is due to genetic factors (Towne et al., 2005). There also appears to be heritable variation in the age at menopause, with at least half of the inter-individual variability in menopausal age attributable to genetic effects (Murabito et al. 2005).

There are now data sets that have reproductive histories on women and their mothers. Very little work has been done to link fertility issues of mothers and daughters even though there is evidence from biological data sets that these are linked. Almost no work has been done to understand how inherited physiology from a mother affects choices of a daughter. Some of this work could be done with existing data. For example, the NLSY79 collects information on the age at menarche and the Child Supplement of the NLSY79 collects the same information on the female offspring of the NLSY79 cohort.

Assessing the age at menopause is more difficult because, in a prospective study, the sample must age into the menopausal years. However, the NLSY79 is collecting this information in its Age 50 health assessments of women in the original cohort. In general, the literature in biology suggests that prospective and retrospective studies of the heritability of reproductive events yield similar assessments about the degree of heritability. This suggests adding retrospective questions to surveys such as fertility events of mothers may be an inexpensive way of collecting such information. What is less clear is whether information on mothers' age at menarche or menopause can be collected from daughters. Pilot work would be useful in this area.

### ***Biomarker data***

Biomarker data are beginning to make inroads into the population sciences. For example, behavioral endocrinology studies the relationship between hormones and behavior, and is at the forefront in studies of adolescents, children, and families. For many years, researchers suggested there were relationships between endocrines and behavior because of macro-level evidence on such relationships. (That is, groups known to have an elevated level of some hormone displayed more of a particular behavior, for example, aggression). However, only recently has the technology to measure endocrine levels become inexpensive and noninvasive enough that it is possible to collect samples from a wide range of individuals. A major advance was the ability to measure endocrine levels in saliva rather than blood serum samples. This has allowed social science researchers to collect fluid samples on a large population of individuals for whom more standard social science survey data are also collected.

Population researchers can now correlate basal and reactive hormone levels with many behaviors at the individual level. Also at the individual level, they can correlate environmental and developmental factors with hormone levels. Researchers have shown that levels of hormones are correlated with individual differences in developmental trajectories and family relationships. Although this work is a major advance in our understanding of family dynamics and fertility, this field is in its infancy. To date, studies are best seen as descriptive, with few well-established causal relationships between endocrine levels and behavior. Two endocrines, testosterone and cortisol, have been the focus of research on family and fertility behavior. (For a more complete review, see Booth, Carver, and Granger 2000). There may be great opportunity to use this

innovative source of data together with other data sources and collection techniques to better understand causal connections between the endocrine system and behavior as they relate to families and related behavior.

Although the use of bioassay data to study behavior is an exciting new field, most of the studies should be viewed as descriptive. Bioassay technology is innovative and useful, especially when incorporated into longitudinal survey data collection. However, they share many of the shortcomings of standard social science data collected in surveys. Typically, endocrine levels are measured at a point in time. Although there have been some experiments in which subjects were manipulated to measure response levels of endocrines, this type of bioassay collection often has not been linked to survey data. In addition, because endocrine levels are both related to behavior, and affected by behavior, causality is extremely difficult to establish.

For example, the fact that women with higher testosterone levels have more sexual partners might result either because testosterone lowers partner selectivity or because sexual variety increases testosterone. In addition, the results on cortisol and childhood developmental problems are equally vexing (e.g., while animosity in a home may raise a child's cortisol levels and his or her behavioral problems, this does not establish that cortisol induces bad behavior – in fact, it could be the mechanism that *limits* it).

If biology has a role in explaining family change and subgroup variation, it is likely that the role comes from the interaction between social and economic circumstances and biological processes. During the last 10 years, interest has grown in the interaction between environmental factors and biological factors (especially genetic factors) and many outcomes. Human studies seeking to explain health-related outcomes have been limited to the interaction between environmental factors and genes. An extremely influential study is Caspi et al. (2003), which finds that a functional polymorphism in the promoter region of the serotonin transporter (5-HT T) gene moderates the influence of stressful life events on depression. Specifically, individuals with one or two copies of the short allele of the 5-HT T promoter polymorphism exhibited more depressive symptoms, diagnosable depression, and suicidality in relation to stressful life events than individuals homozygous for the long allele. This study establishes an important interaction between a specific gene and environmental factors, specifically stress, suggesting that environmental insults can be moderated through genetic makeup.

There is very little work that establishes the interaction between genes and environment within a family context in human populations. One related study is Caspi et al. (2002), who use the longitudinal Dunedin Multidisciplinary Health and Development Study to examine the effects of childhood maltreatment on adult antisocial behavior. This study tracked the development of a sample of 1,000 men and women from the 1972 birth cohort from Dunedin, New Zealand, from age 3 to 26. In the sample, 8% of children between the ages of 3 and 11 experienced severe maltreatment, 28% experienced probable maltreatment, and 64% experienced no maltreatment.

The central question is whether the effect of maltreatment on antisocial behavior is moderated by a specific gene (monoamine oxidase A) (MAOA). MAOA is a gene located on the X chromosome which metabolizes neurotransmitters such as norpinephrine, serotonin, and dopamine rendering them inactive. Genetic deficiencies in MAOA have been linked to aggression in mice and humans. Classifying the Dunedin cohort into individuals with severe, probable, and no childhood maltreatment shows that the fraction with a conduct disorder, the fraction convicted for violent offences, the fraction with a disposition toward violence, and the fraction with a diagnosed antisocial personality disorder in individuals with low levels of MAOA

were frequently more exposed to childhood maltreatment. Given that much maltreatment of children occurs within the family, it is reasonable to assume a link between abusive childrearing practices and poor social functioning as an adult, although the study does not specifically establish this.

Within the family context, the study is intriguing as there is weak to moderate evidence that growing up in an abusive family increases the odds of being involved in a violent marital relationship as an adult (Stith et al. 2000). Whether there is a genetic basis moderating this intergenerational transmission is unknown, but with appropriate biomarker data this could be studied.

In a less extreme situation, there is much interest in the normal development of humans into adults who have a capacity to form long-term bonds. Much of this work is focused on the prosocial behavior of parents, and the most common model is that of parents as role models for children. But animal research has uncovered the intriguing possibility that prosocial behavior may alter gene expression, making it biologically possible for adults to operate more effectively, especially in stressful situations. Weaver et al. (2004) find that two prosocial behaviors in rat mothers—pup licking and grooming and arched-back nursing—are limited to highest levels of glucocorticoid receptor (GR) expression. Higher levels of GR expression enhance the ability of the body to regulate the hypothalamic-pituitary-adrenal (HPA) response (and blood cortisol levels) to stress. Further when pups of prosocial mothers are reared by non-social mothers (and vice versa), the level of GR expression is lower, suggesting that the parenting practices are in fact causing different GR gene expression. The different GR gene expression is traced to differing methylation within the first week of life. Administering a substance that causes demethylation of methylated genes (trichostatin A) eliminated the elevated level of the HPA response to stress in the pups raised by non-social mothers.

Clearly a better understanding of gene expression in humans can help us better identify the mechanisms by which some of the correlations between hormones and behavior might operate as well as how environmental insults might lead to differing risk for behaviors associated with these hormones. But looking forward, we believe that this type of research is likely to play an increasingly important role in how humans behave in family settings.

There are many research avenues in this field. Research is needed to establish how many hormonal measurements are needed, and over what time periods, to develop and test models of interactions between social/economic variables and hormones, and the effect of these interactions on family behaviors. One useful avenue would be to assess whether such research is possible with data collections such as Add Health. A second avenue is to understand the mechanisms that lead to basic features in family behavior such as bonding or aggression. This might give us insight as to which genes might be implicated in such behavior and give us scope for using biomarker data in a meaningful way.

We do recognize that biomarker data are not free. There are significant costs to collecting and storing biological samples as well as large costs for processing samples to obtain usable data. But these costs are declining rapidly and a strategy of collecting samples even if to hold for future use seems warranted.

## Conclusions and Recommendations

An understanding of the continuing profound changes in couple relationships requires an attention both to theory and to new strategies for data collection. Theoretical work is needed to gain new insights into the nature of commitment; the interplay between cultural schemas, resources, and the broader environment; the process of bargaining between couple members; or the potential impact of genetic and hormonal factors on intimate relationships. New data collection is needed to gain an adequate description of trends and subgroup variation in the structure and dynamics of unions. New data collection is also needed to allow the development and testing of mechanism-based theories about relationship dynamics.

Our challenge is to design a research strategy that can be flexible enough to respond to current and future developments in intimate unions while at the same time provide continuity so that we can make across-time comparisons. Tensions exist between the need to keep surveys consistent (to monitor change and variation) and the need to update those same surveys when social change renders their questions irrelevant or less important. We therefore recommend the following:

- **Retain a core group of key intimate union indicators on these surveys.**
- To improve existing data collections, **rely on cognitive and qualitative research to update measures, ascertain their validity for different subpopulations, and ensure that data are consistently collected.** In 2002, the Federal Interagency Forum on Child and Family Statistics earmarked particular surveys for improvement, suggesting specific upgrades (Casper et al. 2002). The ACS holds promise, as does the NSFG if the age range could be extended. Other promising possibilities include the Add Health survey and the NLSY97.
- **Regularly supplement a longitudinal study with a representative sample.** Comparisons could thus examine how intimate unions have changed over an individual's life as well as over time in society.
- In all cases, it is important that existing surveys **oversample special populations** as appropriate, including same-sex couples, older cohabitators, those "living apart together," immigrant couples, and specific racial and ethnic minorities about which little is known.
- **Field a new survey of individuals that embeds a study of couples within it;** we believe this is the best way to make progress in explaining change and variation in unions. This survey would follow individuals, recruiting romantic partners into the design when a relationship was of a defined level of seriousness.
- **Interview both members of a couple longitudinally and collect information on couple dynamics and relationship quality in the envisioned couples survey.** Because such data are vital to understanding union dynamics, some form of **new data collection is warranted.**
- **Build on to a study whose design would support the work called for in this chapter.** The Add Health survey seems to be the best candidate for this purpose, although the NLSY surveys and the PSID could be also improved substantially.



- **Organizations that field surveys should investigate whether supplemental data collection might meet at least some of the needs identified in this report.** Currently, there is no population-based survey that includes all these features, and it is unclear whether existing surveys can be modified to the extent necessary to address many of the key questions we have outlined. Certainly, using an existing survey such as Add Health would be more cost-effective
- **Collect data on interpersonal preferences, expectations, and cultural schemas** to explain changing family dynamics and intimate union formation and dissolution.
- **Collect data on relationship quality** that includes measures of such things as communication, sacrifice, happiness, and commitment.
- **Develop and test appropriate measures for reliability and validity across groups where quality measures are unavailable;** this includes developing measures for concepts used by family therapists.
- **Collect biomarkers on longitudinal surveys.**
- **Identify best practices in international databases** on collecting information on unions for use in new studies in the United States.
- **Conduct on a regular basis qualitative studies of different age groups, social classes and racial-ethnic groups** to keep track of our “moving targets.” With only minor additional investment, those data could be compared with survey data currently being collected to identify needed areas of change. Because the meanings of marriage and cohabitation are shifting, this strategy could be critical in making the case for modification and identifying in what ways ongoing surveys should be modified.
- Ultimately, **a mixture of new data collections and the expansion of existing data collections is needed** to fill gaps in our descriptive knowledge and to improve our understanding of the theoretical mechanisms that have produced the wide-ranging changes in unions over the past 50 years.

## Chapter 5

### **Change and Variation in Intragenerational and Intergenerational Relationships: Summary Report of the EFC Generations Group**

Suzanne M. Bianchi, V. Jeffrey Evans, V. Joseph Hotz,  
Kathleen McGarry, and Judith A. Seltzer

One of the great challenges confronting researchers who study intergenerational relationships is that the study of family behavior usually focuses on either caring and transfers to the young or the elderly rather than on the entire domain of issues and problems faced by the family. To understand family variation and change, however, the whole life span, including the circularity and reciprocity of resource flows and their attendant relationships and obligations, must be a central focus. In this way, we can understand how changes to the family—through births and deaths or union formation and dissolution—affect the constituent members and functioning of the family, and how behavior at one point in life is related to that at other points. This more comprehensive approach is useful both from a scientific and public policy standpoint.

Families play a crucial role in the development, health, and well-being of the next generation in every society. How families rear children, what they teach children either directly or by example, and how they shepherd children through the many facets of life outside the family shape the kinds of adults these children become—how happy, healthy, and productive they are, the types of friendships and relationships they form, and the types of children they, in turn, rear. Also important is how close the ties are that children form with other family members of the same and different generations and whether ties to these family members reinforce or create conflict between individuals and their spouses or partners.

Extended families are often efficient organizations for mobilizing resources to address members' problems. When someone is sick, has trouble making ends meet, or becomes infirm, (extended) family members are more likely than outsiders to step in and help. For example, the family often plays an essential role in how the elderly are sustained and cared for at the end of life. This efficiency arises from the better information family members have about one another compared with information about friends or simple acquaintances, from their greater trust (and often affection), and from the lower costs of monitoring family members' behavior.

Family experiences in childhood can have lasting effects on individuals' health and well-being in middle and old age. By the same token, the health and well-being of parents and grandparents affect the family environment in which children are reared and the resources families invest in the next generation. Parents in a middle generation may be squeezed by the need to care or provide for both children and elderly parents or grandparents. The United States, like many other industrialized countries, has experienced a broad set of demographic, social, and economic changes that renew interest in two long-standing questions: How do families care for their members? And, what is unique about family ties compared with friendship and other social ties?

Four unique features of the family must be part of how we think about theory and new data collection to address these long-standing questions: (1) Family relationships exist over the long-term, and this characteristic likely differentiates family ties from other social ties. As a

result, family ties are “at risk” of developing and changing over time mainly because they last so long. (2) Most other social ties, even friendships, are not reinforced by social and legal institutions that privilege “the family.” (3) Decision making and interactions that go beyond the dyad require assessment of how far beyond the dyad to go. The set of individuals deemed to be members of a family varies over time and across race-ethnic and immigrant groups. Because of this, studies should ask about an array of kin and potential kin to determine whom individuals think of as “in their family” and with whom they interact. (4) Because notions of who is in the family change over time and differ across groups, it is important to assess the “rules” about who is in the family, how they develop, how they are maintained, and how they connect the macro (context) to micro (family) behavior.

The challenges to improving data collection and theory about families, particularly generational ties, are many. This report describes the approach adopted by the Generations Group to evaluate the state of knowledge about change and variation in generational relationships, identify important unanswered questions, and evaluate theory and data needed to address key questions.

### **Changing Context of Generational Relationships**

Demographic trends have altered the structure and generational composition of families, the ages at which individual family members make the transition from one generational status to the next (e.g., becoming a parent and then a grandparent), whether these transitions are made in the context of living with a spouse or cohabiting partner, the relative durability of conjugal (couple) bonds compared with mother-child bonds, how members of different generations exchange resources or care for one another, and the effects of these relationships on individuals’ health and well-being. Increases in life expectancy mean that the United States now has more three- and four-generation families than ever before despite delayed childbearing, while declines in family size mean that children have fewer siblings. The separation of marriage from fertility, and high rates of marital dissolution, cohabitation, and remarriage disrupt ties between biological parents and children at the same time that social (step- and cohabiting) parents and siblings become part of the fabric of U.S. family life. These changes raise new questions about who is in the family. Over this same period, increases in women’s labor force participation alter how mothers, daughters, and increasingly, grandmothers combine paid work with caregiving.

These demographic changes are not monolithic. Family life in the United States continues to vary in consequential ways by race and ethnicity. Education and class differences in union formation and childbearing are likely to have lasting effects on parent-child and sibling relationships. Recent and continuing waves of immigration also challenge families and researchers to consider variation in how families organize their lives and the meaning of family. Nowhere are questions about intergenerational relationships more salient than among immigrant families, for whom status as a first- or second-generation immigrant, for example, has implications for standing within the family and within the nation.

Other social changes also affect families and how family members relate to one another. Technological change affects how family members spend their time, how far away they live from one another, and how they keep in touch. Economic growth and technological developments have also made independent living more readily attainable and more appealing. Public policies, such as the provision of social insurance and welfare regulations, affect whether

family members live together and how they provide for one another's needs. These policies also dictate which family rights and obligations are privileged by the State and how important biological ties are compared with step-family ties and ties formed by cohabitation. Informal institutions, public opinion, and shifts in the ideology of individualism affect what families regard as the norm with respect to generational relationships. In the great melting pot that is the United States, the confluence of diverse cultural norms continually alters what is expected of families and results in significant differences across subpopulations.

Unquestionably, these fundamental changes in the environment in which families exist affect how parents rear children, the kinds of adults children become, how they care for their older parents, and, more broadly, how generations within a family interact with one another. Yet at the same time, family beliefs and behaviors can alter the environment by influencing policies, norms, and how technology is used.

These interactions are complex and belie simple explanations with respect to cause and effect. Some of these interactions take time to play out, and there may be periods without clear norms about what family members should do for one another. Parents who reared children in one normative environment may find themselves in a new world that challenges their understanding and raises new questions about, for example, whether biological ties and marriage are necessary for someone to be a "real" parent and whether friends or paid caregivers are appropriate substitutes for family care.

The challenges families face in a rapidly changing world are evident for parents who reared children in an era when marriage was forever and out-of-wedlock childbearing was rare and who now have adult children who are single parents or step-parents. Mothers who stayed at home to look after their young children and then went into the paid labor force when their children were older now have daughters who are trying to combine childrearing with employment when their children are very young. Grandmothers are now juggling their husbands' needs, the needs of their adult children and grandchildren, and, because of increased life expectancy, the needs of their widowed mothers.

It is against this backdrop of demographic, social, and economic change that the Generations Group approached the NICHD charge to explore change and variation in ties between parents and children, among siblings, and across multiple generations in the same family. Specifically, we reviewed existing research on the determinants of change and variation within and between generations of a family, sought input from numerous scholars with expertise in a wide range of disciplines, collaborated in organizing a conference and publishing a volume on intergenerational issues, and undertook a comprehensive review of available data focusing on generational issues.

Our goals were to: (1) identify the key questions and unresolved issues in this research, (2) assess the strengths and limitations of alternative theoretical approaches used to analyze intra- and intergenerational family relationships and behavior; (3) determine the adequacy of existing data sources; and (4) consider what new data are necessary to address key questions on generational change and variation.

The next sections describe our approach. We then present our findings and make recommendations for how future research in this area might be best advanced.

## Approach Used by the Generations Group

The Generations Group followed a three-pronged approach to fulfill the goals of the EFC project. The approach takes account of the complexity of the likely causes and dimensions of family change and variation. The group developed this approach based on the premise that no one discipline or conceptual approach alone would allow the field to make adequate progress in improving our understanding of the changing nature of inter- and intergenerational relationships of family members.

First, we reached out to a wide range of scholars in a variety of different forums and sought their input and advice on the key unanswered questions in the field and their views on the most promising ways to make progress on these questions. (See Appendix 5.A for the group's approach to the project charge. See Appendix 5.B for a list of consultants who provided advice early in the project.)

Second, we collaborated in organizing the 2006 National Family Symposium at Pennsylvania State University in which a group of leading scholars drawn from a variety of disciplinary perspectives wrote papers on a focused set of topics related to *Caring and Exchange within and between Generations*. The formal symposium was followed by a small workshop to address major questions arising from the symposium. (See Appendix 5.C for the symposium program and list of participants; Appendix 5.D for the list of key motivating questions circulated in advance to participants in the small post-symposium workshop; and Appendix 5.E for a list of participants in the workshop.) As part of the symposium, our group contributed a paper in which we summarized and synthesized the theoretical approaches, empirical findings, and open questions on the nature and forms of "intergenerational ties" (Bianchi et al. 2008). (A preprint version of this paper is available at [www.soc.duke.edu/~efc/Docs/pubs/IntergenerationalTies\\_tociruclate17March2007.pdf](http://www.soc.duke.edu/~efc/Docs/pubs/IntergenerationalTies_tociruclate17March2007.pdf)). All of the papers from the symposium, along with the discussant comments, are included in a conference volume, *Intergenerational Caregiving*, published by the Urban Institute Press. (See Appendix 5.F for its table of contents.)

Finally, we conducted an extensive assessment of the sampling frames and content relevant to the study of intra- and intergenerational family relationships in more than 20 existing survey data sets. In conducting this assessment, we asked the researchers who have designed and continue to guide these data collection efforts to help us identify the strengths and weaknesses of existing data and the future data needs for conducting such research. (For document on existing data sets, see [www.ccpr.ucla.edu/docs/publications/CCPR20-07.pdf](http://www.ccpr.ucla.edu/docs/publications/CCPR20-07.pdf) and included as Appendix 5.G.)

### Key Questions for Research on Change and Variation in Intra- and Intergenerational Family Relationships

Two overriding questions motivate our work. First, what are the major gaps in our *descriptive* knowledge of major trends and subgroup variation in generational relationships? Second, how can we go beyond description and understand and explain trends and subgroup variation in intra- and intergenerational family relationships?

We take relationships among adults as our starting point because this was the focus of most of our efforts. We acknowledge, however, the important role parents and siblings play in

children's development and in creating the foundation on which inter- and intra-generational relationships rest throughout adulthood. We recognize there are multiple dimensions of relationships, including, but certainly not limited to, emotional support, social activities, and social networks, the provision of financial assistance and practical help, time spent caregiving, and the intergenerational transmission of attitudes and values. In fact, one of the challenges for theory and research on generational relationships is that family relationships are multifaceted. Dimensions of relationships may vary for different reasons, and family relationships, by definition, involve multiple actors, some of whom are easily observed and some of whom are not. Relationships also evolve over time. Behaviors that characterize children's relationship with a parent in childhood may be very different from those experienced later when children are adults. Some of this variation may be anticipated by the individuals involved, but it is likely that many of the changes in roles and positions represent adjustments individuals make to unexpected events.

### ***Who Gives and Who Receives?***

***Parents and children***—Caregiving relationships can be quite complicated and vary greatly across families. The existing literature has, however, identified several stylized facts that speak to patterns of caring.

Currently many more intergenerational transfers in the United States flow “downstream” from parent to child, with a much smaller portion flowing upstream from child to parent, even when only considering transfers made to adults (Bianchi et al. 2008). In many families, however, there comes a point at which the parent becomes a recipient of care and the adult child a donor (i.e., the transfer of resources changes direction from downstream to upstream). Even if parents are not particularly frail, they may turn to their children for financial assistance, advice, or help with household chores.

There is a strong correlation between gender and whether individuals will give or receive care during their lives. Women are much more likely to invest in the care of their children or parents, and sometimes both. Furthermore, because a spouse is typically the primary caregiver for a frail elderly person and because wives often outlive their husbands, women are at greater risk than men of providing care to a spouse and then of being alone in old age and needing to rely on an adult child for care. This greater potential need may affect mother-child relationships much earlier in life.

Although the age and gender patterns are well documented, less well understood is the origin of these patterns and how they will evolve over time. For instance, do women invest more in children than men because they will need to rely on those children to provide care once their husbands have died? Will changes in labor force participation and the male–female wage ratio affect the gender difference in caregiving, either to children or to elderly parents? Will the aging of the baby boom, accompanied by lower fertility and more working women, mean that professional care and institutionalization become more common? Public policy also plays an important role in many of these outcomes. The Family and Medical Leave Act allows an employee to take unpaid leave from work to care for family members. This gender-blind law may make it easier for fathers to participate in the care of a young child or a son to care for a parent. However, at the same time, societal pressure and gender stereotyping may limit men's use of this benefit.

**Siblings**—Patterns of assistance among individuals of the same generation have been studied less often than have parent-child patterns. Individuals' lives overlap more with those of their siblings than with any other relatives. They are reared together and will likely share certain goals, beliefs, and attitudes. Yet despite the potential significance of sibling relationships, we know very little about how adult siblings interact with each other or how their interactions with a parent and assistance to a parent are mediated by their relationship with each other. For example, one sibling may compensate another for providing care to a parent, or may choose to transfer cash to a parent while the other transfers time. Siblings may help each other directly with cash or time assistance, social or employment connections, and emotional support, or they may engage in increasing conflict as they age and encounter life difficulties. Some siblings are able to cooperate and others are not and these dynamics are a component in understanding how families function to provide care both across and within generations.

### ***What Resources Are Given?***

Families transfer a great deal of resources to their members in the forms of money, time, and goods or services (Bianchi et al. 2008). Although disciplines differ in the degree to which they consider the content of these transfers, examples of each can be found in all fields, albeit with differences in the terminology used to describe the relationship and the emphasis placed on various factors. For example, whereas economists might stress the opportunity cost of a time transfer, sociologists note that time transfers likely also involve the transmission of attitudes and social knowledge, and further, that there is cultural variation in the meaning of time spent with parents, children, and siblings. Measurement of the presence and amount of various currencies of support is relatively straightforward compared with measurement of the content or meaning of these transfers.

As a result, we know more about the existing patterns than about the meanings underlying them. However, even coverage of the more routinely observed types of transfers leaves room for improvement. Because few surveys measure all currencies, we lack a clear picture of how time and money, for example, substitute for each other. One could easily imagine cases in which dollars are given in lieu of time help, but they may also be complements, with needy recipients receiving more of each. Also, because much of this work is done at a point in time, we do not know how transfers over a lifetime relate to each other and when and where the direction of transfer flows change.

Methods for improving the measurement of resources such as emotional support are less clear-cut. Resources such as trust, dependability, compassion, and understanding are obviously important during times of crisis as well as in dealing with simple day-to-day ups and downs. Families transmit attitudes and beliefs as they attend to life's challenges. Children mimic their parents in many ways, and parents, either consciously or unconsciously, transmit their values and approaches to life to their own children.

Finally, even studies that measure the quality of dyadic relationships between parents and children or between siblings do not fully describe or explain conflict, estrangement, and disengagement, although recent attention to ambivalence in parent-child relationships begins to address this concern. These negative aspects of generational ties have important theoretical and policy implications, but they also pose practical and ethical concerns for data collection.

### ***Active versus Inactive/Potential “Safety Nets”***

The actual transfer of resources need not be observed for an individual to benefit. The simple matter of knowing that a parent or other family member can provide assistance should the need arise can allow an individual to take more risk in life because of this insurance. Rebeca Wong (2008) characterizes this as a critical conceptual issue:

A major gap in both the economic and sociological literature is that, empirically, we have focused on the study of observed or active transfers to infer generational ties or social bonds. There is a conceptual problem with this approach because an inactive link among people may also constitute part of the social bonds that tie them and may affect the way people behave and plan.

Survey questions asking whether an individual has someone to whom they could turn for help in an emergency endeavor to assess this notion of inactive transfers, yet work on this topic is in its infancy. As our review of survey data highlighted, we lack systematic information about individuals' expectations of who among a range of potential helpers (parents, siblings, adult children, step-kin, in-laws) would provide help if needed, and whom they themselves might be expected to assist. The limited existing research illustrates a tension between posing these questions about family members in the abstract (e.g., should a child provide care for a step-parent?) and posing these questions about the individual's own kin (would you provide care for your step-parent?). The latter requires knowledge about the person's potential support network, such as whether parents are still alive, whether there are any step-parents, and the number of siblings. Similarly, a person without particular family members—for example, a step-parent—may find it difficult to think abstractly about these types of bonds.

### ***Time Horizons and the Dynamics of Generational Transfers over the Life Course***

Transfers are made at a point in time. However, in observing a particular transfer, we are only observing a portion of the relationship between the donor and recipient. The observed transfer is part of a much larger set of interactions that play out over time. Transfers may be made as repayment for an early transfer, in anticipation of a future need, or in the hope of building ties or bonds between the parties. Because our data are often cross-sectional—or at best obtained over a relatively short panel study—it is not easy to assess how a particular transfer fits into the larger picture and thus not easy to attribute motive to behavior.

The relevant period of observation may be prohibitively long. Help with child care that a grandmother provides to her adult children may not be repaid until those grandchildren are themselves adults and repay the favor by caring for their grandmother. Even with as wide an observation window as this entails, we may miss the true picture if the grandchildren are ready and willing to reciprocate by providing care but the grandmother remains independent throughout her life. Thus, although our theories readily apply to exchange-based transfers made over a span of years or decades, our data are insufficient to capture this behavior. Similarly, an exchange regime may be sufficiently complex that multiple generations are involved; for example, if a mother provides care for her parent in the expectation that her children will provide for her.



## *How Should We Think about the Role of Geographic Proximity?*

Care and caregiving are not necessarily bound by geography, although research indicates that certain types of transfers are more likely to occur as proximity between parent and child increases, with coresidence being a particularly strong correlate with caregiving. However, residence decisions are not independent of the need to provide care. A child may move in with a parent to provide care more efficiently (or the parent may move to be with the child). Even geographic proximity may depend on the need or anticipated need to provide care. Identifying causality is extremely difficult, as a living arrangement may be made in advance in anticipation of the need to provide care. Factors such as labor force participation may be affected by caregiving or the anticipation of having to provide care. For example, given the current gender specialization in caregiving, a daughter may quit her job to care for a parent or may invest less intensively in job-related skills in anticipation of the eventual need to do so.

The actual provision of time help is only one dimension of caring. A child who lives far away or who has a high opportunity cost of time may pay for professional care or compensate a sibling who is willing and able to directly provide care to the parent. A long-distance child can also provide support through phone calls, e-mails, and the like, filling an important need for an infirm parent who might otherwise feel isolated. Thus, although proximity improves the efficiency of hands-on care, it may make little difference for the other forms of support. Much of the current research misses these alternative means of transfers because survey questions tend to target hands-on help, direct cash transfers, or coresidence. Transfers to third parties and emotional support are often measured inadequately or missed entirely.

In sum, our review of the existing literature identified a number of key areas that are most in need of future study. The areas include identifying who gives and receives care and over what time horizon; who feels obligated to whom, what affects these feelings of obligation, and whether or not they motivate action; what things are actually transferred and what remains in the domain of “potential” transfers; and how does proximity of all types—physical, emotional, biological, and social—affect the ties that bind individuals within and across generations.

### **Existing Theoretical Approaches to Modeling and Motivating Relationships within and between Generations**

#### *What We Learned from Our Assessment of Theoretical Approaches*

In Bianchi et al. (2008), we review the primary theoretical approaches for modeling relationships and interactions of family members between and within generations.<sup>1</sup> These approaches tend to differ with respect to: (a) the underlying motivation for such relationships; (b) structure of interactions and decision making (i.e., who participates in these decisions and what is the nature of their involvement or lack of it); and (c) the role for and nature of context, broadly put, in such relationships. We briefly review each of these dimensions.

**Motivations for interactions within the family**—Here, we organize our discussion around what we categorize as five primary motivations that underlie most theoretical models: (1)

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<sup>1</sup> See [www.soc.duke.edu/~efc/Docs/pubs/IntergenerationalTies\\_tociruclate17March2007.pdf](http://www.soc.duke.edu/~efc/Docs/pubs/IntergenerationalTies_tociruclate17March2007.pdf) for a preprint version of Bianchi et al.

altruism, (2) exchange or reciprocity, (3) trust and common preferences, (4) biological predispositions, and (5) social or cultural norms. Economic models of the family typically view interactions within the family as motivated by altruistic preferences or the exchange/reciprocity motive.

Within the altruism model, the preferences (i.e., utility functions) are such that family members care about the well-being of others. Alternatively, in an exchange model, family members value the services provided by others and are willing to exchange something for these services. Because of lower monitoring costs, or efficiency in production, exchange takes place within families rather than in the market.

Although a number of sociological models of the family also use notions of altruism and reciprocity to motivate intergenerational relationships, they more typically maintain that such motives arise from and are maintained by social and cultural norms. More recent game theoretic or bargaining models of the family often are based (somewhat implicitly) on the view that family members trust one another—possibly as a result of repeated interactions and/or social norms—and, as a result, engage in (more) cooperative bargaining than members of other groups.

Evolutionary biology models of inter- and intragenerational family interactions motivate familial altruism as a desire to preserve one's genes across generations. Models differ with respect to whether these motives are immutable or change over time—for example, as a result of evolving norms—and/or whether different motives apply to different types of interactions or transfers; that is, reciprocity may be more important for financial transfers than time transfers.

**Structure of interactions and decision making within the family**—A key difference across models is the structure of interactions and family decision making. Some models (such as Becker's [1981, 1991] model of the family) view decisions of the family as largely generated by a family head (dictator) who makes decisions for all members on the basis of altruistic preferences. This is the unitary model. Other models view the family as a collective in which all members are potential actors, with these members assumed to have their own objectives guiding their decisions and in which family-member interactions may or may not be characterized as cooperative. Most models focus on dyadic relationships—such as parent-child, sibling-sibling—while a few consider the interactions or potential interactions of a much broader set of family members, as in models of caregiving in Pezzin, Pollak, and Schone (2008).

A key issue with respect to such interactions concerns which family members are involved in different family decisions. For example, bargaining models of caregiving in principle allow all members of an extended family to be “at risk” to be potential actors in decision making and allow who is actually involved to be endogenous.

In contrast, evolutionary models of the family suggest that which family members are involved in any set of interactions depends on genetic closeness and the extent to which decisions involve gene preservation. For example, gene preservation and the fact that a mother is typically more certain than a father whether a child is her (biological) offspring provides an explanation for why mothers invest more in children than do fathers. Moreover, cultural norms, the principle of comparative advantage (e.g., more educated family members may be more involved in financial decisions), bargaining power (e.g., a higher-income spouse may have more say in decisions), and historical experience have all been hypothesized in models of the family to characterize which family members are involved in different types of decisions.

Finally, another important dimension of modeling the role of the family in decision making concerns the comparative role of the family versus other actors or institutions. Some

models of the family, whether explicitly or implicitly, consider which decisions are best handled by the family versus ones that may involve other “actors” (such as friends or unrelated “professionals”) and/or other “institutions” (such as markets or the government).

**Role and nature of context**—Theories about family interactions place much attention on the context in which family members interact, how the context guides interactions, and how family interactions, in turn, influence the context. For example, several models focus on the role of the family within the context of governmental policy climates, such as the presence or absence of old-age security systems. In such models, the attention is on what role the family plays given the presence or absence of institutions that might substitute for functions that families sometimes fulfill. Another important set of contextual forces that influence (and may be influenced by) the family is cultural or social norms. Finally, there is the role of technological change and innovation and its impact on the family.

In many of these cases, there appear to be two issues that arise. The first is the nature of the interactions between alternative forms of context and family behavior. This is particularly true for the role of culture. How does culture shape appropriate family behavior, and is there a set of feedback mechanisms that make such interactions endogenous?

For example, the historical specialization of men in work production and women in home production—due, in part, to the past importance of physical strength in many jobs—may have helped foster the norm that it was primarily a woman’s responsibility to rear children and care for older relatives. This example further suggests that the changes in the economic structure of work—that is, the rise of the service economy where strength is less important—may give rise to forces that will change or are changing norms or agreed-on practices concerning gender responsibilities for caregiving.

From a modeling perspective, this possibility of feedback from the micro to the macro complicates the untangling of the theoretical implications of any models in general, and models of family interactions in particular. Yet understanding the influence of changes in context—whether they are exogenous or endogenous with respect to family interactions—is essential for making progress on understanding family change and variation.

The discussion in Bianchi et al. (2008), the other papers in the Pennsylvania State Symposium that the EFC Generations Group held, and the more informal discussion at the workshop following this symposium provided at least two important guiding principles for designing future research on the extended family. First, many discipline-based models, on closer examination, share many similarities, even though they cloak their models in different language, terminology, and use of mathematics. This claim, if true, clearly suggests that attempts to synthesize the content of models across disciplines can play a nontrivial role in advancing the development of theories of the family.

Second, the discussions in these papers and at the symposium about models of the extended family strongly suggest the need to (1) design data collection efforts that help us to better explore the motivations for family interactions, (2) examine more explicitly the nature of the interactions of the family, (3) identify better who participates in particular decisions and who does not, and (4) try to tackle the role of context and the potential role of norms and norm formation in the relationships and interactions of the family. Only by understanding the motivation behind the observed behaviors can we position ourselves to assess the effects of future policy and social changes.

## *Conclusions about Theory*

At this point in time, it is our view that no single, unified theoretical framework exists with which to study generational relationships within the family. More and more, the data point to the likelihood that different models are operable at different times and in different situations. Past emphasis on unitary models—wherein the family is presumed to act as a unit with one set of goals and preferences—is increasingly giving way to more complex, multi-actor models sometimes cast in a game theoretic framework. These advances and alternative models of thinking are welcome.

Experts in many disciplines across the social and biological sciences are actively exploring new ways of thinking about generational issues. We believe strongly that the cooperation of family experts in these various fields provides the key to making significant advances on the theoretical front. To this end, dialogue across disciplines is essential. Furthermore, because theoretical advances are often stimulated by a desire to understand real-world behavior, we believe that successful theoretical development requires careful, ongoing description of trends and differences in the family behaviors of generational caring and exchange.

If these theories are to be useful, they should be sufficiently well developed that they generate predictions and hypotheses that are falsifiable, either in practice or in principle. Maintaining this criterion disciplines theorizing and ensures it “goes far enough” in its development. It is relatively easy to tell a story that is consistent with the data; successful theories must go beyond merely sounding plausible and be rigorously tested against alternatives to prove their worth. Modeling efforts, regardless of the theoretical tradition or approach, should be encouraged to meet this criterion.

Empirical work should then seize the opportunity to test these models. Learning which aspects of a model stand up to testing and which fail can help further refine the theory. This interaction between theoretical modeling and testing is one of the keys to advancing science. Some of the model features that we believe are likely to be important in the future development of theoretical models that describe change and variation in intra- and intergenerational relationships within the family include:

1. Taking account of multiple actors and their motives and preferences in modeling behavior. In doing so, we must recognize that we may need to define *family* broadly to encompass many of the new family types that have arisen.
2. Examining the nature of interactions between family members, including the circumstances in which actors cooperate with one another and those in which there is conflict or a lack of cooperation. It is important that theories explore the factors and forces that might help support or deter cooperation among family members in caring for one another and meeting one another’s needs.
3. Exploring the role of norms or cultural schemas and their influence on the behavior of families. We also see the need to devise ways to assess where cultural schemas or norms come from and how they might change and adapt to different macro forces, including economic and technological factors. Taking norms and cultural schemas as given may be reasonable and expedient for some research questions, but ignoring where norms come from is ultimately unsatisfying and runs the risk of being tautological. It is therefore

necessary to explore how norms and schemas are formed and whether and how they adapt to changing circumstances. We also suggest that these and other core concepts in theories of generational change and variation be rigorously defined so that cross-disciplinary work can proceed without being hindered by differences in nuanced terminology.

4. Understanding the issue of trust and whether one can count on (extended) family members, either because trust is reinforced by legal sanction, social custom, community appraisal, strong norms of obligation, or all of these reinforcing mechanisms. Similarly, the origin of trust and how it is maintained (or not) over time is an important issue for further development.
5. Assessing the roles of genetic similarity and/or genetically-based motives for behavior, such as those suggested by evolutionary perspectives. Crucial to both cases is the need for theorizing that focuses attention on what role culture, norms, and genetic predispositions play in structuring the repeated interactions of family life, the environment, or context that surrounds those interactions.
6. Drawing on the theoretical models of social interactions such as social network theory that might be usefully applied to studies of the family, especially to the extent that the equilibrium or steady-state properties of these models can be developed. Such models may help us to understand why certain types of interactions and relationships prevail and others do not.
7. Drawing on the findings and approaches of cross-cultural comparisons in developing theories of family change and variation. For example, it may be worth exploring how groups that face different cultural norms and structural conditions might reach similar or different solutions to family decision-making dilemmas.
8. Examining how familial interactions differ from those in the non-family arena or market. Over time, needs that were once met by the family are being filled by the market or by friends. Caregiving for children and the elderly is now commonly a purchased commodity, individuals are increasingly likely to spend holidays with friends rather than families, and the role of fictive kin varies in importance across cultures and across time. How the family evolves affects these non-family sources of support and vice versa.

### **Features of Existing Data Sources for Analyzing and Understanding Family Generational Relationships**

#### *What We Learned from Our Assessments of Data and Data Needs*

On the basis of our three-pronged approach—talking to scholars in the field, hosting a symposium, and workshop on generational caregiving and exchange, and surveying the purveyors of 20 or so large data collections that assess generational issues—we consistently heard several important data collection considerations surrounding sampling issues, methodological and design characteristics, and needed content development. We summarize these below. The detailed report of our assessment is included as Appendix 5.G and at [www.ccpr.ucla.edu/docs/publications/CCPR20-07.pdf](http://www.ccpr.ucla.edu/docs/publications/CCPR20-07.pdf)

**Sampling considerations: family ties versus coresidence**—First and foremost, we heard that there was a need to sample family ties, which often cross household boundaries, and that household-based sampling frames of coresiding family members are too restrictive for the adequate study of generational relationships because members of multiple generations often live apart. If we are to significantly improve our understanding of change and variation in intra- and intergenerational family relationships, we must both do a better job of assessing the complexity of relationships among those who coreside and also design studies that are not limited to family members who coreside. Many household-based data collections still do not distinguish between biological and step-relationships nor do they capture the complexity of family ties within households. Further, household-based sampling frames are typically inadequate for assessing relationships among family members who do not share the same residence, such as non-custodial parents and their children, or adult siblings or adult children and their elderly parents. Gathering information on family members, regardless of where they live, is essential. Furthermore, because coresidence varies across race, income, and educational groups, we are likely to miss important differences in familial behaviors unless we broaden the scope of family studies to include family members who do not coreside. A major challenge in doing this, however, is to determine who should be included in a given family or a given individual's family network of ties.

**Sampling non-biological kin**—A corollary of this is the need to sample and follow family members who are linked non-biologically via family processes such as divorce, remarriage, and cohabitation, as well as those who are linked biologically. Given the increasing prevalence of “blended” families and step-relationships, the need to understand the interactions between such non-biologically linked family members is also growing. Fictive kin differ further from these non-biological family members in that there are typically neither biological links nor legal ties. Yet as families become more dispersed and variable over time, fictive kin are likely to fill roles once held by family members. Few large-scale data sets make any attempt to collect information on those individuals who are acting like family members.

**Intragenerational relationships**—Although it is important to interview and follow family members from different generations, we also heard how important it was to study family members within the same generation, particularly adult siblings. Rarely are relationships between adult siblings measured in surveys, and yet our investigation highlighted at least four important reasons for their inclusion. First, these types of relationships are understudied relative to between-generation relationships, particularly during adulthood. Second, fully understanding intergeneration behaviors, such as caregiving and exchange, requires insights into intragenerational dynamics (e.g., adult children may cooperate in deciding about the care of an elderly parent). Third, exploiting sibling designs can enable us to investigate a variety of genetic versus (family) environment hypotheses about caring and exchange behaviors and outcomes. Fourth, intragenerational relationships, particularly those between siblings, are likely to be of longer duration than any other familial ties and therefore to have a profound impact on behavior. The variation in outcomes among siblings from the same family is great and may provide an opportunity for empirical work and theoretical development about the role of the family, biology, and other factors in individual outcomes.

**Methodological issues: use of proxy respondents**—Another issue that was identified as problematic for studying exchanges among family members is the reliance on reports obtained from only one party to the exchange. Very often different parties will have different impressions of the relationship and of particular behaviors. Studies in which family members from multiple generations are interviewed or directly assessed about their interactions with one another address this concern, although at the same time multiple reports introduce complexity and often additional methodological issues surrounding sample attrition, non-response, and missing data. Bias is introduced because survey non-response is not random. In particular, kin who are estranged or have poorer relationship quality are harder to contact and interview. Tracing estranged kin also raises ethical issues, including issues of consent.

**Content innovations**—There is a need to broaden the conceptualization and measurement of transfers between family members. Several aspects must be considered here. First, although time and money transfers are measured in most studies, other types of transfers, such as emotional support, are less well studied, at least in large, nationally representative studies.

Second, perceptions of what one owes and what is owed by others, the nature of commitments to and from family members, and the likelihood of family members serving as a “safety net” in times of need require better conceptualization and measurement.

Third, the fact that obligations may be incurred over both long and short time horizons points to issues of timing and dynamism that must be incorporated into both the conceptualization and the measurement of exchanges within and between generations.

Finally, it is important to investigate what the motivations are for transfers and why some relationships are characterized by transfers and others are not. Several data collectors whom we interviewed said they were gathering or would find it useful to obtain measures of preferences such as aversion to risk, altruism, and time preferences and to get more information about family members’ perceptions of obligations or norms with respect to what is expected at different stages of the life course. Direct measurement of preferences and how preferences are formed, along with other subjective phenomena such as norms of obligation or cultural schemas, might form the basis for better understanding of the gender-differentiated nature of caring and exchange relationships within families.

**Innovative and multi-method data collection**—Finally, a number of innovative data collection strategies are either under way or on the list of things that investigators are contemplating. In addition to including established questions about intra- and intergenerational caregiving and exchanges, several studies are exploring or making plans to:

1. use experimental methods embedded within surveys as a promising option for measuring preferences and attitudes;
2. gather biomeasures and other health-related data to better understand genetic commonalities, stress responses, and their potential biological influences on the nature of interactions between family members;
3. use factorial designs and vignettes to study obligations that individuals feel toward each other, such as those described by Steven Nock at the Penn State Family Symposium;

4. use of the Internet for gathering information, given that it has the increasing potential of providing an inexpensive way to contact relatives of a sample person and may be particularly useful in reaching certain populations, such as young adult children;
5. greater linking of administrative data with survey information, although such linkages do require informed consent (usually written) by respondents and cooperation of the administrative unit, both of which can be obstacles to undertaking such linkages, especially in the United States;
6. more reliance on mixed-mode data collection, such as combining data obtained via traditional survey methods with that obtained by qualitative interviewing.

### ***Conclusions about Data Collection***

**Data design**—To make progress in understanding the interactions and relationships across and within generations of families, we must focus on “family-based” rather than “household-based” sampling frames. Establishing a family versus household sampling frame can be done by either gaining the cooperation of adult family members from various generations at the outset of the study (i.e., parents and their adult offspring, sets of siblings) or by “growing” into such a sampling frame by starting with households and then following family members as they leave the original household and form their own households. In the surveys we assessed, we observed cases of each of these strategies, and the investigators we consulted provided us with assessments of the strengths and weaknesses of each. On balance, the survey design experts suggested that a genealogical design is best for studying family relationships. Hence, data sets such as the Panel Study of Income Dynamics (PSID) may have the greatest potential to provide this sort of longitudinal data with information on multiple generations and the possibility of sampling all siblings. Although not perfect, we believe that existing data such as these can be augmented and improved to provide a good deal of the needed information.

The approach of augmenting existing data sets, such as the PSID, has the following advantages:<sup>2</sup>

1. It avoids the startup costs of developing a new study and the recruitment and retention of new sample members.
2. It allows use of data gathered over the life cycle when children are young (before they leave their parents’ household) to help predict and model the subsequent behavior and interactions with siblings and/or with their parents when they become adults.
3. It provides invaluable data on the history and evolution of behaviors over time, allowing an investigator to “look back” at which factors led to the current state. By augmenting an existing data set such as the PSID, decades of data are already available describing the evolution of behaviors over time and how the current state was reached.

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<sup>2</sup> In this section we briefly mention several of the larger panel surveys with which we think many readers will be familiar. We include a more detailed discussion of data sets in our data assessment report included as Appendix 5.G and available at [www.cepr.ucla.edu/docs/publications/CCPR20-07.pdf](http://www.cepr.ucla.edu/docs/publications/CCPR20-07.pdf).



We note, however, that these advantages enhance the study of generational relationships for a sample of representative U.S. families at the time the survey began. For the PSID, this corresponds to a time roughly four decades ago. Changes in the U.S. population because of immigration, racial and ethnic intermarriage, as well as other demographic processes are missed. This limitation points to the need for a new sample of families to investigate generational relationships in the future or to periodic refreshment of the original sample as is done in the cohort-based Health and Retirement Study (HRS). Fortunately, this concern about the representativeness of existing samples does not reduce the value of these existing data for studying the processes that affect relationships within and between generations, and we see great potential for the efficient augmentation of existing data sets.

When considering the augmentation process for data sets following a PSID-like model, we believe that the following strategies are essential:

1. Following rules cannot be based solely on biology. This is crucial to enable us to analyze the consequences of interactions and ties for blended families, including the relationships between step-parents and step-children, step-siblings, and cohabitating individuals.
2. Given the longer transition to adulthood of recent cohorts, interviewing must begin before young adults leave the parental home so that important generational exchanges that occur early in adulthood are not missed. Examples of exchanges for which these data are needed include investments in schooling, factors inducing the formation of new households or the maintenance of a multigenerational household, and the strength of emotional ties, all of which may be perceived differently by the younger and older generation. Along these lines, it is beneficial to have reports from both parties. (The current interviewing of young adults who were part of the Child Development Supplement to the PSID is a promising start in this direction.)
3. Greater attention must be placed on developing sequences of questions that directly examine the interactions—or lack of them—between particular family members. Moreover, ways must be devised to explore the nature of interactions between more than dyads. In this regard, the sampling frames of some studies such as the PSID may be ideal in that they include (nearly) all family members, but the topic domains are currently too limited. Longitudinal surveys with more expansive domains of questionnaire content (such as the social-psychological content of the Wisconsin Longitudinal Survey [WLS] or the family relationship and interaction content in the National Survey of Families and Households [NSFH]) provide good models for this additional content. Despite the increase in respondent burden and with the realization that no survey can be all things to all people, we believe that some degree of broadening survey content would be useful to build on the existing data.

An alternative to the genealogical design is a cohort study that follows a particular birth cohort over time. Cohort studies have the advantage that they hold constant the social and economic conditions (such as educational opportunities and timing of economic cycles) facing the survey population and allow for richer and more appropriately targeted questions (such as health care or retirement issues in surveys of the elderly). However, they typically cannot be used to examine how the timing of social and economic conditions affects behavior because

there is little, if any, variation in exposure to these circumstances. One way around this limitation is to expand the focus of the survey to cover more than one cohort. This is in fact what has been done with several cohort-based studies, including the National Longitudinal Surveys (NLS), with the multiple birth-cohort studies in Britain, and the Panel Analysis of Intimate Relationships and Family Dynamics (PAIRFAM) project in Germany. This enriched cohort-based approach has the potential to make these data sets extremely useful for tracking family change.

The WLS is a particularly interesting example of this type of survey design that has been augmented to provide much of the information typically available only in genealogical designs. The WLS has followed a single birth cohort from high school graduation to the present, but it also has included a sibling sample, and recently added interviews with spouses and widow(er)s. The further addition of interviews with adult children would provide a full two-generation design with additional generations represented by proxy reports (original respondents reported about their parents, and adult children would report about their offspring). There is also the possibility of interviewing multiple children (siblings) of the WLS respondent. The survey has the drawback that it is limited to a graduating high school class from Wisconsin and thus the sample is much more homogeneous than the population in general. Similar criticisms of the cohort design can be made of the more nationally representative National Longitudinal Study of Adolescent Health (Add Health) and NLSY, except that for the latter there is a repeated cohort panel.

The HRS provides a related enriched-cohort study methodology. The initial sample targeted specific birth cohorts, but this sample has been regularly augmented with refresher cohorts. It now consists of a sampling frame that will roughly remain representative of the population ages 50 or older, even as current sample members age. Although this sample scheme does not allow for interviews with multiple generations of the same family, it does permit the study of the effects of variation in macro-level factors (such as changes in the normal retirement age) on individual behavior. Unfortunately, because respondents are added to the survey in late-middle age, the HRS relies on retrospective reports about family-related experiences earlier in life, making it less than ideal for many questions. However, with a simple variation on its current sampling methodology, the HRS could provide information from multiple generations for the same family. If a portion of the refresher cohorts were drawn by targeting the children of current respondents, a within-family, multigenerational design could readily be obtained, substantially enriching the usefulness of the survey. This modification of the sample design obviously would require adjustments to sample weights to enable the data to be used for population estimates.

Given these observations, we conclude that the focus should be placed on genealogical, family-based surveys. However, we do think that enriched cohort-based surveys represent a reasonable alternative to family-based surveys in two situations. The first is where the economic costs are prohibitive, as they may be to achieve the multiple goals of enrolling and maintaining a multi-cohort, family-based sample and all of its members, regardless of whether they reside in the same household and having adequate representation of important demographic groups (i.e., certain racial, ethnic or other targeted groups). A second, and related, case is where an existing cohort-based sample can be readily adapted to include a family-based sample by expanding interviews to include siblings, children, or parents.

**Content improvements**—Regardless of whether one considers existing data collection studies or new ones, changes are needed to the overall content of surveys to improve our ability to analyze family generational relationships and behaviors.

We should follow the lead of Duncan Thomas in the Mexican Family Life Survey (MxFLS) and recommendations of Robert Willis (HRS) in devising ways to gather data on preferences and other subjective phenomena that motivate and give meaning to actions, using embedded experiments or vignettes or some combination of the two approaches.

We also must develop ways of gathering information about the “implicit” commitments (such as the terms of insurance contracts) that are made—or are not made—between family members. Because these implicit commitments likely shape behavior even when they are not explicitly observed, we must better understand how they evolve and what the various parties understand or perceive to be the terms of these commitments, and develop ways to measure the commitments’ strength, influence, and how binding they are over the life course.

One promising avenue for measuring such commitments and their tenuousness is the vignette approach of Nock, in which hypothetical scenarios allow one to explore, in a controlled way, how family members might deal with various situations facing others in their family (Nock, Kingston, and Holian 2008). In this regard, we found the suggestions of Robert Willis in his Penn State conference paper commenting on Nock’s work to be extremely useful (see Appendix 5.F). We also see great potential for developing survey measures and mixed-method approaches by building on insights gained from ethnographic studies of how individuals learn the meaning of new types of family relationships, as in Linda Burton’s research on how children in “multi-partner fertility” families learn how they are related to other children being reared by the same adults.

Survey content should also take account of the need for more systematic measurement of how individuals resolve competing obligations to parents, as compared with spouses or cohabiting partners. In these cases, we see the final decision, but we seldom learn anything about the decision-making process. In addition, survey content should include more systematic measurement of the same dimensions for different relationships, such as trust and obligation in parent-child relationships compared with trust and obligation in conjugal relationships or between parent and child or step-parent and step-child. Without these data, it is impossible at this time to explain differences in ties across groups; for example, why African-American families appear to have relatively stronger mother-child bonds than conjugal (partner) bonds whereas for white families, the difference between mother-child and partner bonds is less striking. Systematic information on the relative strength and durability of the bonds is essential for explaining variation and its consequences for individuals’ health and well-being.

We also must determine when it makes sense to capture biomeasures; which biomeasures are most important and most readily collected in multi-member, cross-household data collection studies; and which measures are likely to be the most important in studying generational issues. Such collections are an enormous, expensive, and invasive undertaking, and thus we must deploy resources judiciously. In fact, it is not always clear that a broad longitudinal study is the best venue for such collection. Often more targeted samples may be more cost-effective.

Finally, we must capture the dynamic processes characteristic of intra- and intergenerational relationships by improving our measurement of the timing of transfers and exchanges over the life course.

## Recommendations

### *Recommendation 1: Importance of Data Collection for Description*

We must continue to collect—indeed enhance the collection of—the basic descriptive information that allows for the modeling of change and variation in extended family care and exchange. Much of this monitoring is done in ongoing federal surveys or federally funded data collection efforts. More attention to collecting the disparate pieces of what we know about intra- and intergenerational family relationships from across these surveys would be valuable.

**Why is this important?**—All societies seek to monitor the health and well-being of their populations to assess current needs, track progress in improving living conditions, and project future demands on government services. Typically, ensuring the well-being of any population is accomplished via two main channels: privately, most often through the (extended) family; and publicly, through government programs, incentives, and schemes. A key component of this social accounting is the collection and monitoring of basic family statistics on living arrangements and the flow of support between parents and young children, between adult children and elderly parents, and among siblings and extended family members. National estimates that monitor trends and subgroup variation in extended family ties serve as critical benchmarks against which the quality and representativeness of smaller-scale studies of the motivations for intergenerational exchanges can be assessed. Finally, broad, national, periodic, representative descriptions of (extended) family structure and transitions offer the “puzzles” that need to be explained. Ongoing monitoring and description motivate new theoretical and empirical developments.

**What do we know?**—Large federal data collections provide selected indicators of extended family structure. For example, the March Current Population Survey (CPS) allows for the annual assessment of children’s living arrangements—whether they live with both, one, or neither parent (although with limitations on our ability to assess biological relatedness to parents). In recent years, grandparent-grandchild coresidence can be assessed with these data, following the growing attention to grandparental support for grandchildren in the wake of welfare reform. In the Survey of Income and Program Participation (SIPP) and the April CPS, child support from non-resident parents is assessed and monitored. Household rosters in the decennial censuses and surveys such as the CPS and SIPP allow us to identify when multiple generations of a family live together. Typically in the CPS, the American Community Survey (ACS), and the decennial censuses, relationship information is keyed to one person, the householder, but full relationship matrices have been included in SIPP, and surveys like CPS are increasingly incorporating flags that help identify all parent-child linkages and all partners, including cohabiting partners, in households.

Researchers use sources such as the decennial censuses to provide information on long-term trends in generational ties, such as the coresidence of young adult children (Ruggles 2007), father-child coresidence (Goldscheider and Sassler 2006), and the presence of female “other relatives” who might assist mothers with child care (Short et al. 2006). Others have reported the incidence of parents “hosting” adult children versus children “hosting” parents (Cohen and Casper 2002) and grandparent-grandchild coresidence (Casper and Bianchi 2002). These data also provide the input for simulations projecting the availability of adult children for the older

population (Wolf, Freedman, and Soldo 1997), change in the number of sets of grandparents that grandchildren have (Uhlenberg 1996), and changes in the availability of step-children, biological children, and other extended kin (Wachter 1998).

**What impedes the accurate monitoring of generational ties?**—Ongoing monitoring of extended family structures is impeded by at least two factors. First, the indicators of extended family forms and coresidence are not routinely collected together in one annual report or set of “indicators.” There are a few tables on living arrangements produced routinely by the Census Bureau. Other statistics and series are spread across papers published in journals or book chapters. This impedes ongoing assessment of what we know about change and variation in generational relationships.

A second and even more serious limitation is that virtually all major data collections employ a housing unit sampling frame and ask few, if any, questions about kin outside the sampled household. With the exception of coresidence, it is difficult to assess the structure of extended family ties and the availability and contact with kin who do not coreside. This limitation is particularly problematic for studying parent-child relationships and sibling relationships in adulthood. In childhood as well, this sampling frame also limits the study of intergenerational relationships between young children and non-resident parents and siblings of differing degrees of relatedness. Joint-custody agreements with varying degrees of sharing suggest that children could spend substantial portions of their childhood with step-parents and step-siblings with whom they do not formally coreside. Information on the existence of these relationships and on the content (that is, what happens in the relationships) is essential for understanding the effects of family experiences on children’s well-being.

***Recommendation 2: Move Beyond Description to Explanation in the Assessment of the Quantity and Quality of Interactions, Exchanges, and Contacts across and between Generations in the Family***

**Why is this important?**—Almost always, we want to go beyond mere description of changing family forms and structures and better understand change and variation in the “glue” that binds family members together—affective ties, feelings of obligation and commitment to one another, solidarity, and the assurance that support will be available when needed (i.e., the “latent” or “insurance” value of kin ties). To do this, we must assess the extent and nature of the *interactions, exchanges, and contacts* between family members across and between generations—both how these change over the life course and across cohorts and how they vary across subgroups in the population. These include parents’ investment of *time* and *resources in childrearing*, including provision of care and affection and the transmission of values to young children, as well as the financial resources that often extend into young adulthood, such as payment for higher education, gifts, dowries, and help with housing. They also include the reverse flows from adult children to (frail) elderly parents, including financial, caregiving, and affective support. In addition, as we noted previously, the potential for support in either direction should the need arise is consequential for individuals’ well-being.

The conditions that affect family interactions include factors such as whether family members remain geographically close to one another, whether they make geographic proximity a factor in their mobility decisions, how much contact, social and otherwise, they have with each other, and what form this contact takes (personal visits, phone calls, email). In addition, to

observe the uniqueness of family ties, we often wish to compare what family members give to one another with what individuals give or receive from non-familial sources, including friends, public and private organizations, formal institutions, and markets. One important aspect of these comparisons is examining the role of the state. Interaction between the family and state has important implications for familial ties. What the state does or does not provide affects what families must do for members. A key public policy question is often whether public transfers (such as Social Security or welfare) “crowds out” that which families would otherwise provide members. Alternatively, because public policy responds to the needs of citizens, it can fill voids left by private and family support.

**What do we know?**—As noted in the “Key Questions for Research” section, a central focus of previous research on generational relationships within the family is on donors and recipients, and the finding that the predominant direction of the flow of resources and caregiving within families is from parent to child. Who gives and who receives is marked by enduring gender differences in resource flows. Facts about what types of resources are exchanged or transferred between family members focus on the transfer of money, and to a lesser extent, time, goods, or services.

Emphasis has been on these sorts of transfers in part because they are straightforward to measure and amenable to survey questions. However, they are also of particular interest in their own right because they can be provided by non-kin as well as kin. Comparisons of kin to non-kin exchanges can thus be used to deepen our understanding of the role of family ties. For example, help with activities of daily living can readily be provided by paid caregivers, and yet the majority of frail elderly receive informal care from family members. This suggests there is some reason why families are better suited to provide care. Transfers of time and money are also susceptible to policy manipulation, either by design or as an unintended consequence. Social Security, for example, relieved many children of the need to provide for elderly parents. Thus, policy debates about how to improve the health and welfare of the U.S. population motivate research on facts about transfers of money, time, goods, and services.

**What do we need to know about interactions and exchanges among extended kin?**—There appears to be less consensus in the literature about how to measure the nature and extent of exchange of attitudes and beliefs within families. This is so even though there is a strong presumption and some evidence that the family plays an important role in the intergenerational transmission of a wide range of political and moral attitudes.

Vignette techniques show promise for evaluating the extent of felt obligation under different hypothetical conditions such as the need for help and the availability of help from non-familial sources. Data on giving and receiving emotional support is less extensive and/or precise given the lack of common metrics for measuring these aspects of relationships. The lack of agreement across the disciplines about what dimensions of relationships to measure and standards of measurement contributes to this gap in knowledge.

Finally, even studies that do attempt to measure the quality of dyadic relationships between parents and children or between siblings do not fully describe or explain conflict, estrangement, and disengagement, although recent attention to ambivalence in parent-child relationships has begun to address this issue. A challenge for large surveys on intergenerational relationships is how to incorporate reliable measures of the diverse dimensions of relationship quality without overburdening respondents (see Appendix 5.G and

[www.ccpr.ucla.edu/docs/publications/CCPR20-07.pdf](http://www.ccpr.ucla.edu/docs/publications/CCPR20-07.pdf) for a review of intergenerational data sources and their content).

As noted in the “Key Questions for Research” section above, actual transfers may be made at a single point in time, but the transfers and the relationships of which they are part may be the result of agreements or relationships between a donor (parent) and recipient (child) that play out over time. Individuals benefit from explicit or implied commitments made to them as well as from the actual transfer of resources. The simple matter of knowing that a parent or other family member can and would provide assistance should the need arise can allow an individual to take more risks in life. Thus, knowledge of the dynamics of generational interactions and the (implicit) commitments that play out over the life cycle is important for understanding the observed patterns of transfers.

Our existing data sources—especially cross-sectional studies or longitudinal ones with few or widely spaced panels—hamper attempts to gain insight into such generational dynamics. This is largely because of the difficulty of relating transfers and obligations over time within surveys, and because of the difficulties in probing for the nature of the understood commitments and obligations of multiple members of a family. Retrospective reports about motivations for behavior that took place in the distant past (for example, when an elderly parent’s children were young) are likely to be seriously biased by the parent’s current relationship with the children.

Finally, geographic proximity is thought to be a key factor affecting the incidence and nature of caregiving between family members. Existing evidence indicates, not surprisingly, that proximity, especially coresidence, is a strong correlate of caregiving. However, residential decisions are not independent of the need to provide care. Thus, the causal link between geographic proximity and caregiving is difficult to untangle. The ability to reliably measure the types and intensity of caregiving provided by noncoresident kin is problematic in most studies, given that we typically rely on getting information about the provision of such care from only one party to a potential transaction and because the frequency and regularity of such care may be difficult to report about reliably. Efforts to improve the quality of reports about care must confront the challenge created by the lack of external criteria with which to validate most dimensions of caregiving.

### ***Recommendation 3: Pay Greater Attention to Intergenerational Mobility and Intergenerational Transmission of Behavior and Traits and Sibling Similarity and Differences***

**Why is this important?**—In a society that prides itself on equality of opportunity for all its citizenry, a thorny issue is always the intergenerational transmission of advantage. Has society changed in terms of the likelihood that children will “inherit” their parents’ social position? What is passed down between generations, and what are the mechanisms by which parents pass on advantage or disadvantage to their children? For example, has the extent and nature of the apparent role of the family changed in the “intergenerational transmission” of socioeconomic status such as income, wealth, poverty, consumption, labor force participation, occupational attainment, and educational attainment; health and cognitive ability; family formation behaviors such as marriage, divorce, cohabitation, and fertility? What are the mechanisms by which advantaged groups maintain their advantage across generations? For example, studies point to the fact that income for blacks and whites is more similar than wealth. Is the large inequality in wealth a key component affecting lesser “inheritance” of advantage of a black than white youth? Are black middle-class families less securely in the middle class than

white families? And why is upward mobility so often found among immigrant Asian youth even from poor households?

A related issue is the extent to which changes and variation in the intergenerational correlations in the above phenomena are reflected in sibling differences and possibly even family members of the same generation (that is, cousins). Why do siblings in the same family sometimes turn out to be very different and in other families they turn out similarly? Are siblings within families becoming more or less similar over time, and how does their similarity vary across subgroups? Does the decline in family size affect sibling similarity, and how does the incorporation of half- and step-siblings affect the intergenerational transmission of resources and sibling resemblance?

**What do we know and not know?**—There is an extensive literature on the topic of intergenerational transmission of educational and occupational status in sociology and a renewed interest in economics, particularly with respect to intergenerational income mobility (Solon 1999, 2001). There are also new descriptions of what parents do with and for their young children, both from quantitative time diaries (Bianchi, Robinson, and Milkie 2006; Sandberg and Hofferth 2001) and from qualitative ethnographies (Lareau 2003). What is missing is strong evidence of linkages between what parents do and child outcomes.

There is also renewed interest and study of the diversity of outcomes among siblings (Conley 2004), and this remains a fruitful area of inquiry. Studies of variation among siblings, particularly twins, and also cousins have been exploited to try to assess the role of genetics and gene–environment interaction, but there is more to be learned from innovative designs that exploit differences in the biological relatedness of siblings. Studies with promising designs for exploring the causes of diverse outcomes in children are the twin and sibling designs of the Add Health and the data collection on siblings of the original WLS cohort.

#### ***Recommendation 4: Assess the Role of Context***

**Why is this important?**—As documented at the outset of this report, the context in which families function has changed significantly during the past 25 to 50 years, both in the United States and in other countries. Moreover, many forces—globalization, the restructuring of the economy due to skill-based technological change, and the changing role of women in work and society, to name a few—appear to have had different impacts by race, ethnicity, and class. This raises concerns about the consequences that these changes may have had on the structure of the extended family and the nature and extent of relationships across and between generations.

**What do we know and need to know?**—We can speculate on what the likely impact of change is, but often our actual knowledge is limited. For example, reduced infant mortality would seem to create greater incentives to invest in children, although improvements in the financial and physical health of older generations may reduce the “old-age security” motives of parents to make such investments. Increases in fertility out of wedlock and the rise of divorce imply that the biological links between siblings and the generations in “families” are declining and perhaps reducing investments in children. However, at the same time, children now often have more than two parents who can provide for and invest in them. The rise in the labor force attachment of women would seem to suggest that women will have less time to devote to their children or to the care for their elderly relatives, thereby mitigating the gender bias in such



transfers. At the same time, the increasing incomes and capacities to produce wealth (relative to men) may suggest that money transfers to the younger and older generations may increase as women retain more control over family resources and the pool of financial resources grows. Which of the two trends dominates—and, more generally, how the relationships between generations will change as a result of economic and social change—are key questions.

In addition, technological changes affect the length of life and allow for more independent living among both the elderly and nonelderly. Advances in communications alter family ties. The increasingly global flow of labor, capital, and ideas—and high rates of geographic mobility that disperse family members across national boundaries—likely affect the diffusion of family forms and behaviors. Institutional change and differences (such as development of credit and insurance markets, national health care systems, and pension and social security systems) and changes in family-related laws (such as those governing marriage and rights within marriage; laws and policies governing fathers' rights and responsibilities outside marriage; abortion; wealth accumulation; inheritance and tax laws) all potentially alter the context of intergenerational obligations and exchanges. Studying these complex interactions requires broadening the conceptualization of family change and variation to consider the larger nexus within which family change is embedded.

### ***Recommendation 5: Include the Role of Biology, the Family Environment, and Culture***

**Why is it important?**—Population scientists are increasingly aware that the role of biology must be included in theories of family change and variation. Through the use of new techniques such as brain imaging, those who study the brain and other biological processes are discovering things about brain activity and chemical reactions that were undetectable a decade ago. The new information that is emerging on the role of proteins, hormones, and other bodily systems is forcing a rethinking of the interaction between the human organism and external stimuli.

In addition, advances in mapping DNA and collecting bio-measure data are allowing new questions to be asked about the role genes play in shaping family behaviors. For example, health and development may be transmitted over generations through gene–environment interactions that stamp a biological effect on children. How do family environments and behavior interact to influence the health destiny of children in near and distant generations?

**What are we learning?**—In the area of biology and gene–environment interactions, the unanswered questions about family influences are many. Arriving at adequate answers and developing informed protocols for study designs require social scientists to extend collaboration beyond the intellectual domains of the past and to include geneticists, neuroscientists, and others in the biological sciences. Anthropologists and evolutionary scientists also are needed to help address questions such as: How do biology and culture influence intergenerational relationships? Can attention to biology and culture help us solve the micro/macro linkage problem? Does (evolutionary) biology predispose us toward certain micro behaviors? Conversely, does culture keep biology on a “short leash” and provide the mechanism we need to understand macro influences? How might environmental factors interact with genes to influence (family) attachment, a critical component of parent-child and couple bonds?

## **Conclusion: Three-Pronged Approach to Moving from Description to Explanation**

To make progress in understanding change and variation on intra- and intergenerational relationships, we must:

- a) continue to improve our monitoring and description of extended-family living arrangements and ties;
- b) enhance our understanding of the interactions, exchanges, and contact (both quantity and quality) that bind generations together, including not just observed interactions and transmissions but the potential for such transfers;
- c) focus attention on intergenerational transmission of advantage and within-generation differences in advantage and disadvantage;
- d) increase our attention to the contexts that impinge on generational relationships;
- e) adequately incorporate the role of biology, gene–environment interactions, and linkages between biology and culture in both our theoretical understanding and empirical study of change and variation in intra- and intergenerational family ties.

Key to making theoretical and empirical progress is more cross-disciplinary translation and collaboration in the area of intergenerational family relationships. Scholars from a number of disciplinary perspectives—sociology, economics, human development, gerontology, biology, genetics—and an array of applied social scientists, including sampling statisticians, experimentalists, and survey methodologists, will need to understand one another’s concepts and theories if empirical research is to move forward. One of our most productive endeavors during this project was in assessing the similarities and differences in the economic and sociological literature on intergenerational caregiving and exchange. Creating incentives for such interdisciplinary work is a high priority.

Also paramount to making progress on our understanding of the relationships and interactions across and within generations of families is improving data sources that will allow us to move from description to explanation. In his remarks at the Duke Conference, Robert Moffitt proposed a three-pronged agenda for data collection with which to study family change and variation, namely 1) small-scale studies to develop and assess alternative ways of sampling “the family” and measuring key aspects of the behavior and interactions of its members; 2) augmentation of existing surveys and studies to enhance their usefulness for research on family change and variation; and 3) new data collection studies to support a broad-based research agenda on the family over the coming 20 to 30 years. In the next chapter, Moffitt’s taxonomy is used to frame recommendations for data collection for the full range of issues discussed in this and the preceding chapters. Here we outline our particular vision how this three-pronged approach should be applied to the area of intra- and intergenerational relationships.

1. **Small-Scale Pilot Studies.** First, we need a number of smaller-scale studies aimed at a) improving theoretical conceptualization and measurement of key components of family exchanges and ties; b) designing optimal sampling strategies for studying generational relationships; and c) solving methodological impediments that have hampered existing studies and impeded knowledge of generational ties. Much of the focus of this document has been on the discussion and identification of the areas where these smaller-scale measurement and pilot studies are needed.

2. **Additions to Existing Panel Studies.** Generational relationships are complex and unfold over decades. There is therefore an immediate opportunity to enhance what we know about intra- and intergenerational family relationships in the United States if we can envision medium-size projects that build on the most promising existing longitudinal data sets. Enhancing existing data sets is crucial because it will provide the knowledge base over the next several years that, combined with the smaller methodological studies noted above, might allow for the development of a successful plan for a large new data collection in the United States aimed at explaining family change. Huge investments have already been made in several high-quality panel studies with both cohort and genealogical designs. From the EFC Generations Group’s perspective, it would be a great loss if all future investment were steered away from these middle-range enhancement “add-ons” to existing panel studies to immediately fund a new large study without the benefits of combining enhancements to existing studies with the new study. The loss would be two-fold: 1) a missed opportunity for advancing knowledge sooner rather than later, given the long lag time and huge start-up costs in launching any new data collection effort; and 2) a missed opportunity to improve a subsequent new large study or collection of studies based on knowledge learned from strategic augmentation of existing studies.
3. **New Data Collection Effort to Explain Family Change and Variation.** Finally, although we can learn much about generational relationships using existing data, there is no question that the footprint of these studies was established many years ago. Earlier cohorts represent previous U.S. populations, as opposed to a new population with more immigrants and greater racial-ethnic diversity. We also cannot go back and obtain early life experiences and emotional aspects of relationships 20 years later. Despite the richness of existing surveys, there are some questions that cannot be addressed by augmentation of existing studies or where the impediments to using existing panels cannot be overcome. For these questions, designing a new data collection or coordinated set of new data collections will be necessary. Below we outline a set of **issues that must be considered in the development of any new data collection effort**.
  - a. There is a **tension in any new data collection between in-depth targeting of specific issues and a broader-brush approach** that addresses many domains of family life and the intersection of family and other institutions (e.g., schools, work, and health care). Also, although the emphasis of any new study should be on explanation, there is need for a descriptive component as well because so much has changed in families since the last new major descriptive study, the NSFH.
  - b. Any innovative new data collection should make an effort to **employ a study design that embeds individuals in the broader social context**, such as neighborhoods, schools, the policy environment, the health care system, and the labor market. Here is where we must look to the experience of other studies—the Indonesian Family Life Survey (IFLS), the Los Angeles Family and Neighborhood Survey (LA FANS), and the National Longitudinal Study of Adolescent Health (Add Health)—for clues for how best to study embedded social actors.
  - c. New data collection should build on the feedback the Generations Group received from data collectors and scholars who study generational relationships. We were admonished to: (1) **focus on family ties beyond those defined by coresidence**; (2) **collect data from multiple actors** (not just an individual family member); and (3)

- use a lifetime orientation.** In fact, studying family ties within and across generations and throughout the life course should be the overarching perspective or framework for any new collection, because this orientation could encompass most, if not all, of the important issues raised in the Generations, Parenting, and Unions groups.
- d. A significant challenge to launching a new innovative family study that focuses on multiple actors in multiple generations and takes a lifetime orientation is the limitation of disciplinary boundaries (child development versus life-span development and gerontology) that divide up the life course and often ignore the continuity of early and later life experiences. Another potential impediment to funding such studies that must be overcome is the division of responsibility for various domains among NIH agencies such as NICHD and NIA. To make progress on explaining family change, a new study (or coordinated set of studies) will need an organizational structure that **builds on ways to communicate across these disciplinary barriers** as well as across other types of disciplinary divides, such as with the biological and life sciences. A large new effort to study the family will not be successful unless we develop strategies for facilitating the interdisciplinary research and dialogue that is needed to tackle the hard problems in research on topics that span disciplines.
  - e. Generational family research needs to **look at kin and non-kin** because non-kin sometimes fulfill responsibilities of family members. Also, a major family entry point—partnering—is explicitly the joining of non-kin who then become “kin” and assume obligations for relatives to whom they are not biologically related (although they often produce progeny who are). The related questions of how non-kin become kin and how members of a couple balance their needs and obligations to each other against those of their different kin (parents vs. parents-in-law) are important topics for research on generational relationships.
  - f. We also must **consider unique features of the family** that should be part of how we think about theory and new data collection. These include: (1) Family relationships exist over the long term, which is likely a unique feature to family ties as compared with other social ties. As a result, family ties are “at risk” of different motivations over time mainly because they last so long. (2) Most other social ties, even friendships, are not reinforced by social institutions that privilege the family. (3) Decision making and interactions that go beyond the dyad require some assessment of how far beyond the dyad to go. Those relationships deemed “in the family” have varied over time and across race-ethnic and immigrant groups. The data implication is that studies should ask about an array of kin and potential kin to determine whom individuals think of as “in their family” and with whom they interact. (4) Because notions of who is in the family change over time and differ across groups, we must assess the “rules” about who is in the family, how they develop, and how they connect the macro (context) to micro (family) behavior.
  - g. Finally, it will be impossible to do everything in one study. We must move forward on the basis of careful developmental work to build reliable measures. **There may be more merit in a coordinated series of major efforts rather than a single effort.** **An important question for such new data collections is scope:** is a national collection the best venue, or is a smaller targeted population the right sampling

universe and a mixture of methods the appropriate strategy? To the extent that those who are party to the relationship must be tracked over a long period to observe intergenerational exchange or change in relationships, new collections may take many years to yield theoretical insight on generational questions. This is why enhancing existing longitudinal data sets remains such an important component of the recommendations of the Generations Group.

## Chapter 6

### Recommendations for a Coordinated Program of Data Collection for Research on Family Change and Variation<sup>1</sup>

Suzanne M. Bianchi, Lynne Casper, Thomas DiPrete, V. Joseph Hotz, Lindsay Chase-Lansdale,  
S. Philip Morgan, Seth Sanders, and Judith A. Seltzer. With contributions from Peter Brandon,  
Caroline Bledsoe, Lynne Casper, and Jenna Johnson-Hanks

In this final chapter, we offer a set of recommendations for a data collection strategy over the coming years that will advance the description and explanation of family change and variation. The guiding concerns of the original EFC proposal motivate these recommendations. At the heart of our project is a concern with what a family actually is and why family relationships differ from other social ties. Family scholars from diverse disciplines have long recognized that who is considered a family member varies across history and cultures. Recent increases in nonmarital cohabitation, childbearing outside of marriage, childrearing across households, and the growing visibility of same-sex unions underscore ambiguities about “the family.”

Sixty years ago, some of these family forms were not on most family researchers’ radar screens. Among some subgroups, family-like relationships among nonrelatives supplant traditional family relationships. Contemporary research and the data on which it is based should take account of the changes in the cultural understanding of what a family is, especially who is in the family and who is not. Given these changes, it is essential that a forward-looking research agenda identify, measure, and ultimately understand future changes in the family, including those changes that are currently difficult to predict. This includes the emergence of new kin relationships that must be understood in combination with more conventional definitions of family membership. Our recommendations concerning data collection seek to address this challenge.

Changes in who is considered a family member do not alter the fact that “families” still do much of what they have always done—meet basic human needs for well-being, human development, and survival. Families produce children. When they are successful, families nurture and rear the next generation; provide opportunities for education and growth; promote economic security; care for the older generation; develop connections, a sense of belonging, emotional security, and stability; provide opportunities for sex, recreation, and leisure; promote physical and mental health; and convey and transmit cultural and religious values.

Families are not the only institutions that meet individual needs, nor are all families successful in meeting their members’ needs. Today, schools teach children skills and values; clinics and hospitals provide health care; religious and community organizations promote moral development and civic engagement. Yet families teach children first, and families provide the first line of defense when individuals are sick and need help. How families fulfill their functions, how kinship institutions intersect with other institutions that affect individuals’ well-being, and

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<sup>1</sup> The ideas and judgments of many persons are reflected in this chapter. They include the EFC group, our many consultants, those who have attended meetings we have organized, and the reviewers of an earlier version of this report: Shelly Lundberg, Robert Moffitt, and Ron Rindfuss.

whether all individuals benefit equally from these arrangements (or some are differentially advantaged) varies historically and cross-culturally.

Changes in the world around them are altering how U.S. families organize their lives to meet the needs of individual family members. The shift to a service-oriented economy and women's entrance into the paid labor force, improvements in the economic resources of the elderly, new technologies, continued social and geographic mobility, as well as increased immigration and globalization have altered the demographic contours of U.S. families. Families are changing because of increased longevity, fewer children, the rise in cohabitation, delay in first marriage, weaker links between marriage and childbearing, increases in single-parent households, multiple union transitions and multiple partner fertility, and increased experiences with step-kin and surrogate kin. These changes in the structure of family life may alter what families do and how they do it.

As we have argued in the preceding chapters of this report, we do not fully understand the behaviors of the family in the twenty-first century as it seeks to fulfill enduring basic human needs in the context of significant social change. In our view, this is due to six key factors:

1. What constitutes a "family," its membership, and its domains of behavior is a complex issue that appears to have changed over time and across different demographic groups and societies. This fact presents important conceptual and measurement challenges to ongoing and future data collection efforts.
2. Theories from different disciplines on how and why family members behave as they do toward one another remain in "silos" and do not inform one another.
3. Basic measurement appropriate for large-scale surveys of how family members interact with one another at the micro level is underdeveloped.
4. The linking of quantitative and qualitative methods for studying the family and the interactions and behaviors of its members is in its early stages.
5. Theories and measurement inadequately address how internal family processes depend on economic and social alternatives outside the family.
6. Current models and measurement of some key concepts about how families are formed and maintained and what families do are underdeveloped.

These factors underscore the two central goals of our recommendations for future data collection. The first is that data collection must provide a better *description* of demographic patterns and social processes over time if we are to provide an adequate picture of American family life. This is currently not the case with existing data about the family. The main data sources focused on family life are inadequately designed and structured to capture contemporary families or the changes that are likely to occur in the future.

The second goal for data collection is to enable researchers to better *explain* why families are organized as they are, who is considered a family member, the consequences of family membership for individual health and well-being, and the extent to which other social relationships can substitute for family or family-like relationships.

With these concerns in mind, the EFC group responded to the NICHD research application and carried out the research program described in the previous chapters. Specifically, our application began with the following description of the project goals and final product:

The overall goal of this project is the development and execution of a substantive, interdisciplinary research-based planning process to develop innovative models for research and data collection that will address the question: what drives family change and variation in the United States? Based on a thorough interdisciplinary analysis and assessment of relevant research, theory, and scientific methods, NICHD seeks to develop a model (or models) for a coordinated research and data collection program reflecting a multidisciplinary approach to the study of family change and variation. ... The model(s) may have several components which together comprise a coordinated program of research capable of testing specific, theoretically driven hypotheses while also serving as a resource for researchers addressing a broad set of policy relevant and scientific questions. The model programs should have the ability to expand and contract to respond to varying funding levels, and they should complement existing data and research resources related to family and fertility.

Below we offer recommendations and guidelines for the design and collection of data for multidisciplinary research on family change and variation. We focus our recommendations on data rather than theory because new data to describe and explain family change are a critical and widely recognized need for scholars in a broad array of disciplines that conduct research on families in the twenty-first century. Advances in theory are also necessary. In fact, Chapter 3 in this report offers the outline of a new theoretical framework that some in our group consider useful for analyzing families and family-related behaviors. Other chapters also identified existing empirical puzzles that are promising targets for innovation in existing theories and theoretical approaches, such as game theory, evolutionary biology, and psychological theories of relationships and commitment. The different approaches and conclusions of the three working groups illustrate the diverse views about theory and needs for theory development voiced by our many consultants and the field as a whole.

Because of this diversity of opinions, we do not make the same types of specific recommendations about theory development that we do about data collection. Nevertheless, we encourage NICHD to promote ongoing efforts in the social, behavioral, and biological sciences to explain what motivates family behaviors and how families change in response to environmental and social forces. We view a “competition of ideas” as healthy and important to encourage. Significant advances on the theoretical front will benefit from the continued cooperation of and dialogue among researchers from different disciplines and backgrounds. We recommend that NICHD continue to foster such interdisciplinary interactions in the development of theory about family change and variation. Moreover, one role for NICHD is to insist that the “competition of ideas” takes place on a level playing field, to retain the sports metaphor. Thus, NICHD’s portfolio of activities should include high risk/high payoff theoretical and methodological developments, including those that challenge current orthodoxy. We view these developments as ones that must be investigator-initiated and not dictated either by NICHD or a group such as ours.

We also make recommendations that provide more specific guidance, albeit not definitive recommendations, for needed data collection because most data collection efforts, by their very



nature, are public goods that will be used by and must meet the needs of more than one discipline, and that are designed to assess more than one theoretical model. Increasingly, data collection studies require substantial amounts of funding to obtain sample sizes that are large enough to assess the behaviors of various demographic and target groups. Moreover, as we will argue below, many of the issues important to improving our understanding of family change and variation require longitudinal and panel data on sample members, and such data collection is expensive. It is impractical, and probably not feasible, to expect that each research group can garner the resources to sustain large-scale data collection efforts to test their particular theories. Accordingly, NICHD and the research communities interested in research on the family must take a coordinated and collective approach to data collection. In the remainder of this chapter we provide an initial outline for this approach. We now turn to the general outlines of that approach, or strategy, and our recommendations with respect to its various components.

### **Three Aspects of the Proposed Data Collection Strategy**

The data collection strategy that we propose in this chapter has three main components.

- 1) The first is a set of *measurement and methodological studies* that have broad applicability for research design and implementation. These studies are modest in size and are recommended as a priority in terms of research support and the timing of support (i.e., over the next one to three years).
- 2) A second component is *the identification of a set of issues that might be addressed by augmenting existing data resources*. These studies vary in size and scope from modest to substantial; many also are proposed for the near future. Augmenting existing studies must take advantage of efforts in the field or those currently in stages of advanced planning. Many of the proposed augmentations will offer important new empirical results within a two- to five-year time frame.
- 3) A third structural component is *the rationale and proposal for large new data collection efforts focused on family change and variation*. We describe the principles that new data collection should follow and provide only an initial outline of the design for a new data collection effort. New data collection efforts require targeted effort from NICHD and the research community that goes beyond the charge for our project. These efforts must build on the proposed methodological studies and must complement appropriate augmentation of existing data sets. In terms of time frames, we urge a call for planning proposals in the next one to two years, with the goal of initiating data collection in the next three- to five years.

The key to implementing much of this three-pronged strategy will be investigator-initiated research proposals for methodological experimentation, augmentation of existing data sources and proposals for new data collection. Investigator-initiated projects have been and will continue to be the foundation for advancing knowledge about family change and variation. At the same time, some aspects of this strategy, particularly new data collection efforts, will require a concerted role by NICHD and other agencies; they will be needed to bring together sufficient resources and adequate cooperation to ensure that the research needs of a diverse community are met. In what follows, we orient these constituencies to the issues most in need of study and

identify a set of steps that must be taken to move the field forward. Finally, note that our treatment of the three-pronged strategy as sequential steps is an expository strategy in order to highlight that these methodological studies should inform augmentation of existing data and new data collection. The organization of demographic research, with many investigator-initiated efforts, and the breadth of our recommendations imply that progress on this set of recommendations is more likely to be iterative than sequential.

### **Measurement and Methodological Studies**

Designing the next generation of studies and the data collections that will sustain them is challenging and likely controversial. Questions remain about how to measure many of the constructs or concepts suggested by these new frameworks or how to adapt existing measures to the study of the family and family behavior. There are new and evolving questions about how to operationalize more expansive sampling frames required to study the emerging nature of romantic unions and new “forms” of extended families. Moreover, we need to develop efficient, cost-effective screening methods for these more expansive samples of relationships. Finally, questions remain about how to compare alternative approaches and exploit new methods for gathering data to generate richer knowledge about the functioning of families and their members.

In this section we outline a set of methodological and measurement studies that NIH and other funding agencies should support and that should be conducted by the research community. At the outset we note that this set of studies is far from exhaustive. Rather, we have identified these as high priority through our own assessment of existing research and consultation with the research community. These studies appear feasible and immediate progress is possible. We discuss five areas, two sampling issues, and three important areas for improvement in measurement.

1. Develop strategies for sampling family members (or potential members), under alternative definitions of the family or family-like relationships.
2. Develop and validate sampling and interviewing strategies for gathering data on low-prevalence types of families or subpopulations and non-resident and/or difficult-to-survey family members.
3. Develop and validate new strategies for measuring the nature and quality of interactions, commitments, and obligations within families and their roles in family functioning and decision making.
4. Develop strategies for evaluating and analyzing data from multiple respondents.
5. Develop strategies for conceptualizing and measuring schemas and their links to family-related activities and behavior.

Below, we present our rationale for undertaking methodological research projects in each area and we suggest possible strategies, along with key issues and obstacles that must be confronted to make progress on each.

### ***Develop Strategies for Sampling Members (or Potential Members) of Alternative Conceptions of the Family or Family-Like Relationships***

**Motivation**—The assessments contained in the preceding chapters on romantic unions and intergenerational family relationships highlighted the need to develop broader sampling frames for collecting data on romantic relationships and extended families. For example, sampling frames that are limited to coresident household members constrain our ability to gather reliable information on the nature and extent of inter- and intra-generational interactions, as well as commitments that influence such crucial issues as caring for the elderly and the transmission of values across and between generations. Similarly, limiting sampling frames to marriages and “established” cohabiting unions and not gathering data on more temporally transient relationships, such as dating relationships, curtails understanding of the nature of the interactions between individuals, especially the entrance into and out of relationships over the life course. Furthermore, both of these sampling strategies potentially suffer from the problem of “choice-based sampling,” in which the unit sampled (household or existing relationship) is conditioned on a decision that has already been made; namely, to live in the same residence, to marry, or to cohabit.

Developing broader sampling frames presents significant methodological and operational challenges. In the case of more transitory unions, how does one sample and screen in a cost-effective manner? Given the difficulty of knowing when these relationships begin and end, how does one develop a “universe” from which to draw a sample? How does one gain the participation of both parties in such relationships, especially when they are “loosely tied”? How long does one follow these relationships; only as long as the relationship lasts or does one follow the individuals involved for a defined period, regardless of whether the relationship endures?

In the case of the extended family, do researchers only sample biologically-linked family members, or should they include “step” relatives or individuals linked through cohabiting relationships? More generally, how does one operationalize different conceptions of who is in a family or what constitutes a “family tie,” especially for noncoresidential relationships, for use in developing sampling frames? How long should a sample of “connected” individuals be followed, especially when they no longer coreside or share other vestiges of family-like ties?

**Strategies**—As we have argued throughout this report, new data collections must provide information about family or family-like relationships, whether they include family members residing in the same household or not. On the one hand, many of the functions of the traditional family have gradually been transferred to the market and the state, and the content of relationships among family members has been altered by the emergence of new relationships between individuals and “corporate actors” (Coleman 1993) who provide services and maintain forms of social control that once were accomplished within families.

Even as these changes have occurred, however, family or family-like relationships clearly continue to accomplish critical social functions of socialization, emotional fulfillment, and social and material support, which can take many forms. Some of these relationships can be characterized in kinship or kinship-like terms such as *parent*, *spouse*, *sibling*, or *unmarried romantic partner*, and these terms imply content—complex and multifaceted content—to the relationships. It also is increasingly apparent that people form and maintain relationships that

involve care, love, support, and socialization with other individuals outside the household and who may or may not be connected to them via a formal kinship relationship.

Regardless of whether these relationships are more accurately described as substitutes for or augmentations to the relationships that exist among family members in the same household, an adequate understanding of the nature of families in the United States demands an effective strategy for understanding the extent and content of these ties that connect people across households. To accomplish this, new data collection strategies are needed.

One such strategy is an extension of the “relationship matrix” approach used to gather information about members of the *household* to the context of *extended families*. EFC project member Peter Brandon and colleagues are exploring computer software methods for linking non-residential kin to those enumerated in relationship matrices.

This approach incorporates another technique in measuring family relationships: a focal person is drawn from the matrix and types of noncoresidential relatives are tied back to that focal relationship matrix member. Although early in its methodological development, this innovative approach, based on scientific sampling techniques, can yield a multidimensional web of non-household relationships, which can also provide information on geographic proximity of the extended family, intra-family economic exchanges, family identity, and transitions into and out of households. The design has the advantage of describing kin who do not participate in exchanges as well as those who do participate.

Anthropologists and ethnographers have used other approaches: starting with a focal child and spreading outward to all connected kin (Townsend, Garey and Madhaven’s work in Agincourt District in South Africa; Linda Burton’s work in low-income populations in rural and urban settings). One difficulty with these approaches is that, although detail-rich, it can be difficult to get beyond rich description or to assess the representativeness of the kinship ties.

Other potential strategies for collecting information about households spanning family or family-like relationships can be found in the social networks literature. A long-standing strategy that was implemented in the 1984 and the 2004 General Social Surveys is the name-generator approach (Marsden 1987), in which respondents are invited to list up to five individuals in response to a prompt such as “With whom do you talk about personal matters?” Once the names are supplied, additional information is requested about the named individuals. This strategy could be modified to distinguish between individuals in the respondent’s household and those who do not live with the respondent. However, the interview burden is potentially heavy if the supplied list of names is long, and the length and content of this list would certainly be influenced by the content of the prompt.

A second promising strategy would borrow from the “resource generator” approach to the study of social networks. This work, pioneered by Snijders (2001), is in the “social capital” tradition of network research and seeks to establish the structure of resources available to the focal respondent through the social network. Van der Gaag and Snijders (2005) consider the distinction between those resources that are potentially available and those that are actually used. This approach was first implemented in the “Survey on the Social Networks of the Dutch” in 1999–2000 (see Völker and Flap 2004). The resource generator portion of this survey consisted of 33 social resource items of the form “Do you know anyone who can do your shopping when you are ill?” Questions such as these could be modified to ask separately if there is someone in the person’s household and someone outside the household who could provide this help.

A further modification of the research generator approach is the “how many X’s do you know?” approach (Bernard et al. 1990; Zheng, Salganik, and Gelman 2006). Although the

resource generator strategy establishes the existence of particular resources within a social network, the “how many *X*’s do you know?” approach measures the number of ties defined in a specific way (for example, “people that you trust for advice or trust with money”) and the perceived social characteristics (such as race, age, sexual orientation, and occupation) of the people in the network who provide this function. This approach can be used to estimate the full distribution of such ties in the population and how the shape of these distributions varies with the demographic characteristics of the focal respondent. The “how many *X*’s do you know?” approach was recently implemented in the 2006 General Social Survey by EFC project member Thomas DiPrete and his colleagues.

The resource generator approach differs from the name generator approach in that the focus is on the content of the relationship, and the goal is to map the resources available to the respondent for addressing a variety of social needs. In this respect, it is a promising strategy for soliciting information about the availability of family-like emotional ties or social support outside the household. The “how many *X*’s do you know” approach adds information about the social characteristics of individuals who provide specific functions. However, there is a trade-off between collecting information about the overall structure of networks defined in terms of some specific tie, and collecting comprehensive information about the most salient individuals who provide specific family-like functions. The former approach provides more information about the overall structure of the network, while the latter approach provides more information about the characteristics of the more central individuals in the network and the multifaceted character of their ties with the focal respondent. Most of these social network approaches are ego-centered, but there is also a long established community-based approach to assessing ties and the structure of relationships that is less ego-centered and has been productively employed in developing country studies of demographic processes (Entwisle 2007).

The conduct of one or more pilot studies that explore the above approaches and strategies for sampling members of extended families and family-like relationships is needed to establish the optimal trade-off that provides the most useful information about family and family-like ties that span households. A central issue concerns the content of the relationship ties that should be measured, including emotional ties, sexual relationships, and relationships that provide social or financial support. Qualitative research approaches, such as ethnographies and the type of cognitive pretesting that is often done in conjunction with survey research, are needed to ascertain not only the most important relationships to study, but also the methodological difficulties in wording questions about these relationships that are meaningful to respondents from different socioeconomic, racial, and ethnic backgrounds and that can provide data to support comparative study of these groups.

The distinction between *access* to these resources and *use of* these resources must be taken into account in the study design. If the number of individuals who provide these functions overlaps and is generally relatively small, then the name generator approach may be the best vehicle for collecting such information. On the other hand, if the number of individuals involved is typically more than four or five, then some version of the resource generator or the “how many *X*’s do you know?” approaches may be needed as supplemental forms of data collection. The best approach can only be ascertained through carefully constructed pilot studies. Such pilot studies should commence now.

## *Develop and Validate Sampling and Interviewing Strategies for Gathering Data on Low-Prevalence Types of Families or Subpopulations*

**Motivation**—As has been documented in the preceding chapters, our analysis of the family increasingly requires data for relatively rare subgroups in the population, including gay and lesbian couples and families and couples and families from certain ethnic, religious, or immigrant groups. Consider, for example, gay and lesbian couples and families. Although there has been a growing interest in understanding relationship dynamics of such couples and families, analyzing them presents difficult sampling and measurement issues, given their low prevalence in the population. An important corollary to this problem is finding ways to determine the reliability of such oversamples or specialized samples in terms of their “representativeness” for these couples and families.

**Strategies**—In this section, we briefly discuss some of the approaches that might be explored in methodological studies that would enhance our ability to more reliably sample and obtain information on couples and families that are of low prevalence in the population. We start with the presumption that experts in the fields of sampling and survey methods are in a much better position than are we to design and implement such studies. Our objective here is to offer some initial suggestions and, more important, to strongly encourage that such studies be mounted and supported.

As noted in Chapter 4, various methodological approaches that have been developed in the literature on statistical sampling seem potentially well-suited for the study of low-prevalence subgroups, such as gay and lesbian couples and families. As noted there, respondent-driven sampling (Heckathorn 1997; Salganik and Heckathorn 2004) appears to be a useful methodological approach for the sampling of hidden and socially stigmatized populations. Respondent-driven sampling is a variant of snowballing or chain-referral sampling techniques, in which one obtains sample members from friends, social network, or institutions such as clinics or organizations.

Such methods clearly are convenient and cost-effective ways of acquiring samples for low-prevalence and so-called hidden populations. However, this class of sampling strategies has been subject to concerns about its representativeness or, more to the point, the difficulty of making valid statistical inferences about target populations. Recent work by Heckathorn (1997) and Salganik and Heckathorn (2004) derive the set of assumptions under which such samples can be used to obtain samples that produce inferences with known and desirable properties. These results appear to hold great promise for developing samples of gay and lesbian couples and their families.

More methodological work is needed to determine the validity of the assumptions required for reliable statistical inference from such samples. Methodological research might compare these methods with existing samples drawn from large-scale population surveys, such as the recent U.S. decennial censuses. Recent work by Black et al. (2000; 2006) examines the incidence and demographic characteristics of gays and lesbians using such data sources and discusses their reliability for measuring these populations. Constructing samples of gay and lesbian couples with respondent-driven sampling methods on the basis of several “seeds” and then comparing and validating their statistical properties against data from larger and population-representative samples would be a very useful methodological study.

We note that such a validation study might also be conducted on other low-prevalence family-relevant populations, such as of Arab-American families or other immigrant groups. Progress on making inferences from these types of samples of relatively rare population groups could potentially be of great importance to family policymakers who are concerned with family dynamics under stress; for example, when there are disabled children in the family or when abuse and neglect result in children being placed in foster care.

### ***Develop and Validate New Strategies for Measuring the Nature and Quality of Interactions, Commitments, and Obligations within Families and Their Roles in Family Functioning and Decision Making***

**Motivation**—A common theme in chapters 3, 4, and 5 is the importance of the nature and “quality” of the interactions, commitments, and obligations between members of families or “family-like” groups. Moreover, a key notion in the theory of conjunctural action (Chapter 3) is that the actions taken at a particular conjuncture (or situation) are shaped by a process that includes perceived obligations and commitments to a family member in a particular situation, as well as interpretations of these actions by others. Shared assessments of the situation and agreement on appropriate behaviors (given the situation) compose the fundamental basis for communication and collaboration. As an example, the nature and degree of commitments appear to differentiate marriage from cohabitation and from more informal types of romantic unions. Finally, the concepts of commitment and obligations play crucial roles in models of intergenerational transfers and exchange (see Bianchi et al. 2008).

Measures of relationship quality and commitment have been developed in the fields of marital or relationship dynamics, family systems, developmental science, and marriage therapy, and they are associated with indicators of happiness and relationship “success” in clinical populations and samples of convenience. However, these types of measures are only beginning to be adapted to population-based surveys, and they have not been systematically or extensively related to a broader array of socioeconomic, health, and demographic outcomes. Surveys often include batteries of questions that measure the frequency and nature of transfers and exchanges between generations and the degree of affection and commitment between spouses. Yet we have only a limited understanding of the validity of these measures of the “quality” or “strength” of ties between family members. This is a serious deficiency that inhibits our understanding of their role in family functioning and decision making.

**Four strategies for measuring relationship quality** —The EFC work on intimate unions suggests a series of goals for collecting data with which to assess the nature and quality of relationships of couples. These included measuring the expectations of partners with respect to their relationship, developing measures of preferences for taking different types of risks; assessing the degree and nature of trust and commitments between partners; measuring problem solving between partners as well as levels of conflict, distress, and positive connection; determining the nature of decision making and the degree of cooperation (or lack of it) in such decisions. Furthermore, it is important to be able to relate relationship measures to a broad array of outcomes, including the duration and stability of unions, children’s well-being, and socioeconomic attainment. Finally, the EFC Unions Group noted that such analyses must be assessed and validated within surveys and data collection systems for population-based samples and not just clinical populations or convenience samples.

EFC work on generational relationships leads to a call for investigations of alternative strategies for measurement of very similar phenomena between members of extended families, including between adult children and their elderly parents and among adult siblings. In studies of extended kin relationships, there also is a need to validate measures and their relationship to other outcomes, including the nature of financial transfers, living arrangements and other indicators of “ties,” as well as indicators of socioeconomic well-being and the health status of members of the extended family. In this section, we outline some methodological investigations that might be conducted as smaller-scale studies that would address these issues.

We see four potential strategies for measuring relationship quality that might be assessed in one or more methodological projects: (1) measurement of interactions and relationship quality among partners or family members using hypothetical situations through **vignettes**; (2) measurement of preferences over risk and the extent of trust and altruism across time, using structured and **incentivized games** common in behavioral economics; (3) **adaptation of measures** of relationship quality and dynamics used by psychologists in clinical and in-depth evaluations of relationships to population-based surveys; and (4) **ethnographies**.

### **(1) Vignettes**

Vignettes have been employed to measure norms, social obligation, and attributions of responsibility (Rossi and Rossi 1990; Nock, Kingston, and Holian 2008; Hamilton et al. 1988). Vignettes in which individuals are asked to whom they would turn in times of need and what they would do under different conditions have considerable potential for learning about important dimensions of family relationships. By comparing an individual’s willingness to assist family members in need, one can ascertain the extent of commitment, closeness, and sense of obligation to provide support to different family members or spouses/partners. For example, one can imagine asking respondents about how they would behave in a situation—such as dealing with the illness of a partner, an elderly family member, or a friend—that would measure key constructs such as commitment, obligation, and sacrifice, which are all aspects of relationship quality and connectedness to kin.

In a methodological project that examined the responses to such situations, we might learn about how individuals with different characteristics (e.g., immigrants versus non-immigrants, and highly educated versus not well educated) would respond to similar situations without the need to observe them in the actual experience. Furthermore, such a study, especially if it were embedded within an ongoing longitudinal study, could assess the predictive validity of these measures compared with measures of socioeconomic attainment, health, well-being, and success of relationships typically included in population-based surveys.

Finally, a clear issue that should be investigated in such a project would be the feasibility of incorporating vignettes into large surveys, given that vignettes typically take a great deal of time and appear to entail significant burdens on respondents. Vignettes have been employed to study stigma in the mental health literature (Pescosolido’s work with the General Social Survey) and also employed to anchor health assessments in studies of aging and health. They might be adapted to studying the quality of family relationships and calibrated against other measurements.

### **(2) Measuring preferences with incentivized and/or structured games**

A second innovative method being piloted to measure important interpersonal preference parameters is the use of structured games within a panel data collection effort. See, for example,



Henrich et al. (2004) and Hamoudi and Thomas (2006). The Hamoudi and Thomas approach is particularly relevant here, as these investigators conducted a pilot study within the Mexican Family Life Survey (MxFLS), in which respondents played a series of incentivized games developed in behavioral economics and psychology.

In one set of games intended to measure trust and degrees of altruism between individuals, respondents were given an “endowment” of money and were asked to decide whether to give some of it to another person (the “recipient”) and, if so, how much. First, the subject was shown a photograph of the assigned recipient, who was an individual from a distant community. The fraction of the endowment given to the stranger is interpreted as indicative of “pure altruism.” Second, each subject was given the name of a recipient from their village, but not a family member. Finally, the game was played twice more where the recipients were family members. Because this study was embedded within an ongoing study, the measures from these experiments could be related to measures of socioeconomic attainment and health status gathered in the main MxFLS survey. Furthermore, by collecting more traditional, survey-based measures of altruism (as well as risk-aversion and time preference), investigators could compare their incentivized measures against the survey-based measures to assess the validity of both approaches. Although the MxFLS pilot project is already proving informative, we certainly see the scope for more methodological work using other samples, especially ones that could conduct a similar investigation with noncoresident (extended) family members.

### **(3) Adapting and implementing psychological measures of relationship quality and dynamics**

As noted, we know much about relationship quality from the clinical, developmental, and family psychology research. Yet, these in-depth, observational approaches are seldom used with population-based samples. It would be extremely useful to assess the feasibility of adapting and implementing some of these methods with representative samples of married, cohabiting, or dating couples, as well as assessing whether these approaches might be used with non-coresiding family members within an ongoing, population-based survey.

We envision the adaptation of the psychological strategies for measuring such phenomena as communication, conflict dynamics, commitment processes, attachment, forgiveness, sacrifice, acceptance, and emotional intimacy developed by researchers such as Philip and Carolyn Cowan, John Gottman, Scott Stanley, Marion Forgatch, and their respective collaborators to standard survey settings. Again, emphasis should be placed on comparing such strategies with measures of relationship quality found in existing surveys; for example, the use of point-blank questions about relationships and commitment found in existing surveys.<sup>2</sup> We note that results from several ongoing evaluations designed to assess the effectiveness of alternative relationship skill programs on couple outcomes, including the MPR/MDRC Building Strong Families, MDRC’s Supporting Healthy Marriage evaluation projects, and NICHD-funded evaluation of the PREP program for young, married Army couples also may provide useful information about the validity of these psychologically-based measures of relationship quality.

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<sup>2</sup> Examples of such direct or point-blank questions are the questions included in the National Longitudinal Surveys asking women why their wills provide for children in the way in which they do and the Health and Retirement module in which respondents are asked directly about why they do or would provide assistance to family members (Cox and Soldo 2004).

#### **(4) Ethnographies**

Finally, we believe that ethnographic approaches and in-depth interviewing may be especially useful in learning more about the language individuals use to describe different types of kin relationships (for example, “baby daddy” is an example of a finding from past research) and assessing the relationship expectations of these ties. This work could then be used to improve standardized questions.

Similarly, ethnographies could be used to learn more about how people enact trust and commitment and what the relevant dimensions of obligations are (what is owed, to whom, under what conditions). These descriptions could then be used to develop a questionnaire module that could be subjected to cognitive interviewing and standard pretesting to develop better point blank-type questions and learn about whether the concepts apply in the general population. An example of this type of work is the qualitative study, “Time, Love, Cash, Caring, and Children,” that is embedded within the large-scale quantitative survey, Fragile Families and Child Well-Being (England and Edin 2007).

As noted, a key issue in assessing the above approaches and their adaptation to population-based data collection contexts concerns the issue of their validity. In particular, one would like to design ways of addressing such questions as: Are they measuring the constructs of interest? How well do they correlate with behaviors and other outcomes? In addition to the strategies for assessing and validating the measurement of preferences with incentivized games used in the Mexican Family Life Survey pilot study headed by EFC project member Duncan Thomas, we also point to the comparative approach taken in Henrich et al. (2004), who compare results from alternative behavioral games using samples from 15 small-scale societies in their cross-cultural study. With respect to the validation of vignette methods, one might wish to compare the results from these methods with actual behavior.

#### ***Develop Strategies for Evaluating and Analyzing Data from Multiple Respondents***

**Motivation**—Running throughout our work, at multiple levels and in many contexts, is a concern with interactions and transfers between family and family-like members. How do they aid, support, and compete with one another? Why are some relations between family members inactive or even hostile? How and when are family relationships important? To answer such questions we generally obtain data from an individual respondent, but the information that is sought is about a transfer, tie, or relationship with others. Sometimes it will matter who answers the question (see Coley and Morris 2002).

Consider a dyad: the focal respondent may report different information than his or her partner because of different knowledge. For example, a non-resident father who pays a young child’s doctors’ bills may know whether he has paid the bill and the amount of the payment, but the resident mother (focal respondent) may not have this information. Or, two individuals may respond differently because of different perceptions or feelings about their relationship or because of normative scripts. Continuing the example above, the mother (focal respondent) may report that the non-resident father has not paid the medical bill because she views his level of father involvement as generally unsatisfactory and thus assumes he has not fulfilled this particular obligation. The father may claim to have paid the bill because this is what “good fathers” do, and he wishes to avoid the stigma of not being a good father.

Clearly, discrepant reports are likely, and they have multiple interpretations. Drawing appropriate inferences from multi-respondent data would provide better descriptions of family life and family processes. Many of the in-depth psychological studies of marital interaction and family functioning have incorporated multiple respondents in their designs.

**Three strategies for including multiple respondents**—Additional research should be directed toward three issues.

**1) non-response bias:** How do we evaluate the possible biases that might result from systematic non-response from targeted sets of respondents? And can this bias be reduced? Research must address possible bias produced by patterns of non-response in multi-informant data. Again consider the case of matched pairs; such samples of dyads are often a biased sample of all such relationships. Failure to interview partners in the dyads may be conditioned by important factors.

For example, non-resident fathers who have close ties to their children are more likely to be contacted and to consent to an interview (Teitler 2001). As a result, the sample of dyads is biased in ways that suggest greater father involvement of non-resident fathers than is the case for the universe of interest. In fact, Mandemakers and Dykstra (2008) from the Netherlands Kinship Panel Study (NKPS), which includes pairs of noncoresident parents and children aged 15 and older in which the respondent was asked to provide information about how to contact the parent (or child) and the quality of the respondent's relationship with that other person. The authors find that if the respondent reported a high-quality relationship (as opposed to a poor quality one), the respondent was more likely to provide contact information for the other person.

There is also ample evidence of such bias in U.S. samples of disrupted families. Resident mothers or a child are frequently the sampled respondent. Obtaining information from administrative records or other sources to contact the non-resident father is more likely if the mother and father had been married longer, if they shared joint legal custody, and if the marital disruption was recent. Fathers who were located but refused to participate were less likely to have child-support orders (Lin et al. 2004). Such biased samples can provide a very misleading picture of non-resident fathers.

Research should document the extent of such bias for a range of relationships, such as married couples, cohabiting couples, parents and adult children, siblings, and former union partners. In each case, the process producing non-response requires a substantive behavioral theory. In some cases dyad data are incomplete because respondent's partners or other key family members cannot be located or the partners or family members have refused to participate. Our understanding requires attention to both explanations for non-response and its pattern.

Finally understanding non-response and its patterns allows one to anticipate bias and thus to be appropriately cautious in drawing conclusions. Best estimates may include some corrections for documented biases. Also, the recommended research may suggest strategies that would increase the response rates of partners, family members, or friends, either through improved strategies for making contacts or for encouraging cooperation once these individuals are contacted.

**2) Alternatives to interviewing:** Are there alternatives to interviewing multiple respondents, such as obtaining proxy reports from a key respondent, and how valid and reliable are the latter for different characteristics of others and aspects of relationships? Dyadic reports are expensive to collect, and the data may be biased in ways discussed above. When are proxy reports good enough? Synthesis of existing research and additional research is needed to answer this question.

Three types of studies are needed. First, surveys that collect information from multiple respondents allow researchers to compare reports and judge whether bias would result from using a proxy report. Below we describe results from two such studies.

Second, proxy reports can be compared with another source, such as administrative data, to assess level of potential bias.

Third, experiments could be conducted, perhaps within the context of existing surveys, that contrast proxy reporting about various domains of kinship ties with reports that are collected directly from the respondent and targeted others. The goal would be to determine the domains that lend themselves to proxy reporting as well as assess the bias from the presumably higher non-response that results when dyads are interviewed (rather than when individuals are interviewed about dyadic relationships).

For example, the replicate design of studies such as the Wisconsin Longitudinal Survey (WLS) that already interview multiple respondents (i.e., graduates and their spouses, graduates and a sibling) might lend themselves to experimentation with respondents in randomly chosen replicates assigned to proxy reporting and those in other replicates assigned to gathering the information through interviews with the respondent and the spouse or sibling pair. Split-half designs for survey-question wording experiments are another template for the type of experimentation that might shed light on the issues that surround proxy reporting versus interviewing multiple respondents.

Again this work must pay attention to the type of information sought and the substantive and behavioral theory that might explain and predict discrepant reports. For instance, we expect that cohabiting couples (compared with married ones) would be less able to provide accurate proxy reports of their partner's income. Cohabiting couples are less likely to pool resources, to have joint bank accounts, and to make joint decisions about expenditures. Thus, we have reasons to expect that they would be less likely to know their partner's income.

Indeed, using NSFH data, Dechter and Becker (2006) compared cohabiting partners' ability to report each other's incomes with similar reports from married couples. Cohabiting partners were less likely than married couples to know the partner's income. In contrast, Morgan (1985) used data for couples married more than five years and compared husband and wife reports of their personal desire for additional children, their partner's desire for an additional child, and their joint intention regarding additional childbearing. Morgan reports that for this sample (those married more than five years) and for these questions regarding future childbearing, proxy reports would have worked well. That is, husbands' and wives' reported accurately their partner's desire for more children, and husbands and wives agreed on their joint intention. Without a basis for expecting discrepant results, only strong empirical evidence should disqualify proxy reports.

**3) Strategies for drawing conclusions:** What concepts and analytic strategies allow one to draw valid conclusions from reports obtained from multiple respondents? Data from multiple respondents are available in multiple sources (including the NSFH and Add Health) allowing for immediate work on these questions. New data collections should take the opportunity to collect data that would shed additional light on these questions. Concepts and analytic strategies should be developed that allow valid inferences from multiple-respondent data. Are discrepant reports “errors” to be fixed or rich sources of data on family processes? They can be either or neither. Some information we seek has an objective answer: the husband’s or wife’s wage income, the education level of a family member, the date of marriage and birth date of one’s first child, whether a transfer was made (but not whether it was a gift or a loan), whether a woman has had an abortion, whether one person hit another. Discrepant results could reflect lack of knowledge or differential willingness to report accurately. The goal in this case is to get better information. Event-history calendars, for instance, have improved the recall of dates and sequencing of life events (i.e., dates of births, marriages, and associated work histories). Various formats have been used to gain more accurate reports of abortion and physical abuse.

A primary concern here is with subjective phenomena: Do husbands and wives report their marriage as “very happy”? Are children “close” to a parent? Would a given family member provide assistance in a time of crisis? Is the division of household labor fair? Discrepant responses to such questions provide a rich source of data on family processes. Such responses can reflect different perspectives and interpretations and/or different costs and benefits of a relationship or behavior.

Conceptual work is needed to characterize how intimates come to agree or to have discrepant views. On the basis of such conceptual work, analytic strategies are needed to identify contributing processes to the underlying phenomena and in the measurement process. For instance, Smith and colleagues (see Smith and Morgan 1994; Smith, Gager, and Morgan 1998) model dyadic survey responses as joint frequency distributions resulting from individual idiosyncratic factors, systematic factors associated with “metrics” respondents might use, and fundamental agreement (or disagreement) in evaluation. The particular models they use are cumbersome and their assumptions might not be generally applicable, but this work makes clear that discrepant reports can not only be rich sources of data on families but difficult puzzles to unravel. Similarly, Coley and Morris (2002) show that low-income mothers report lower levels of father involvement with preschoolers than do fathers themselves, although mothers’ and fathers’ independent reports are highly correlated. Discordant reports between mothers and fathers were linked to higher levels of parental conflict, maternal education, and employment and to lower levels of coresidence. These studies indicate the need for multi-agent reporting in future research.

### *Develop Strategies for Conceptualizing and Measuring Schema*

**Motivation**—Schema play a pivotal role in the theory of conjunctural action (TCA) that the EFC Parenthood Group has developed to account for family change and variation. Schema are defined as follows:

A **schema** in psychology and cognitive science, is a mental structure that represents some aspect of the world. People use schema to organize current knowledge and provide a framework for future understanding. Examples of schema include rubrics, stereotypes, social roles, scripts, worldviews, and archetypes. ([http://en.wikipedia.org/wiki/Schema\\_\(psychology\)](http://en.wikipedia.org/wiki/Schema_(psychology))).

There is much research in psychology suggesting that the schema concept is a useful representation of important cognitive processes, including interpretation, recall, planning, and identity formation. However, schema are not just in the brain, they are “in the world,” in the sense that they are shared with others in the group and are codified in aspects of the group’s material culture (artifacts, institutions, rituals, and cultural scripts). Furthermore, there is consensus within the EFC group that schema has the potential to be a useful concept for developing our understanding of family change and variation. Changing and different worldviews, for example, are key components in some important theories of family change (Thornton 2005; Lesthaeghe and Neidert 2006), even though there is less consensus across the social sciences on what gives rise to such changes and differences. Regardless, it is clear that developing ways to identify and measure this concept within the context of family research is important for evaluating the ways in which the TCA and other ideational theories may improve our understanding of family change and variation.

A focus on schema raises several questions that require conceptual and empirical work, including:

1. How do we identify, describe, and categorize schema relevant to family behavior?
2. What strategies will allow us to infer which schema are available and which are most likely to be invoked by an individual? Which factors or conditions “privilege” one schema over another?
3. How do we study the processes that produce stability and change in the schema that are available or most frequently invoked in a population?

Before turning to possible strategies addressing these three questions, we note that schema are closely related to the constructs of attitudes, values, and preferences discussed in the previous section. Although the TCA developed in Chapter 3 argues that schema are the mental structures that produce and integrate attitudes, values, and preferences, it is clear that the strategies discussed in the previous section for measuring attitudes, values, and preferences are likely to apply to measuring a schema too. Thus, although we have outlined potential strategies for assessing alternative strategies to measure schema and preferences as two separate projects, we appreciate their interrelatedness and the potential benefits of the sorts of interdisciplinary collaboration that has been recently exhibited among psychologists, economists, and anthropologists in the development of fields like behavioral economics, neuroscience, and neuroeconomics.

### **Strategies in using schema**

There are three possible scientific strategies<sup>3</sup> to conceptualize, identify, describe, and categorize schema. The first is through direct discussion with subjects in intensive interviews and ethnographic field research. In this approach, the researcher uses a range of data to characterize the dominant schema and its variations. The respondent's own account is central in the ethnographers' account. Yet ethnographies are also case studies of how people actually behave in particular situations. Observations of how a schema is reflected in material culture are important. In a sense, the ethnographer learns the schema by becoming part of the study community and sharing in the interactions that transmit and perpetuate the local social structure. Although they do not use the term *schema*, the study by Edin and Kefalas (2005) is illustrative—these researchers embedded themselves in poor urban neighborhoods, and they observed and interviewed young, poor, pregnant women faced with the decision to abort or to have a baby. They identify two dominant schema through which these young women interpret their situation (that we would characterize as “I’m not ready to be a parent” versus “being a parent will transform me” schema). McAdams’ interview narrative methodology is another example of a qualitative approach to discovering shared cultural scripts about behavior (McAdams 2006).

A second strategy for identifying and characterizing a schema uses discourse analysis, the analysis of the structure of language and conversation. For instance, Quinn (2005) describes in great detail her strategy of using interview transcripts to identify competing schema about marriage and how the conflicting schema are reconciled.

The third strategy infers a schema from games or structured assignments given to subjects. This strategy assumes some prior knowledge of the range of possible schema because the tasks are designed to discriminate between alternative conceptions. Responses of respondents can suggest that the investigators’ current set of schema is not an adequate or appropriate match to those used by subjects. This strategy has been used by behavioral economists, anthropologists, and other researchers in an attempt to understand the nature and forces governing human decision making, especially decisions that seem at variance with the “rational actor” model of economic theory. In this work, researchers, for example, use interactive games played by subjects from a wide variety of human populations in an attempt to understand when and in what contexts human subjects are willing to forego choosing outcomes that are either purely selfish or selflessly altruistic. (See Henrich et al. 2004.)

### **Judging which schema will be used**

Once schema are conceptualized, described, and categorized, how do we infer which available schema will be invoked? In general, the third strategy above is used: investigators design games or tasks that signal which of a set of schema is invoked. One methodology uses a vignette strategy. Specifically, Nock, Kingston, and Holian (2008) describe a procedure of randomly altering the context (situation or conjuncture) to see how intentions for action or interpretations would vary. Using this strategy of manipulating the social context, hypotheses about the invocation of alternative schema could be tested (i.e., different key facts “prime” the respondent to think about the issue in a particular way). Likewise, sorting tasks may be constructed to test which of two (or more) schema have been invoked to direct the task.

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<sup>3</sup> We say “scientific” to limit the strategies to those guided by rules of observation that are replicable. A very common way to identify schema is to use one’s own—to assume that the subjects share schema with the investigator. This is, of course, highly problematic.

A second way to address this question posits that some relevant schema may be operative but may not be known or acknowledged by the respondent; that is, an implicit belief.<sup>4</sup> In this work, response times to particular tasks are used to infer the accessibility of a particular schema. To explain, it is assumed that individuals respond almost automatically when information conforms to an easily accessible schema. Barnes-Holmes et al. (2006) describe situations in which respondents' reports suggest one result (medical professionals that work with autistic children are less likely to characterize them in negative ways), but tests of implicit beliefs produce another (implicit negative views were equally common among both groups of medical professionals). Thus, response times and responses can provide clues to both the schema invoked and those that are most available.

### **Research strategies**

What are the appropriate research strategies to study change and stability in available schema? Relevant work on such topics can be found in social history and work on social movements. Examples are available in the family and fertility literature (e.g., Bailey 1988 on the social history of dating in the United States). Thornton's ongoing work<sup>5</sup> uses survey items to "test" knowledge implied in developmental idealism, a schematic worldview. He finds that people in rural Nepal "know" the basic tenants of developmental idealism. Thus, he argues this worldview is available to interpret information and motivate action. Likewise, survey research items and scales have been developed to distinguish worldviews that are assumed to be crucial schema. Examples would include scales measuring adherence to religious worldviews as opposed to more secular ones (see Inglehart and Baker 2000).

From this prior work, we see five strands as essential for future work.

1. Ethnography aimed at conceptualizing, identifying, describing, and categorizing important schema, their variations, and interrelations. Such work should be embedded in survey research programs and should be encouraged in active research areas (e.g., parenthood delay, cohabitation) and emerging issues (e.g., the use of assisted reproductive technology or Internet dating services).
2. The factorial vignette strategy and others (e.g., card sorting activities,<sup>6</sup> strategic games) that identify which schema are invoked in situations. Vignettes in which respondents are asked what they would do in hypothetical situations are a promising method for learning more about cultural differences in beliefs about individual responsibility and the nature of commitment and obligation in families. Recent vignette studies ask respondents to report about what others should do (Nock et al. 2008); for example, how much money different family members should provide to a member of the kin network who is in need and how

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<sup>4</sup> Implicit attitudes and beliefs are "introspectively unidentified (or inaccurately identified) traces of past experience that mediate favourable or unfavourable feeling, thought, or action toward social objects" (Greenwald and Banaji 1995: 8).

<sup>5</sup> Work under an NICHD active grant: Measuring Developmental Idealism and Family Life. Principal Investigator: Arland Thornton. National Institute of Child Health and Human Development (2005-2007).

<sup>6</sup> Examples include: the task given in Add Health to describe the ideal relationship; the task used by Carol Worthman and her colleagues (2002) to depict life-course stages; the task used by Sweder (2003) in India and the United States to get at schema about family relationships by asking people to assign sleeping arrangements for households of various configurations.



much money non-family members should provide. We see the potential for such tasks to be embedded in large representative surveys.

3. Direct survey measurement across locations where the operative schema differ or are undergoing transition.
4. Linkage of ethnographic approaches, factorial designs, and other schema measurement using survey approaches so that we can see how they map onto each other.
5. Work on the issue of measurement of schema when respondents “take them for granted” and are not aware that they are invoking a particular schema. Schema invocation may not rely on the respondent’s explicit acknowledgement and needs to be integrated into study designs. Demographers rely very heavily on respondents’ reports of events and their justifications. Collaborations with psychologists are likely to be very important in this latter domain.

### **Augmenting Existing Data Collection Studies**

The EFC project identified several domains where new data collection is necessary to expand our knowledge of family change and variation.

First, we must continue to monitor and describe change and variation in the family. To do this, we must find ways to ensure that crucial data collection studies that provide information on diverse aspects of family life are continued and enhanced, a serious challenge in an environment in which several of these studies are being curtailed or eliminated.

Second, it also is essential that data collection focus on families and family-like relationships and not be restricted to the household-sampling frames that characterize many existing surveys. We must expand our understanding of the relationships and interactions, or lack of them, among family members, whether or not they live together, to better understand the nature and extent of family obligations, commitments, and decision making. Changes in the types of unions that couples form, delays in marriage, increases in cohabitation, “visiting” relationships, and childbearing outside of marriage all affect the welfare of children and adults, but our ability to understand the causes and consequences of these changes is limited by the structure of most data on families.

We can no longer afford to start gathering data on couples only after they have begun to live together. We need data that allow us to describe and explain how unions of all types are formed, the quality of the relationships, and the timing and duration of these unions in individuals’ lives.

Similarly, we need better data about intergenerational relationships throughout life, including transfers of time, money, affection, and values, with observations from both parties to the interaction—instead of only donors or recipients—to better understand why families vary in the transmission of resources across generations.

Finally, declines in family size and increases in the prevalence of step- and half-siblings mean that we must enlarge the focus of family relationships to include greater attention to relationships among siblings, especially in adulthood where such ties are understudied.

As we look forward, there are **two main strategies** for ensuring the availability of the data that will meet these requirements for sustaining research on the family. The first is to **design a new study** or set of studies that will encompass all or many of these new data collection objectives. In the “Major New Data Collections” section, we discuss the key elements of such a design and the trade-offs, challenges, and benefits that must be considered in developing large new studies. A second strategy is to look to current studies for opportunities to **expand, enhance, or redesign existing data collection** efforts to achieve some of these goals. We consider this topic, “augmentation,” in this section. Augmentation of existing data is often the most viable strategy for enhancing knowledge in the short term because of the time involved in designing and launching a large new study of family change and variation.

Before undertaking a discussion of augmentation of existing data sources, we reiterate the importance of investigator-initiated research. Our view is that augmentation studies depend on investigator-initiated proposals from the research community. These proposals must persuasively argue the case for a particular augmentation, garner the necessary cooperation from the study principal investigators (PIs), and secure the necessary funding. It is our perception that some, but perhaps not all, of the PIs of current large-scale studies are interested in collaboration with investigators outside the original research team and that NIH is potentially supportive of these broader collaborations. This creates opportunities to use existing studies in new ways to expand what we know about family change and variation.

In the discussion that follows, it is often easier to illustrate what might be done to advance knowledge by focusing concretely on existing data collections whose study designs lend themselves to augmentation. However, we intend these as promising illustrations and not as an exhaustive list of what should be done. In developing these illustrations we do not assess the “openness” of various large-scale data collections to augmentation. The PIs of panel studies, in particular, must weigh the potential respondent burden and potential compromise of current data collection goals against the gains that would come from new, expanded data collection. These are difficult issues that must be negotiated between the PIs and those proposing new studies. Hence, there will be inherent limits to the role augmentation can play, and this motivates our discussion of a new large-scale data collection effort in the subsequent section.

### ***Data Augmentation: Types, Rationales, Benefits, and Drawbacks***

“Augmentation” involves adding to or modifying existing data collection studies to better monitor family change and variation and to address and assess alternative theories or hypotheses about change and variation. Augmentations can be simple; for example, changing the wording of a specific question or adding a question or battery of questions. Augmentations can be more complex; for example, creating a new survey module, extending a survey to incorporate a new population of respondents, or incorporating a qualitative component. The strategy of augmentation can be used for many different kinds of data collection, including nationally representative surveys conducted by the federal statistical system, nationally representative surveys conducted under private auspices, surveys conducted at the subnational level, and data collections that add survey or experimental components to initially qualitative studies. Augmentation should be considered when it becomes impossible to answer important questions using existing data.

The following list of ways in which existing surveys and other data collection systems might be augmented is not exhaustive. It illustrates, however, the range of modifications to existing data that hold promise for describing and explaining family change.

### **Augmentation of Survey Questions**

- Asking additional questions or adding modules.
- Refining questions to improve measurement.
- Modifying questions periodically to pick up the quick pace of family change and reflect the reality of new family forms and processes.

### **Respondent Enhancements**

- Adding in-depth modules focused on specific subpopulations.
- Piggybacking large data collections onto existing surveys by collecting information on individuals who bear a specific relationship to core sample members such as children, siblings, or partners, for example, data collection on children in surveys of adults as in the Panel Study of Income Dynamics–Child Development Supplement (PSID-CDS) or the National Longitudinal Survey of Youth 1979 Child and Young Adult Supplements (NLSY79-CS and NLSY79-YA).
- Adding longitudinal follow-ups.
- Adding information on history (for example, family and or community history) from additional informants.
- Augmenting or modifying rules for identifying respondents for data collection (e.g., oversamples, sampling criteria); for instance, the Panel Study of Income Dynamics (PSID) rules that define who would remain in the longitudinal data collection (i.e., “following rules”) to include following step-children.
- Adding methodological components or modules.
- Adding biomarkers.
- Embedding experiments.
- Embedding qualitative components (in-depth interviews, focus groups, videotaping or live observation of respondents or settings; participant observation).
- Adding information on context collected using other methodological approaches (e.g., media, community characteristics, policy).
- Administrative data linkages (e.g., Social Security, vital statistics, school records, criminal justice), also potentially with private databases, including genealogies, and medical and credit records.

**Benefits to augmenting data sets**—As we see it, there are at least two important overarching benefits of augmenting existing data collection studies to support research on family

change and variation. First, this strategy can be **cost-effective**. Because existing studies often already contain many of the measures and design features that a new study would have to replicate, adding to ongoing data collections is an efficient strategy for addressing data collection needs. In augmenting studies, one pays only the marginal cost of the additional data collection needs. Because of the large fixed costs associated with survey research, these marginal costs are often a small share of the total cost. With the competition for research funds growing ever more intense, cost-effective strategies for augmentation increase the probability that efforts to obtain important new information about family variation and change will actually be funded.

Second, to the extent that augmentation can be implemented more quickly than launching a major new study, it may speed up the acquisition of new knowledge. Augmentation also may be an excellent strategy for testing data collection innovations and improving the quality of new major data collections. The ability to combine new data with the body of data already available from the existing survey creates the opportunity to address important research questions beyond those that originally motivated the collection of additional data. In some cases, augmentation leads to fortuitous research opportunities to explore ideas by using the original data in ways that would not have occurred to the planners of the original survey. In summary, the augmentation of existing studies often has a multiplicative effect on the potential value of a data collection.

**Advantages to augmentation**—Augmentation of large, representative data sets has several advantages. Augmentation through the modification of existing questions, the incorporation of better questions, or the use of new forms of data collection—such as links with administrative data or the collection of biomarkers—can improve the accuracy, validity, and reliability of measurement as well as provide new information about existing sample members. Augmentation of the sample—for example, by obtaining information about kin, partners, or other members of a respondent’s social network—can provide new or improved information about family variation and change. Augmentation can increase the sample size of important population subgroups to support more precise study of differences and trends in their family structure. Finally, augmentation can ensure that survey data reflect changing social realities relating to key and emergent family forms and processes.

**Potential challenges of augmentation**—At the same time, there are a number of potential problems and challenges to relying on augmentation of existing surveys and data collection studies:

- Addressing the potential impact of augmentation on response rates, respondent burden, instrumentation, and human subjects issues.
- Gaining the cooperation of data collectors; convincing them of the value of the augmentation and assessing the capabilities of vendors to gather the supplementary material.
- Addressing whether augmented items are needed on a short-term versus permanent basis (many augmentations come to be viewed as essential over time and this expands the size of the “base” survey).
- Applying innovations that may reveal too much identifying information creates a problem for allowing public use of the data.

- Standardizing ethnographies and other qualitative approaches to increase reliability while protecting confidentiality.

### ***Recommendations for Augmenting Existing Data***

In the remainder of this section we present a set of recommendations on how existing data collection studies might be augmented to support the coming generation of research on the family. First, we discuss ways in which augmentation can help produce and sustain data necessary for *monitoring* trends and differences in families and family-related behavior over the coming decades. Such monitoring is essential for detecting change and variation in the behaviors that motivate our research and inform theory development. Second, we outline ways to augment existing surveys to provide new data for *explaining* family change and variation.

**Augmentation to provide data for monitoring trends and differences**—The chapters on fertility, unions, and generations all recognize the continued need for adequate, and in many cases improved, information on key aspects of family life and related demographic phenomena to describe changes in the family over time and how families differ across important population subgroups. The primary goal of this information is to describe U.S. families, but knowledge of how the United States compares with other countries provides valuable information about the relative welfare of the U.S. population and insight into potential explanations for differences between it and other countries.

Historically, U.S. data for this monitoring function have come from large ongoing national surveys, most of which are part of the federal data collection system. As we look to the future, we expect this to continue to be the case. It is essential that the research community—agencies such as NICHD, NIA, and NSF; professional research associations; and groups such as the National Research Council’s Committees on Population and National Statistics—continue to examine the adequacy of the data that are collected and encourage changes when warranted. Change to these ongoing studies must balance the need to continue important time series for describing change and variation, and at the same time take account of sometimes rapid changes in U.S. families. We consider census data first because they are so essential for family demographers, but we later consider other data that are important sources of descriptive information about the state of American families.

#### ***Census data***

Nowhere is the challenge of balancing these needs more apparent than in changes to the design and content of population-based surveys conducted by the U.S. Census Bureau. The collection of standardized censuses and surveys in the Integrated Public Use Microdata Series, [www.ipums.org](http://www.ipums.org), is an important data resource for studying family change and variation within the United States and for investigating how the United States compares with other countries. The importance of looking backward as well as forward is apparent in the effort to create consistent definitions of family relationships and family characteristics (e.g., immigrant status and language use) across the various censuses, given that the designers of the censuses sometimes changed relevant concepts in response to conditions at the time of enumeration (Ruggles and Brower 2003; Stevens 1999). Below we identify domains that require changes in the information collected to continue existing time series to guard against potential losses in coverage and content.

One of the most significant changes in the federal data collection system over the past 20 to 25 years has been the development of the **American Community Survey** (ACS; U.S. Census Bureau, 2006). The ACS is a continuous survey designed to replace the decennial census long form by providing information about U.S. families and households for small local areas as well as the country as a whole. The Census Bureau estimates that continuous interviewing for five years of full operation will produce a sufficiently large ACS sample to enable researchers to monitor family change and variation on a continuous basis rather than waiting for each decennial census. The ACS has the potential to be an important new source of data for monitoring such things as the composition of coresident families and family transitions for members of different racial and ethnic groups.

The ACS data will be used for many purposes, just as the census long form data were. Competing demands for extending the content of the ACS make it especially significant that the Census Bureau is using the ACS to continue its long-standing commitment to obtain information about U.S. families. We applaud the Census Bureau for its efforts to collect data on such family-related phenomena as living arrangements, family size, and marital status as well as its willingness to improve and expand its content in this domain. For example, the 2008 version of the ACS has added questions on number of times married; year of last marriage; marriage, divorce, and widowhood in the past year; and births in the past year. At the same time, **we urge the Census Bureau to enhance the ACS by adding some additional questions that are essential for monitoring marriage and fertility. First, we urge the addition of a question about the year of the respondent's first marriage.** This question would allow one to monitor trends and group differences in postponement of marriage.

In the area of fertility, we also urge that the ACS **ask the parity of any child born in the last year** (e.g., is this the mother's first, second, third child). This would allow researchers to compute population-based estimates of fertility by age and parity over time and for important population subgroups within the United States. It also would provide an important complementary source of fertility data to that obtained from vital registration records. Obtaining information about fertility in the ACS even though some fertility information is also available from vital registration records is important because both data sources have known coverage and reporting errors. It is essential to be able to compare estimates of trends or differences across different types of data sources to evaluate the robustness of estimates from a single data source. This might seem an academic luxury, but some redundancy in data collection is essential. For example, the lack of redundancy in national data on marital dissolution combined with an unfortunate error in the skip sequence on marital dissolution in the 2002 National Survey of Family Growth (NSFG) has resulted in a complete lack of information about recent U.S. trends in marital dissolution by race and ethnicity.

Although we recognize the great potential of the ACS for monitoring U.S. family change and variation, the value of the ACS as a substitute for the long form of the decennial census raises some **methodological challenges** for maintaining the time series of previous censuses and for comparisons between the ongoing CPS and the ACS. As in each decennial census, some measures of important concepts have been modified to take account of change in the social world since the previous census.

Two such changes are the greater geographic mobility of the U.S. population and an increase in family members who live apart, even parents and minor children. A major difference between the ACS and the decennial censuses and CPS is how the ACS determines who lives in the household (i.e., the "residence rules," to use census language) (National Research Council,

2006). Compared with the decennial census, the ACS adopts a shorter reference period to determine household composition and considers individuals' plans to live in the household in the future. This shorter-term and future-oriented time horizon may mean that the ACS will detect more fluidity in family members' living arrangements than would be observed using the decennial census definition of household composition. Methodological studies are necessary to determine the extent to which household boundaries have become more permeable and different survey definitions of where individuals live account for any observed changes in the time series.

The Census Bureau also has modified the content of the **Current Population Survey (CPS)** to enhance the quality of the data for studying family relationships within households. We applaud the innovation of adding questionnaire items to identify the parents of each child in a household. A particularly valuable aspect of this innovation is that, beginning with the 2007 CPS, the survey now identifies both of a child's coresident parents regardless of each parent's marital status. The 2007 CPS also identifies all unmarried couples living together regardless of who is the householder. Earlier CPS data did not identify cohabiting couples when neither partner was the householder. These are important changes that facilitate monitoring changing family structure.

Despite these advances, there are concerns about the federal data collection system that provides basic data for monitoring trends and variation in union formation and dissolution and fertility transitions for the U.S. population. Specifically, there are significant gaps in, recent loss of information from, and continued threats to this system. (See Chapter 4 on unions.) For example, the CPS has not included the widely used marriage and fertility supplement (that includes questions on a respondent's marital and fertility history) since 1995. And increasingly problematic as the prevalence of cohabitation increases, the CPS has never included cohabitation histories. The SIPP does have a union history, but it provides limited information about dates of entry/exit into unions on public-use files.

In light of the important changes over time and differences among racial and educational groups in the types of unions they form (both cohabitation and marriage), their duration, and the timing of fertility in and outside of unions, this loss of information frustrates attempts to monitor change and variation in these phenomena. **We urge the Census Bureau to maintain and improve the fertility and union histories in SIPP and to explore ways to make more of the detailed information from these histories available in the SIPP public-use files.** We note that it is an opportune time to consider expanding and improving questions on unions and fertility within the SIPP, because of the Bureau's current plans to restructure this survey, to interview less frequently, and to use new data collection techniques (including Event History Calendars) to gather information from respondents on behaviors in different domains throughout their lives.<sup>7</sup> We do not recommend reinstating the CPS marriage and fertility supplements but instead encourage expansion of the NSFG (see discussion below and in Chapter 2) to fill this important data need.

### ***Major national surveys***

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<sup>7</sup> Starting and end dates of relationships are critical for understanding when in individuals' lives they experience family changes (e.g., before or after leaving school). The SIPP public-use data include years but not months of events. Making monthly data more accessible to researchers, while still protecting respondents' confidentiality, would significantly enhance the value of the SIPP data for monitoring family change and variation (Bumpass and Raley 2007). The need for more precise information about individuals' family experiences and the need to preserve confidentiality are important, general issues worthy of greater attention in future efforts.

In addition to census surveys, other national surveys contribute important information for monitoring family change and variation. We see promise in continuing and augmenting some of these other sources. Recent losses of coverage of family-related topics in census surveys and the difficulties of maintaining, let alone reinstituting, coverage of topics within the SIPP and CPS mean that it is essential to consider alternative sources of descriptive data about family behavior and attitudes, an aspect of family life not addressed by census data sources. For example, the **National Survey of Family Growth** (NSFG) is part of a time series going back to the 1955 Growth of American Families Study, albeit with a significantly restricted target population by today's standards. Knowledge about the continuation of long-term trends in marriage, cohabitation, and fertility would benefit from **adding additional content to the NSFG on couple relationships, fertility, and fertility-related attitudes**.

The NSFG already has expanded content on relationships and undertaken important innovations to support its goals of providing high-quality data on family and fertility. These include a focus on cohabitation as well as marriage, including men, and going to a continuous field operation. To better monitor the nature and forms of couple relationships would require that the NSFG **expand the age range it covers beyond age 45**. These older respondents would only complete selected NSFG modules and perhaps additional ones appropriate for an older life cycle stage. By including older men and women, the NSFG would expand opportunities to monitor many changes -- changes in union formation after the first marriage; children's exposure to divorce and other family forms after a parent is 45; and divorce, cohabitation, and emerging couple arrangements, such as "living apart together" (LATs). This would represent only a modest change in the NSFG design and captures the advantageous features we describe elsewhere as *augmentation*. If the age range were extended, the NSFG total sample size must increase to prevent any loss of value for the study's other purposes, such as the ability to reliably monitor U.S. fertility and union transitions at younger ages.

The NSFG plays an important and unfortunately rare role in **providing monitoring data comparable with data available for a number of European countries, Canada, and New Zealand**, in the **Family and Fertility project** ([www.unece.org/pau/ffs/welcome.htm](http://www.unece.org/pau/ffs/welcome.htm)). Participation in this comparative project has provided valuable information about how cohabitation and nonmarital childbearing in the United States differ from European family and fertility patterns. The finding that U.S. children are more likely than those in Western European countries to be born in a household with a single mother, rather than both biological parents (married or cohabiting) (Heuveline, Timberlake, and Furstenberg 2003; Heuveline and Timberlake 2004), identifies children who might be economically vulnerable and provides a basis for research that explains why the experience of U.S. children differs from that of European children.

The United States is not part of the next "generation" of this comparative project, the **Generations and Gender Programme** (GGP) ([www.unece.org/pau/ggp/Welcome.html](http://www.unece.org/pau/ggp/Welcome.html)). As the name suggests, the new program examines differences between women's and men's family roles, with a particular focus on relationships between parents and children. (See the Data Assessment report prepared by the Generations Group, Appendix 5.G.) The standard design for each country is a panel study of individuals with at least three waves, with three-year intervals between waves. The design includes a contextual file for each country that would be matched to individual records (Vikat et al. 2007). We see the absence of U.S. involvement in the GGP as a missed opportunity for comparative research on how couple and intergenerational relationships differ by economic, cultural, and policy contexts. We recommend that **any planning projects for new**



**data collection consider the GGP design and enhancements of it.** A relatively low-cost way to build on the design of the GGP would be to **include questions from the GGP in U.S. surveys** with samples appropriate for comparisons to the GGP. We think it is vital that efforts to augment existing data or to mount new data collection efforts consider ways to facilitate cross-country comparisons to advance both description and explanation of family change and variation. Data collection on U.S. families also can learn from innovations in study design applied in other countries (e.g., the Mexican Family Life Survey discussed elsewhere).

The NSFG also differs from the other data sources we have considered thus far because it includes some questions about individuals' attitudes about family and fertility. These attitude items are relatively limited in number and scope, focusing primarily on fertility intentions. There are few U.S. studies that provide a time series of data on what the U.S. population thinks about marriage, cohabitation, divorce, and family roles.

The **General Social Survey (GSS)**, begun in 1972, is unique in its coverage of attitudes for a representative sample of the adult population age 18 and older. (See [www.norc.org/projects/General+Social+Survey.htm](http://www.norc.org/projects/General+Social+Survey.htm)) The cross-sectional survey was conducted annually before 1994, and since then is biennial. Beginning in 2008 the survey will have a panel component. The GSS design includes core material on a limited array of family and demographic characteristics and a broad array of attitudes about family-related and other topics. The core material is combined with special topical modules based on investigator-initiated proposals and Board-of-Overseers-initiated proposals. Examples of topical modules include family mobility and social networks.

Wording on the core attitude items does not change from wave to wave, thus facilitating analyses over time and pooling data for sequential waves to increase sample sizes for subgroups in the population. Attitudes about such things as family and work, and the division of household labor in coresident families have been included since the early years of the study. Coverage of attitudes about family relationships in adulthood or when children are making the transition to adulthood is limited at best. In light of the aging of the U.S. population and the reconfiguration of U.S. families as a result of changing union and fertility patterns, **we recommend that the GSS reevaluate the core attitude items to introduce some topics that would begin to shed light on how the U.S. population thinks about "new" (to the GSS) aspects of family life.** The GSS has made excellent inroads on this already by including questions on attitudes toward gay marriage beginning in 1988, and repeated in 2004 and 2006. In addition, the GSS recently decided to include a question about individual respondents' sexual orientation as a core measure beginning in 2008. This will enable researchers to compare gay men's and lesbians' attitudes about marriage to the attitudes of heterosexual men and women.

The value of the GSS for monitoring family change and variation is significantly enhanced by the study's inclusion in the International Social Survey Programme (ISSP) ([www.issp.org](http://www.issp.org)). The ISSP provides data for systematic comparisons of trends in family-related attitudes and behavior for over 40 developed and developing countries. The combination of family-related behavior and attitudes measured comparably across several decades and for multiple countries represents a unique resource that we hope will continue in the future.

### ***Augmentation to Provide Data for Generating New Knowledge***

There is a much broader set of potential augmentations that could lead to the generation of new knowledge. Augmentation could be undertaken not only with large national surveys but also with

any data collection activity, large or small, typically focused or multipurpose. Augmentation of national surveys is often an attractive option because their rich information base and large sample sizes offer a strong foundation for new material. Again, the examples we choose are illustrative but not exhaustive.

**Augmentation to analyze romantic unions, couple relationships, and their quality—**  
In Chapter 4, the EFC Unions Group identified a number of areas where new and better data are needed to support research on a broader array of romantic unions and relationships, as well as the formation, duration, and dissolution of such relationships over the life course, and to better understand the quality of those relationships. In the following sections, we discuss how existing data sources might be augmented to support this research in the short to medium term.

### ***Relationship quality***

The EFC Unions report delineates the need to assess relationship quality and recommends that that assessments of such relationship for couples must begin as soon as individuals enter into a couple relationship and well before they start living together. Needed is a vehicle that: (1) is prospective, following a cohort from adolescence to pick up first cohabitation; (2) has room for expanded measures of relationship quality at each data collection point; and (3) captures both members of the dyad. A cohort of individuals would be used to capture the partner so as to interview both members of the couple about such things as trust, commitment, conflict dynamics, “interaction safety,” “commitment safety,” sexual fidelity, cooperative versus uncooperative decision making, individual psychological characteristics, and relationship expectations.

Also, the study should assess the standard determinants of union dissolution (such as age, parental marital disruption, and educational attainment) as well as record multiple aspects of individual health and well-being. The goal is to better specify how relationship-quality ties risk factors to outcomes. In addition, the goal might be to capture how children affect relationship quality, how exogenous shocks affect quality, and so forth.

Although it is unlikely that an existing survey could be commandeered to do all these things, it may be worth exploring whether augmentation of certain studies could enhance our understanding of these relationship dynamics. Which might be the candidates? NLSY79-CS and YA, the National Longitudinal Survey of Youth 1997 (NLSY97), the National Longitudinal Study of Adolescent Health (Add Health), the PSID-CDS, and the Early Childhood Longitudinal Study (ECLS) are all nationally representative and follow children into young adulthood.<sup>8</sup> NLSY79-CS started at birth. PSID-CDS varies in how early children are captured, though all are in the PSID from birth. The Add Health respondents were originally (in 1994) between ages 12 and 18. The Education Longitudinal Study of 2002 (ELS: 2002) began following adolescents in

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<sup>8</sup> These studies vary in which generation is sampled from the population. For example, the Add Health study is a sample of individuals who are followed as they form and dissolve relationships. This differs from the population represented by the persons forming relationships in the NLSY79-CS and YA. The NLSY79 is a cohort sample of individuals, aged 14 to 21 in 1979, who have been followed over time. The NLSY79-CS and YA consists of the children of the female respondents of the NLSY79 who are followed in the NLSY79-CS as children and in the NLSY79-YA as young adults. Thus, the persons whose new relationships can be studied with the NLSY-CS and YA are children of the original sample member, not an independent sample of young adults from the population. To the extent that children of the NLSY79 sample include a disproportionate number of those who were born early in their parents' lives, the experiences of the young adult children of the NLSY79 are not likely to be representative of the full population of young adults.

tenth grade in that year. The NLSY97 began following a cohort of adolescents aged 12–16 in 1997.

All of the studies noted above have data on children who move into young adulthood as well as data from their parents. Some—notably Add Health—have already incorporated design elements to enhance the value of the data for understanding couple relationships by interviewing partners for a subsample of the original sample members. However, a general problem for the studies we have identified is that these samples are progressively aging beyond the stated ideal beginning point for observation and assessment of the quality of “first” unions. In this regard, it might make more sense to plan for following somewhat younger cohorts. For example, the ECLS-Kindergarten cohort (ECLS-K), which was enrolled in kindergarten in 1998–1999, is currently about age 14, though the National Center for Education Statistics plans to end follow-up of these children in 2007 when they are in 8th grade. The ECLS-Birth cohort (ECLS-B) is a nationally representative sample of children born in the year 2001, though current plans are to cease follow-up of these children in 2007, when they all will have reached kindergarten age. The Fragile Families study follows a birth cohort of 5,000 children (three-quarters of whom were born to unmarried parents) born between 1998 and 2000 in urban areas, with the nine-year follow-up taking place between 2007 and 2009.

Aside from differences in age and in the planned period of follow-up, these studies have different sampling plans, which give them potentially different strengths or weaknesses for augmentations focused on the family. Many of these studies (e.g., NLSY79, PSID-CS, ECLS-K, Fragile Families, and Add Health) already include survey information for both parents and children. The NLSY79, NLSY97, PSID-CS, and Add Health contain extensive sibling data. Add Health, ELS:2002, and ECLS-K used sampling plans that drew their respondents from a sample of schools.

Whether or not these studies would be appropriate for augmentation also depends on whether it would be possible to incorporate substantial new content on relationship quality. Because most of the studies do not yet interview partners, there also is the question of whether or not the studies could accommodate the addition of partner interviews for at least a sample of original study members. The NLSY and PSID offer the possibility of “off-year” interviewing as the main survey is fielded every other year, and Fragile Families similarly has “off years” that could be utilized for supplementary data collection. In contrast, the Education Department surveys occur on a yearly basis, although the planned termination of ECLS-B and ECLS-K offer the possibility of re-interviewing these cohorts in subsequent years with survey instruments that focus on family relationship issues. Cost, respondent burden, and panel retention are issues that would have to be addressed with respect to any of these surveys.

### ***Dating***

The EFC Unions report also makes a case for the need to study “dating,” a topic that might be pursued through augmentation of existing data sets, perhaps some of the same data sets discussed in (1) above. Fragile Families identified parents who were romantic partners, an important innovation because it allowed parenting to be compared among couples that were romantically involved but not living together to parenting among cohabitators and married parents. Dating also has been a topic of data collection in Add Health. Add Health offers the greatest potential of any existing data set for understanding how friendships and intimate relationships during adolescence are related to the process of union formation, cohabitation, marriage, and divorce during adulthood. Along with the full histories of intimate relationships, fertility, cohabitation, and

marriage, the Add Health study contains parallel data on both partners in dating, cohabiting, and marital relationships when the original respondents were age 18–26 (in wave three). Moreover, the sibling samples and the DNA data provide potential controls for unobservable variables that may aid in the identification and estimation of causal relationships.

Any plan to augment existing data sets to better study dating should begin by ascertaining whether the potential of national studies, such as Add Health and Fragile Families, and local studies, such as Flourishing Families, and Los Angeles Family and Neighborhood Survey (LA FANS), has been exhausted. Any augmentation also should be designed to answer important questions that cannot be suitably addressed with existing data.

An increasingly important phenomenon is the use of the Internet by couples to identify potential dating partners, and more research is needed to understand the impact of this new technology on dating, cohabitation, marriage, and divorce. Much of this research could be done in the context of existing national surveys if they contained suitable questions about the role of the Internet in dating and in the finding of romantic partners. Additional research might profitably be done on the Internet itself, either through experiments or analyses of the databases of Internet dating services. Such studies would obviously require the cooperation of these commercial services and would also potentially involve human subjects and Institutional Review Board (IRB) issues that need to be addressed. These studies also go beyond our definition above of augmentation, in that they would not be directly connected with existing data collection efforts. Similarly, studies of dating by gays and lesbians might require new designs involving new methodologies, such as the respondent-driven sampling technique proposed by Heckathorn (1997), and thus fall outside our definition of augmentation.

**Augmentation to analyze the extended family and inter- and intragenerational relationships**—In Chapter 5, the EFC Generations Group considered the state of research on inter- and intragenerational relationships within the extended family. It noted a number of alternative theoretical frameworks; e.g., the collective model and the use of game and network theory to characterize the interactions across and within generations of family members, especially those between noncoresident family members. Furthermore, the group discussed the need for improving and expanding information gathered on the extent, nature, and quality of relationships and interactions among family members, especially among adult siblings. In this section, we discuss how several existing data studies might be augmented to support research and model assessment on the extended family.

### ***Intergenerational transfers***

The EFC Generations Group identified the need to study an expanded set of issues vis-à-vis transfers between generations. The expansion includes assessing money and time transfers between parent-adult child dyads (at a minimum) in conjunction with information on conjugal dyads in both generations because transfers to a parent or child affect a couple's joint resources. This must be combined with some of the relationship quality indicators highlighted by the EFC Unions Group in its discussion of data needs for couple relationships, for example trust, commitment, and conflict. With generational questions there is the added dimension that there is an extremely long history to adult children-parent dyads. There is only very limited research on the time horizon for transfers, the dynamism over the life course of transfers, and the implicit nature of commitments. Not all transfers are actualized, yet the “safety net” feature of possible transfers can influence risk taking.

To study life-course transfers for parent-child dyads, a genealogical design was considered superior by a number of scholars who advised the Generations Group on possibilities for augmentation of existing studies. The Panel Study of Income Dynamics (PSID) is an existing data set with this type of design. However, to realize the potential of expanded data collection in the PSID, a number of things would have to happen—many of which are currently being discussed by PSID staff.

- 1) A thorough assessment is needed of attrition and weighting issues.
- 2) Following rules must be changed so that non-biological parents (i.e., step-parents and cohabiting partners of parents) and step-child relationships are better captured.
- 3) The lack of noneconomic data hampers what can be done with data collected in previous waves of the survey. This should be remedied, perhaps requiring off-year data collection given that the current regular interview is 90 minutes. The potential effect of this change on panel attrition is a concern.
- 4) Examine the use of proxy reporting, currently allowed, but less satisfactory for collecting relationship quality and subjective assessments. This could increase the cost of the survey substantially.
- 5) Reconsider the point at which young adults become eligible for independent interviews. Historically, young adults became eligible when they became economically independent of their parents' household. Usually this coincided with moving out of the parents' household, but children away at college might not be considered independent and therefore eligible to be interviewed. Because coresidence and economic independence are outcomes of intergenerational relationships, revising the eligibility rules would significantly enhance the quality of the data for studying intergenerational ties. Currently, PSID's Child Development Study (CDS) is being extended to interview the CDS respondents when they turn 18, regardless of their living arrangements. Ideally, the Young Adult interview could be expanded to all PSID household members when they turned age 18, or perhaps age 16, as is the rule for the British Household Panel Study. That Britain, Germany, and Canada have designed panel studies that are comparable to the PSID increases the value of the PSID as a data source for monitoring and explaining change in generational relationships.

### ***Expanding existing studies to create data on relationships, ties, and interactions of multiple-generations of families***

A common theme throughout our discussions with other researchers on the state of knowledge about intergenerational relationships was the call for reports of relationship quality and interactions from both sides of the generational dyad. As noted previously, inferences about relationships based on reports from one party may be biased. Furthermore, when surveying elderly individuals, cognitive impairments may affect reporting and validation, and additional information from an adult child could be extremely valuable.

Few surveys, however, provide the opportunity to interview both an older and younger generation in the same family. The original cohorts of the National Longitudinal Surveys (Mature Women, Young Women, Old Men, and Young Men) contained some parent-child pairs, but the sample sizes are relatively thin, and these links have therefore rarely been exploited (but

see Lin and Henning 2007). The PSID, as we noted above, provides another opportunity to examine intergenerational relationships from both sides of the equation, although many of the topics for which this would be most interesting are not covered in the survey core.

In contrast to the PSID, the Health and Retirement Study (HRS) asks many questions about intergenerational relationships, but its sampling framework does not include parents and their adult children. However, with its focus on the elderly and its already rich set of information on the provision of both time and financial transfers, an add-on (or modification of the sampling frame) for the HRS could provide a unique opportunity to increase significantly our knowledge of generational ties.

The HRS began with two original cohorts of elderly and near elderly. However, under its current sampling scheme, it periodically adds refresher cohorts to maintain a survey population that is approximately representative of the population age 50 or older.<sup>9</sup> Rather than adding a randomly selected set of individuals as is done now, the sampling frame could be adjusted so that some portion of new sample members were children of the current respondents. Certainly population weights would need to be adjusted to maintain population representativeness, but doing so is likely to be feasible and much desired parent-child pairs could be obtained relatively economically.

The HRS has already spawned a large number of studies that examine caregiving for the elderly. Much of this work has examined reports of care provided by the elderly respondent. With linked parent-child pairs, it would be possible to view the financial and personal situations of both the child and parent as well as to examine preferences for the type of care, how the arrangement was reached, attitudes toward care, and what impact the caregiving has had on the adult child and her family.

With respect to financial transfers, it has been observed that the volume of transfers reportedly given to elderly parents far exceeds that reportedly received. Examining reports of parent-child pairs would go far toward helping us understand the source of the discrepancy. As with the transfer of time help, interviews with both the donor and recipient of a cash transfer as well as those pairs in which no transfer takes place would provide a much clearer picture of the motivation and impact of the transfer.

One of the major issues facing our aging population is decline in cognitive functioning. Although much space in the HRS is devoted to measuring cognitive functioning, it would be exceptionally useful to have additional reports from family members who may be more aware of a decline than the elderly individual herself. An adult child might notice a decline sooner or might notice other indicators, such as a change in personality or temperament. Adult children's reports about the emotional aspects of the relationship, particularly as the parents' physical and cognitive functioning change, are important for understanding how and why the type and quality of care children provide changes over time. As noted above in the discussion of methodological research needed to inform augmentation and new data collection, information provided by a child on basic economic and demographic characteristics can be compared with older parents' reports to determine when parents' proxy reports are of sufficient quality.

All told, we believe there is much to be gained from a modification of the HRS sampling framework to include adult children of the current respondents in the refresher cohorts. Although more difficult, one could imagine adding not just a single child but sibling pairs, thereby providing two reports from the younger generation on intergenerational relationships as well as

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<sup>9</sup> Refresher samples are added every six years.

allowing study of intragenerational relationships. Many of the same issues apply to the understudied issue of intragenerational relations, a topic we discuss below.

### ***Augmenting existing cohort studies to study (adult) sibling relationships***

The EFC Generations report outlines the need to assess sibling relationships in adulthood, both because there is a dearth of information on these relationships but also because they may be undergoing change as families shrink in size but add members through remarriage and cohabitation. In addition, there is growing concern that we cannot understand adult parent-child ties—intergenerational connections—without information on within-generation connections. This is perhaps most clear in immigrant populations, where decisions about which child comes to the United States may depend on which children stay in the home country, particularly when there are obligations to aging parents and extended kin.

However, it is likely also a key issue for most families, especially at transition points, such as the onset of frailty and death of parents. Questions about sibling relationships come to the forefront in families in which one of the siblings has a developmental disability or mental illness, or serious physical disability.<sup>10</sup> As parents age and become less able to provide care for their disabled child, the caregiving responsibilities of their other children may increase exponentially as they acquire responsibilities to a sibling and parent at the same time. Insights from studies of younger families provide guidance about the dimensions of sibling relationships that might be important to observe in adulthood and how within-family differences in parents' relationships with each child may play out as both parents and children age.

Here augmentation requires identifying data sets that have the requisite focus on siblings. PSID is a possible candidate because all siblings are followed in the design. Currently however, there are major deficiencies in the degree to which step-siblings have been included by the following rules. Four cohort studies, on the other hand, have made design decisions that capture siblings of all types, including half- and step-siblings and, sometimes, twins. These include Add Health, NLSY79, NLSY97, and the WLS—all cohort studies, but cohorts who are at different life stages, ranging from relatively young to middle aged and elderly.<sup>11</sup> Of these studies, only the Add Health and WLS have included questions about siblings' relationships with each other and with their parents. Both the Add Health and WLS have rich biomarker information along with detailed reports about health that enable researchers to study how health affects U.S. families. Augmentation of the cohort studies and the PSID to enhance their value for explaining change and variation in inter- and intragenerational relationships would involve (a) adding respondents to represent more generations and broaden the types of siblings included (i.e., step-siblings in the PSID), and (b) expanding the content of the interviews to ask more questions about sibling and parent-child relationships.

Before discussing the potential for augmentation further, it is important to acknowledge that decisions about adding respondents to existing studies would be a major undertaking. A major concern is how successful field efforts would be in recruiting “others” —parents, siblings, adult children—to participate in the survey. The goal should be to obtain an unbiased sample of matched sample members and their parents, children, or siblings and not a sample that is disproportionately made up of those who have good relationships, as in some previous attempts

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<sup>10</sup> This circumstance is not as unusual as is commonly assumed (Seltzer et al. 2008).

<sup>11</sup> Midlife in the United States (MIDUS) has also invested in a sibling design, though for some of the issues of interest—such as, how do adult children cooperate or not to care for aging parents—a cohort design may actually be preferable. MIDUS is not a cohort design like the Add Health, NLSY79, or WLS.

to interview parent-child and sibling pairs (Dykstra et al. 2004). Decisions about whether and how to recruit other respondents to report about their relationships with a primary sample member must build on the methodological studies outlined in the previous section. It also is important to avoid burdening the primary respondent with significantly expanded survey content. Thus, studies that already have information about family relationships may be a more effective choice for augmentation than studies with very limited content on family relationships.

The WLS, for example, is unique in the breadth of information it has about social and economic relationships between siblings and between parents and children in adulthood. The WLS has substantial data about the original sample member's family background (beginning when the sample members were about 18 years old), proxy reports about a small number of characteristics for each sibling, and interviews with a randomly selected sibling. The 50-year study now also includes interviews with the spouses (or widows) of the original respondent and the sibling. That both the original respondent and sibling report about their children, most of whom are now adults themselves, provides a rare opportunity to explore how intergenerational and intragenerational relationships develop over time.

Augmenting the WLS to further enhance its value for research on generational questions would involve interviewing the adult children of the original respondent. Adult children's reports about the nature of their relationships with their now elderly parents would provide insight into how parents' early investments in children affect the type and amount of care adult children provide them later in life, whether differences in how parents treat their children when they are young affect the siblings' relationships with each other in adulthood, and continuity across four generations in intergenerational caregiving (parents of the respondent, the respondent, the children of the respondent, and the grandchildren of the respondent). The multigenerational component also is valuable for this cohort because the primary respondents and their parents were from cohorts with relatively high fertility, low rates of women's employment, and low divorce rates, but their children and grandchildren are in a world with low fertility, high rates of women's employment, and high divorce rates. This multigenerational view of family change at the personal level provides insight into how families function when children do not follow in their parents' footsteps.

We note that the NLSY79, along with their Child and Young Adult supplements (NLSY79-CS and NLSY79-YA), could be augmented to make these data even more valuable for studying sibling relationships in adulthood than they currently are.<sup>12</sup> The previous waves of the NLSY79 included some questions for female respondents about attitudes toward and relationships with their children and some questions are asked of these children about relationships with parents in the NLSY79-CS and NLSY79-YA supplements. We urge NICHD to continue to fund these child and young adult supplements and content in the NLSY79 respondent interviews about parent-child relationships in the future. Given the sibling structure of the latter sample, we also recommend that modules be added to the NLSY79-YA about the relationships of adult siblings. We also think it worthwhile to explore asking such questions of the respondents of the NLSY79, as the design of the latter study does include a subset of respondents who are siblings.<sup>13</sup>

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<sup>12</sup> Ideally, one also would like to "recapture" the parents of the NLSY79 respondents to have data on three generations of family members. These parents were interviewed in 1979 but were not re-interviewed after that. As a result, we do not think it is feasible to find and interview those parents who are still alive after an almost 30-year lag.

<sup>13</sup> The sampling rule for the NLSY79 was to take all children in an interviewed household who were between ages 14 and 21 in 1978.



The Add Health study also would be more valuable for studying intra- and intergenerational relationships if parents of the original sample member were re-interviewed. They were interviewed in the first wave of the study when the sample members were still in high school, but they have not yet been re-interviewed. Re-contacting them as the Add Health primary respondents are entering their peak childbearing years would allow study of the evolution of parent-child relations as the Add Health cohorts, aged 24–32 at wave four, are having children of their own. A second enhancement would be to interview the children of Add Health respondents. Add Health has excellent measures of the relationship quality between the Add Health respondents when they were teenagers and their parents. Interviews with the children of Add Health respondents would allow for estimates of the extent to which parenting practices and the quality of parent-child relationships are transmitted across generations.

Several of the above studies already include (or could include) reports about family life from a spouse/partner dyad as well as from at least one parent-child dyad. This would provide an opportunity to investigate how partners negotiate childrearing and investments in children or allocate scarce resources of time and money to their aging parents. The exciting potential of these multi-respondent designs must be balanced against the difficulties of obtaining unbiased, reasonably sized samples with reports from each of the relevant actors.

The major surveys we have mentioned also have the potential to include qualitative additions or other embedded elements to provide opportunities to validate survey measures of relationship qualities and to explore aspects of sibling, parent-child, and couple relationships not captured by survey questions. These efforts can inform the incorporation of new material in interviews.

### ***Augmenting a new study: The National Children's Study***

Throughout the course of this project, the fate of the National Children's Study (NCS) has waxed and waned. Its fortune rose again as we entered the last phase of our planning project, providing the EFC with an exciting opportunity to consider the potential for collecting new data to explain change and variation in generational relationships. As a cohort study, the design complements that of the existing cohort studies we considered above. We think it is important to maintain a balance between replicating content from existing cohorts and incorporating new questions about children's family environment. This strategy will shed light on the effects on individual well-being of cohort variation in family experiences since 1939 (the WLS cohort) at the same time it allows the investigation of understudied aspects of family life.

## **Major New Data Collections**

The EFC group focused first on the potential to augment existing data sets to address important, unanswered questions about the causes of family change and variation. We anticipated a need for pilot projects and measurement development (see "Measurement and Methodological Studies" above) to improve researchers' ability to incorporate central theoretical concepts into ongoing studies. Pilot projects also provide a firm foundation for new data collections that might be conducted in the future.

Initially, many in our group were not optimistic about the possibility of launching one or more new large-scale data collection projects in the United States on the order of the NSFH. This skepticism was based on the existing funding environment and the number of data collections

currently in the field. However, our assessment of the empirical literature and existing data sets uncovered new questions on family change and variation for which existing data could not be readily or appropriately modified. In particular, there are several reasons to believe that augmenting existing studies will simply not be an adequate strategy for monitoring and explaining family in the United States over the coming 20 to 30 years.

First, most, if not all, of the existing studies that might be augmented have been designed to address issues that are not central to explaining family change and variation. Moreover, most existing large-scale surveys of families do not fully draw on the diverse theories and methods of the disciplines that are central to understanding family behavior, including anthropology, demography, economics, sociology, and psychology. Thus, one can anticipate limits to their capacity for accommodating the sorts of substantial changes in content and focus that we have discussed in the earlier chapters of this report and that have been recommended in the above sections (“Measurement and Methodological Studies” and “Augmenting Existing Data Collection Studies”).

Second, even if such accommodation were possible, it remains challenging to extend these studies in ways that will provide representative samples to monitor changes in family structure and behavior over the coming years, especially given the likelihood of continuing change in U.S. population composition. This problem is exaggerated by the rapidity of U.S. family change over the past 30 to 40 years and the likelihood that such changes will continue into the future. This concern is all the more important given the need, as we have noted in earlier chapters, for capturing data on the behaviors and relationships of family members at all stages of the life cycle; e.g., in childhood, adolescence, young adulthood, and older ages.

Finally even if the current funding climate is not conducive for launching a new large-scale data collection project, many family scholars and researchers urged us to discuss the features, costs, and benefits of such new data collections. These advisors gave two reasons for including such discussions in this report. First, data needs and options are important for the field to debate in order to identify what we need to know and what research is required to answer the key family questions 10 to 20 years from now. The findings and recommendation of this project are a necessary start to that process, but they are not intended to settle that debate. Second, if one or more large-scale data collections are to be initiated, they will take a good deal of time to design and to secure funding. It is clear that no single study can address all needs. Thus, targeted discussions about the structure and content of new studies must begin now to increase the chance of launching appropriate studies in the foreseeable future.

### ***General Goals and Specific Rationales for New Large-Scale Data Collection Efforts***

**New data collection must describe and monitor**—Any new data collection efforts for describing and explaining family change and variation must keep in mind two important, albeit potentially conflicting, objectives. **First, any new nationally representative survey must enable researchers to describe and monitor the types and prevalence of U.S. families and family-like relationships in the early part of the twenty-first century. The research community agrees on the importance of description** (i.e., differential trends and trends in important proximate variables as well as decompositions of trends and differences). Descriptive work identifies the dynamic components of change or the dominant factors perpetuating differences and thus sets the stage for our second fundamental goal, assessing causal processes. Currently, the United States does not have an ongoing and sustained survey devoted to

describing the family and, as a result, lags behind most industrialized nations. American researchers and policymakers are forced to draw on different aspects of multiple data sets to describe family change and variation, and even then, we are left with an incomplete picture that does not reflect the reality of many American families.

Many of the surveys pieced together to monitor family change and variation are woefully outdated and inadequately measure the array of family forms that one observes today, such as cohabitation, step-families, and family relationships that span households. The need for a new, longitudinal broad-based survey of U.S. families has long been recognized by demographers. This concern was reinforced by many of the participants at the scientific stakeholders' conference at Duke University in June 2007. (See Appendix 1.B for the conference agenda and a list of participants.)

**New data collection must help explain the trends**—The second objective for any new large new study (or set of studies) is to **provide a broad array of researchers with the capacity to examine and assess new and innovative theories and explanations for why families change and why they may differ across subgroups**. As has been argued in the earlier chapters of this report, existing data sources appear inadequate for assessing these new theories and explanations. They are particularly inadequate for resolving important empirical puzzles about how families affect individuals' health and economic and psychological well-being within and across generations. They are also inadequate for determining how earlier experiences and interactions influence the incidence and duration of marriage and other forms of romantic unions. They are also inadequate for explaining change and variation within and across important subgroups of the population, including race/ethnic diversity, immigrant groups, and same-sex families. Finally, they are lacking in their ability to advance our understanding of how social contexts affect family behavior, including the role of social networks, neighborhoods, communities, the marketplace, religious, social, educational and economic institutions, as well as public policy.

We acknowledge that there are tensions between the goals of description and explanation when considering the design of a large-scale data collection study. For example, in designing a survey for monitoring trends and differences in family structure and behaviors, one will inevitably place greater weight on a sample design that is representative of the population—that is, a design that is frequently “refreshed,” with repeated cross-sectional surveys. This frequency picks up changes in the population. Data collection studies also are often reluctant to alter questions to ensure comparability of measures of key phenomena and constructs over time. In contrast, the best survey designs for assessing existing theories or for developing new theories may oversample, or exclusively sample, certain types of families (such as single-parent families or step-families). Alternatively, they may use geographically-based cluster sampling to better measure the contexts in which families function, or they may embed a range of approaches to data collection, such as ethnographies and the types of experiments noted above in the section, “Measurement and Methodological Studies.” In short, the ideal survey design for description may be quite different from those preferred for examining theories of family change and variation.

## *Recommendations for Developing New Data Collections*

In the face of these alternative and potentially conflicting goals for data collection, we make several recommendations for how to approach the development of a new data collection system with which to monitor and explain family change and variation in the United States.

**A. We recommend establishing a new omnibus population-based survey whose primary mission is to collect data on U.S. families.**

As we discuss below, this survey must be focused on collecting data on families and not households. It must focus on collecting detailed information about family structure and family-related behaviors, such as fertility, marriage, romantic unions, and exchanges and interactions within and across generations in a family, so that changes and variation in these behaviors can be monitored. It must be longitudinal, following sampled family members regardless of their residence. At the same time, it must be refreshed on a periodic basis to reflect the changing population in the United States (owing to, for example, immigration) and to include new birth cohorts. All of these design features for a new omnibus study—as well as several more noted below—are needed to insure that this study meets the description goal noted above. In our view, it is essential that this goal be met in any new data collection effort.

**B. We recommend that this new omnibus survey also include design features that will enable the assessment of alternative theories to explain how families function, what roles they play, how the family changes over time, and how families differ across subgroups.**

Any new large-scale data collection should seize the opportunity to address the second goal for new data collection, explaining family change and variation. Thus, this new study must find ways—through the use of specialized modules and oversamples, and the embedding of more specialized data collection approaches such as ethnographies, vignettes, and experiments—to assess alternative theories of the family and family change and variation. To accomplish this, the leadership of any new study must develop a planning structure that includes researchers from a broad range of disciplinary backgrounds who are committed to a collaborative and interdisciplinary approach. We believe that it is important that this study be dynamic in its design and that survey content orientation be open to changes when they are justified. The planning team should be committed to a continual evaluation of innovative data collection strategies and alert to new ways of assessing and testing emerging theories. In this regard, we point to the collaborative structure of leadership that has characterized the design of the Health and Retirement Surveys as a potential model for a new large-scale study of the family. The study should meet the goal of monitoring and description, and it should also be committed to a multidisciplinary design that develops and tests new theories about the family.

**C. We recommend that funders, in planning for resources to support data collection, balance the needs of large-scale new data collection with a focus on the support of smaller-scale studies that address innovations in the assessment of theoretical-based models, new methods of data collection, and data collection studies of the family for specialized and non-U.S. populations.**

Although we recommend (Recommendation B) that any new omnibus study strive to accommodate research that assesses a broad range of theories about the family, we understand that this is not always possible. Compelling empirical research on causal processes and tests of alternative theories of the family often are best conducted on more specialized populations and use more specialized and experimental data collection techniques. For example, many causal claims are best evaluated by taking advantage of natural experiments (i.e., events and treatments affecting one population but not another) or by comparing contrasting social settings that experience a similar event (or treatment). Assessing causal processes often requires research designs that are different from a nationally representative sample. The appropriate research design flows from theoretical perspectives and closely linked research agendas that are best mounted by independent investigators or teams of investigators. Finally, we note that much has been learned about how families function and make decisions as well as alternative strategies for collecting data to study the family from surveys on specialized populations in the United States, such as the Fragile Families and the Three Cities studies, and for non-U.S. populations, such as the Indonesian Family Life (IFLS) and Mexican Family Life (MxFLS) studies. It is essential that any plans to support new data collection include provisions for the continued funding of such investigator-initiated surveys and data collection studies. The need to maintain support for such data collection efforts was a key finding in the EFC Generations Group’s Assessment of Data Report contained in Appendix 5.G.

- D. We recommend that the design of a new omnibus data collection survey for studying family change and variation be informed by the findings of the types of measurement and methodological projects discussed in the “Measurement and Methodological Studies” section and the augmented existing studies discussed in “Augmenting Existing Data Collection Studies” section.**
- E. Furthermore, we strongly recommend that the design of any new survey take account of the design features and survey content of these augmented existing studies to ensure that gaps in the content crucial to monitoring family change and variation in these existing studies are filled and that needless overlap in content with existing studies is avoided.**
- F. Finally, to help facilitate Recommendations D and E, we further recommend the establishment of a regularized forum in which the principal investigators of existing and future data collection studies with a significant focus on research on the family meet and exchange ideas regularly.**

Recommendations D through F are oriented toward ensuring that any new data collection effort—be it for a new omnibus study, new specialized studies, or augmented existing studies—not be designed in isolation, but rather be guided by a more systemic perspective than is often the case for such studies. We recognize that attempts to “coordinate” studies is difficult in the investigator-initiated funding environment in which research on the family (and social science research more generally) operates. Moreover, as we have argued above, the investigator-initiated process encourages the “competition of ideas” that is essential for good research and, we would argue, for good data collection in support of such research. At the same time, data collection

studies tend to be expensive and they, by necessity, must have a “public good” character in that they should prove valuable to multiple users. To help accommodate these realities, our final recommendation (Recommendation F) is an attempt to encourage a bottom-up approach through regular interaction by principal investigators of such studies. We would encourage that this forum be established outside the auspices of existing funding agencies such as NIH or NSF and that it be a voluntary association. We hope that the potential benefits it can provide to the principal investigators will be substantial enough to outweigh the tendencies to avoid such collaboration.

### ***Related Issues in Designing New Data Collection Study***

In the remainder of this section, we focus on issues related to a new omnibus data collection study. In particular, we discuss some principles that should guide decisions about what such a study should do and how decisions about the design and conduct should be made. We then outline important design elements for a new large-scale study. However, before moving to those discussions, we wish to be clear about several points.

First, we wish to make clear that the discussion below *does not* constitute the design of a new large-scale study. Much more thought, assessment, and effort will be needed to produce a compelling but realistic design for such an undertaking. We hope, however, that the discussion will stimulate researchers and funders to think seriously and begin planning immediately for new data collection.

Second, our lack of further discussion about the recommendations concerning possible design features of other new forms of data collection does not suggest that it is of lower priority than designing a new omnibus study. Rather, it reflects our view that these other studies and their designs will be initiated by investigators and evaluated through the normal competitive funding process. In all, this process will produce better and more comprehensive ideas than we can generate in this project.

**Guiding principles for a new large-scale study**—Any new, large data collection must be a public resource. Only very broad use can justify its costs. Prior studies have managed to agree on the fundamental processes and behaviors to describe in such an endeavor (i.e., in fertility studies such as the World Fertility Survey, the Demographic and Health Survey (DHS), and in family surveys such as the NSFG). One obvious but important lesson in implementing social science surveys is that disciplines will use the survey only if their data needs are represented in a substantive fashion from inception through design and implementation. Particular surveys disproportionately attract scholars from specific disciplines. Although sociologists are heavy users of NSFH, economists are less frequent users, and publish fewer papers using NSFH in economics journals. Similarly, economists are heavy users of the HRS, with less use by researchers in other fields. Fundamental theoretical constructs from various disciplines must be measured in a new survey to make the survey useful within a discipline. Full involvement of members of an interdisciplinary team is the best way of ensuring this. **The selection of specific family processes to study must be informed by theories, models, and measurement from economics, psychology, sociology, and anthropology but not tied to a single theory or theoretical orientation.**

A new study must **take account of the diverse social and economic contexts that affect family life and are affected by how families behave.** These contexts include religious

institutions, schools, health and political institutions, and the labor force. Other contexts include cultural representations of the kinship system, informal social networks, policies, and local economies. Again, it is naive to believe that a single omnibus data set will capture all the important aspects of context for multiple family processes and behaviors. Thus, specific studies, some possibly embedded within the omnibus design, are needed. Further, efforts at compiling aggregate or macro-level data sets can augment the measurement of social context. Existing state, county, and city level census data are only the crudest examples of augmenting data collected on individuals.

Recent studies have implemented a number of successful innovations. A new study should build on these. Examples include the LA FANS and Add Health, which sample contexts as well as individuals; the Fragile Families, the Three Cities, and the Flourishing Families ([www.flourishingfamilies.org](http://www.flourishingfamilies.org)) studies, which include embedded designs with combinations of in-depth interviews, ethnographies, and video and live observational data.; the HRS, which matches survey and administrative records; and the several studies that now combine biomarker data for survey participants.

The new study also should **be forward looking in the use of new technologies**, such as the Internet, to facilitate experience-based data collection on important family transitions, such as becoming a parent or changes in a couple's relationship status (cohabitation, marriage, separation), when individual and family adjustment to the transition is of particular interest. Internet surveys also may improve response rates for some types of respondents, enable more complex question sequences, and reduce respondent burden.<sup>14</sup> Given the growth of the Internet, its greater penetration among younger Americans, and new, inexpensive Internet devices that can be used for surveys, we expect new technologies to play a role in increasing the frequency with which some reports may be collected.

Finally, a new, large-scale, longitudinal study will face the organizational challenge of **maintaining the funds necessary for repeated waves of interviews** at theoretically appropriate time intervals. Previous studies differ in how successfully they have negotiated this challenge. The cost of failure is longer, sometimes too long, intervals between interviews with the resulting loss of important information about attitudes and short-term adjustments, difficulty tracing respondents, and sometimes a reduction in sample size because of the trade-off between sample size and interval between re-interviews. We believe that an assessment is needed of the minimum time necessary to accomplish the scientific objectives. Funding for the core program—whether from NIH, a combination of NIH and private foundation support, or a line item in the congressional budget—should then be guaranteed (within the usual constraints) for that time period.<sup>15</sup>

**Design elements for a new large-scale study**—Our recommendations for the design of a new large-scale study build on lessons learned from previous large studies. We discuss these features briefly here and combine them into a template for a new large scale study in the Appendix 6.A.

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<sup>14</sup> The HRS has used internet surveys for the 30.5% of the sample with internet access and concluded that selection bias is largely a function of access rather than survey response given access.

<sup>15</sup> The NLSY program has a great deal of uncertainty over the fielding of new cohorts. However, the program has had remarkably steady funding for a cohort once started. The NLSY79 has now been fielded for 25 years with annual surveys conducted from 1979-1994 and biannual surveys collected thereafter. Although important add-ons have been funded on an ad-hoc basis, the core funding for the NLSY79 has been more certain than other surveys.

***The survey must focus on families and not households.***

As argued throughout this report, new data collections must focus on families and not households. Sampling designs cannot be limited to households or, more to the point, only interview and gather data from coresiding family members. Rather, sample recruitment needs to focus on strategies that will include family members or family-like members, regardless of where they reside and even if, in the extreme, they are estranged from other family members in such a sample. How can one construct a roster of such family members? How do we draw an appropriate sample from this roster? These remain somewhat open questions. Thus, we have recommended (see Measurement and Methodological Studies section of this chapter) that pilot studies be conducted to assess alternative strategies for developing sampling frames and for encouraging the participation of potential family members in a study. However, our fundamental point is that this orientation toward family and away from households is essential if we are to improve our understanding of family change and variation.

***The survey must be longitudinal and of high frequency.***

Of primary interest is how relationship dynamics affect families' choices and behaviors. Because relationship dynamics are fluid, a great deal can be learned by studying how they are affected by shocks to families—both financial shocks such as unemployment and emotional shocks such as infidelity. Retrospective reports about attitudes and feelings may be systematically biased and therefore inadequate for most studies of their effects on family decisions.<sup>16</sup> Similarly, accurate reports about interactions among family members are difficult to obtain after significant time has passed, both because of recall errors and potential bias. How frequently participants are reinterviewed should be based on theory and data needs instead of the vagaries of funding cycles. The successful experiences of the NLSY and PSID, with annual and now biennial interviews, point to the importance of relatively short periods between interviews for most of the processes of interest to family demographers.

***The design requires a compromise between the need to measure cohort differences and the need for a large sample of a single birth cohort to provide more statistical power for key subgroups within that cohort.***

Birth cohorts differ in the timing of transitions to becoming a parent, marriage, and other family roles, in large part because of variation in the economic, sociocultural, and policy environments that affect family decisions. Designs that include multiple cohorts enable researchers to investigate the effects of context on families. A new multi-cohort design also has the advantage that it would provide descriptive information about U.S. families across the age span so that researchers could provide an immediate snapshot of how families organize their lives in the twenty-first century.

Designs that sample individuals from a single birth cohort, on the other hand, usually have the advantage of a larger sample size with greater statistical power for the specific cohort than would be possible for cross-cohort comparisons in a multi-cohort sample. (See the Data Assessment report by the Generations Group included as Appendix 5.G.)

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<sup>16</sup> Much evidence indicates that recall is affected by frames or schema that are currently employed. Likewise, much evidence indicates that attitudes, values, and schema change over time as the result of experience and interactions. For example, see Axinn and Thornton (1993). We are unaware of any studies that actually examine the extent of such bias by comparing retrospective reports about attitudes and feelings with contemporaneous reports.



Investigators have made creative use of single-cohort designs by combining several single-cohort studies, standardizing the measures as much as possible, and then comparing individuals' family experiences across cohorts. Examples of these efforts include combinations of various adolescent cohorts, notably the NLS cohorts and the British birth cohort studies.

The strategy of combining single-cohort studies to enable a comparison across cohorts requires that the sample design and measurement be reasonably comparable across studies. Any new data collection should balance the need for standardized design and consistent measurement against the need to take advantage of new, improved ways to collect data and measure important concepts.

***A new study should adopt a life-course orientation.***

There is considerable merit in adopting a life-course perspective that measures transitions into and out of different family roles as well as the individual and social processes and health and well-being outcomes associated with these transitions. This recommendation implies the need to include careful documentation of demographic transitions (such as becoming a parent, forming and dissolving couple relationships, movements in and out of households, and educational and labor force transitions) as a starting point. Social processes and family dynamics that cause or accompany these transitions must also be measured. It also is important to learn how individuals maintain relationships. What are the processes that bind individuals together in families? What weakens and strengthens these relationships?

A new large study should encompass the experiences of individuals of all ages, not just at the youngest life stage and transition to adulthood, or retirement and old age. This will complement existing studies that emphasize early life (the National Children's Study, Fragile Families, and ECLS), the transition to adulthood (Add Health and NLS studies), fertility and reproductive union formation and dissolution (NSFGs), and midlife and older age (MIDUS and HRS).

***The design should prioritize which relationships to follow over time.***

This issue goes to the heart of the motivating questions for a new large-scale study: who is in the family, what do families do, and what are the effects on individuals of family membership as compared with membership in other groups? To address these questions requires information on both family and non-family relationships.

A new survey must be clear on which relationships are of central interest and which should be followed over time. We believe that three relationships deserve particular attention: (1) the relationship between spouses or partners, including dating relationships, (2) the relationship between children and childrearing adults, and (3) the relationship between older parents and their children and step-children.

What is unclear is whether a single survey can have a sampling frame that can address the relevant relationships for all three. For example, from the child's perspective, the optimal design may start by interviewing both biological parents and any additional adults who potentially play a major childrearing role, including step-parents. This would allow us to address issues of child development and eventually how they are related to children's relationship choices and what happens within those relationships. On one hand, it is vital to continue to interview both parents even after parents split up and have no relationship with each other. On the other hand, from one of the parent's perspective, it may not be necessary to assess couple relationship dynamics with a former spouse if its only relevance is through the child. Finally, for an older adult, it is likely

necessary to interview all adult persons who are potential sources of emotional and financial support. This is likely to include the households of all biological children, of step-children, and of more distant kin and other close non-kin. The key principle is that the set of people who compose important relationships should be followed over time, whether or not these relationships are biological or formed through marriage.

A new large-scale study should ask individuals about family relationships whether or not the “other” lives with the individual. That is, we believe it is important to study certain relationships whether or not the individuals in the relationship live in the same household. This principle differs from the design of such studies as the PSID, which only follows adult children when they set up an economically independent household from their PSID parent. Coresidence, however, is one of the things we think it is important to study—who lives together and who does not. The BHPS includes children in the sample based on chronological age (age 16), whether or not they live with their parents.

Balance is necessary. On one hand, there are some relationships that we think should be studied to understand family change and variation because they represent family connections in theories about kinship: parent-child relationships, spouse/partner relationships, relationships among siblings. On the other hand, it also is essential to study some relationships that might not be considered “family” relationships by conventional definitions but which individuals themselves define as family ties.

This design decision is particularly challenging because some non-kin relationships may become family relationships with time, for instance when dating partners marry or a parent’s cohabiting partner begins to behave like a “real member of the family.” The transition from non-kin to kin is important for individuals’ well-being. It also is important to study from a societal perspective: What social processes determine whether non-kin relationships, such as cohabiting relationships, become sufficiently institutionalized that they are culturally part of the family? It is unclear that a single large-scale survey can address both the individual and the societal-level question, but embedding ethnographic studies within a large-scale survey has the potential to provide insight into how some non-family relationships become defined as family relationships. We discuss embedded designs below.

***The design must allow for the study of relationships, not just individuals.***

Whichever relationships are privileged by the design, it is important that a new study incorporate information about relationships from multiple parties in the relationship. Theories about the effects of families on individual development and about individuals’ family-related behavior (forming a couple relationship, having a child, caring for an infirm parent) treat these as social processes. They depend on the attitudes and preferences of multiple actors. A single individual may not be able to provide unbiased reports about others’ attitudes or about “how their relationship is.”

Several existing large studies have made innovative attempts to collect data directly from both spouse/partners [NSFH, Add Health, Netherlands Kinship Panel Study (NKPS), and WLS], ex-spouse/partners (NSFH), and parents and children (Add Health, NLSY79 and NLSY97, NSFH, LA FANS, PSID, and WLS). Some of these also include information from siblings (Add Health, NLSY79/97, PSID, and WLS). (See Data Assessment report by the Generations Group in Appendix 5.G.) Studies with multiple respondents vary in whether the content of the interviews includes questions about the quality of relationships with the other person. For

example, relationship quality is more likely to be covered in studies with both spouse/partners and parent-child designs, and much less likely to be covered in studies with siblings.

Any new study must address the problem of how to obtain an unbiased sample of individuals and “others,” as we discussed in the section on “Measurement and Methodological Studies.” Previous attempts to interview respondents from both sides of a relationship have been significantly less successful when the primary individual reports a poor relationship with the other. Is this due to poor locating information for the other? Is this due to refusals by the other once located?<sup>17</sup> The design also must address ethical concerns involved in asking questions about estranged relationships or high-conflict relationships. It should build on past efforts to obtain high-quality information on sensitive issues and maintain respondent confidentiality. It is important to study relationships that are inactive at a particular time but may still have significant effects on individuals’ family-related behaviors (e.g., insurance value of kin), and to consider positive, negative, indifferent, or ambivalent relationships.

Finally, a new study should provide sufficient information to enable researchers to compare the qualities of different types of relationships—parent-child, couple, non-kin ties—and their effects on individuals’ health and well-being. By collecting information on a range of relationship types, data from the new study could address the question of when relationships with non-kin substitute for relationships with parents or spouse/partners in promoting individuals’ well-being, and when parent-child relationships enhance or threaten a couple’s relationship.

***The design should assess the social development of children to better estimate the association with healthy relationships as an adult.***

We believe it is important to measure longitudinally the social development of children and their dating behaviors, specifically the development of attributes that as adults regulate the quality and success of relationships. It is important to measure key concepts—such as healthy and age-appropriate attachment and conflict-resolution skills—from an early age. Although the NLSY program does not measure these factors, the program faced a similar challenge in measuring in a survey context the cognitive development of children. Although these two measurement issues are not equivalent, the process of developing assessments shares some parallels. For example, adapting psychological measurement to a survey context where a limited number of questions must suffice is shared by the two measurement issues.

***The design should represent important subgroups in sufficient numbers to allow analyses that compare family experiences across groups.***

Racial, ethnic, and immigrant groups differ in the opportunities and constraints they face in making family decisions. There also may be important cultural differences that affect the criteria members of these groups use to guide their choices and the aspects of family life they take for granted. Oversampling of important subgroups would provide researchers with the opportunity to

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<sup>17</sup> See, for example, Teitler, Reichman, and Sprachman (2003) who examine efforts to survey hard-to-reach populations using data from the Fragile Families and Well-Being Study. Also see Lin, Schaeffer, and Seltzer (1999) on participation and non-response errors of absent fathers using data that combines detailed information from field efforts for a list sample and survey data. For list samples of divorces, location problems are much more serious than refusals. This might be very different for household samples that do not start from lists. Most studies do not include or make available the field indicators that will tell what the source of the non-response is. The Netherlands Kinship Panel Study (NKPS) is an example of a study that had a serious problem with non-response bias, but it is not clear whether the non-response problem comes from locating problems or refusals.

study these issues more rigorously than is now possible for contemporary American families.

Several hard choices must be made. Choosing which groups to oversample is obviously important. The method for oversampling also is critical; in particular, the degree of clustering for the oversample affects the extent to which investigators can examine such questions as the effects of having many co-ethnics in the community on dating and marriage choices.

Oversampling other groups also may be useful for theoretical reasons or to obtain a sufficiently large sample for comprehensive analysis. Types of individuals who might be oversampled include those in couples who recently cohabited and made the transition to marriage, step-families, households in which children are the result of “multi-partner fertility,” and grandparent-grandchild households. Oversampling based on these family-related characteristics provides the advantage of greater statistical power but at the cost of sampling on the dependent variable, family decisions.

A third group that might be oversampled are those in same-sex relationships. These are a new, more visible family form, and they offer a comparison that provides theoretical insight into the role of gender and institutionalization on how couples organize their lives and the effects on individuals of this organization. (See Chapter 4 of this report.)

An alternative to oversampling many groups is to design a new study to include specific modules and sets of questions from other group-specific studies so that researchers can combine data from the new study with existing data from group-specific projects. The New Immigrant Survey (NIS) and the Family Connections Across Generations (formerly the National Survey of Black Americans) are candidates for these types of comparisons.

A related opportunity for comparative work is to include questionnaire sequences that are part of large-scale studies in other countries, such as the Generations and Gender Programme described above and the European Values Survey.

***The design should embed studies that help us understand the processes that cannot be measured adequately within structured survey interviews.***

We envision at least two types of embedded studies. One combines survey interview data with other types of data on the same individual in the large-scale survey. These can include live or videotaped coded-interaction studies, in-depth interviews, ethnographies of communities from which individuals are sampled, collection of biomarker data, pilot questionnaire modules, embedded experiments, and administrative record matches. A second type would be “offline”; that is, it would not collect data on the individuals in the large survey but instead would collect information from others to inform the interpretation of data about similar persons in the large survey.

Obviously the purpose of the embedded study should inform the decision whether to collect data from the survey sample or from a different sample. One reason to conduct an embedded study is to measure important variables necessary to help researchers test theoretical propositions. Surveys are not the ideal way to collect some types of information about individuals’ health and family processes, but embedded designs to collect different, complementary data can greatly enhance the value of the survey data. Embedded studies can also shed light on ways to improve survey measures of important constructs.

The Embedded Developmental Study (EDS) of the Three City Study gathered detailed, process-oriented measures that provide information not easily collected in standard surveys, including videotaped observations of parenting and children’s self regulation as well as live structured observations of child care quality. Because the focus was on young children, the EDS

collected information on mother-child interactions, observational ratings of the child care settings, and interviews with the child care providers and the biological fathers. The EDS included all the families with two- to four-year-old children from the Three City Study. For assessing social development of children and the role of parental interactions, the EDS is clearly relevant. Nevertheless, the general method could be adapted to assessing other relationship dynamics as well, particularly when concepts are poorly defined.

Ethnographic methods offer the potential for insight into how individuals learn about who is in their family and about the obligations family members have for each other. Insights about these negotiations, however, need not come from ethnographic observations of the same individuals who participate in the survey. Studying individuals similar to the survey respondents reduces the effects of observation on individuals' attitudes and survey responses and avoids undue burden on study participants.

Another type of embedded study would involve key experimental manipulation of important theoretical constructs. One example would adapt the experimental manipulations of programs to promote healthy marriages through counseling interventions or other mechanisms. Other examples include collecting DNA or biomarkers for subsets of respondents or matching selected sample members to existing administrative records.

***The design should incorporate the context of family decision making.***

Individuals do not make family decisions in a vacuum. Multiple contexts influence family decisions and behaviors. The resources available to families in their communities and social networks may alleviate reliance on the family or intensify it. Several surveys have made important advancements in assessing different contexts of decision making, and each has a good chance of being adapted to address the key questions of interest in this study.

The LA FANS design made important advances by sampling both individuals and contexts to enable researchers to separate the effects of context from individuals' choices about the contexts in which they spend time, such as neighborhoods, schools, and workplaces. Americans spend time in many different contexts. Theory and rich description from previous work should inform choices about which contexts should be the focus of a new large-scale study. These contexts may vary by life stage; for example, schools are important contexts for children and teenagers but not for older adults, for whom workplace and neighborhood may be more important.

A constraint of a design that samples context is the need for a sufficient number of cases that cross contexts; for example, individual children whose neighborhoods and schools differ. Otherwise, it is impossible to separate neighborhood from school effects on such things as adolescents' choices about whom to date. (Kim et al. 2006). The same is true for contexts that are more relevant for adults' family choices.

Another context-oriented strategy is the one implemented in the IFLS. For each IFLS community in which households were interviewed, the survey collected extensive information from community leaders and from staff at schools and health facilities available to community residents. Although the specific questions and institutions would no doubt vary in the U.S. context, the general principle of cataloging and assessing community resources holds. For example, understanding church-related community activities as well as school programs might help us better understand the interaction between families' choices and resources external to the family.

A better understanding of the operation of families within a network of friends and other potential providers of emotional and financial support (and conflict) is warranted. The Add Health design, which samples individuals within high schools, provides a unique window on this issue with the saturated school data. All students in some schools provided social network information. The design allows investigators to determine if students' friendship choices are reciprocated and to take account of the array of potential friends and even dating partners from which individuals choose. The Add Health data also include interviews with a parent and sibling for a subsample of cases. The design supports analyses of independent family and school effects. Neighborhood data from the census and administrative sources can be matched to geographic identifiers as well. Despite these strengths, data on the teenager's family environment and family processes are limited by the content of the parent and in-home questionnaires.

### **Conclusion**

Above we have proposed an integrated structure for future research on family change and variation. We proposed new research on measurement and methods, new data collection via the augmentation of existing data resources, and the collection of new data focused on the description of family processes and on understanding the causes of changes and differences in these family processes. Many of the details and the precise content of these studies and data collections are not specified here; these are details that should be provided as part of specific research applications. Nevertheless, this report has identified important and promising areas of inquiry and strategies for analysis and data collection. As requested by NICHD, our recommendations focus both on immediate and longer-term goals; they include projects that require modest investments and those that require substantial ones. Moving forward on these initiatives in a very competitive research environment will require innovative research applications and strong efforts to communicate their importance to the research community, potential funders of research (such as NICHD), and to the public at large. Our goal here is to stimulate this discussion and to provide some ideas and frameworks that provide some momentum for these discussions.

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## APPENDIX 1.A

### Changing Context of Relationships

The three working groups within the Explaining Family Change Project Team, fertility, or becoming a parent; intimate unions; and generational relationships, began our tasks by recognizing the common context in which changes in each aspect of family life have occurred. We describe key dimensions of social change that likely affect all domains of family life. Some of these societal changes occurred for reasons that are largely unconnected to family choice but may have had profound impacts on it. Others are social changes related to family choice or mass changes in the family that have had rippling effects on many aspects of family life. We address these two types of changes in turn.

#### *Social Changes Beyond Family Choice*

There are a number of important changes in society that have their origin in factors that are beyond family choices. Many of these have their origin in technological changes and the accumulation of knowledge that has occurred over time. Others have their origins in social movements in which the focus was on correcting social ills, and concern over effects on families was a secondary consideration. However, although these factors did not arise to address family issues, their impacts on families can be profound. We review these here.

*Technological change*—Humans have learned to accomplish their goals more rapidly, cheaply, and reliably. Through the twentieth century, technological change impacted the lives of people in profound ways. The ease with which individuals can transverse long distances has increased with less expensive, faster, and more reliable transportation. Air travel, once restricted to the wealthy, has become widespread among middle-class Americans, offering travel ten times faster than by rail or road. Communications technology has also changed the meaning of distance. Expensive telephone landlines and government-regulated rates have given way to a plethora of communications options that allow middle-class Americans the ability to communicate cheaply and reliably. Operator-assisted long-distance calls have been replaced by worldwide direct-dial calls over landlines, cell phones, and Internet devices. Medical technology has also advanced rapidly, and many diseases that were fatal 50 years ago are now being treated as chronic conditions managed by drug therapy. Technology is embedded in many consumer products, increasing their quality and reducing cost.

Technological change has also changed the way families operate. Fifty years ago it was common for multiple generations to live within the same household or in the same neighborhood. Access to fast, cheap, and reliable transportation and communications have enabled families to live apart, as they can more easily stay in touch through e-mail, cell phones, and video phones. However, at the same time, families may be less close because they don't see each other at meals, have non-overlapping work or leisure schedules that compete with time for family members, or spend non-work time at home on a computer. Internet technologies such as instant messaging are changing the way in which children communicate with each other and raise new concerns for parents. For parents of all ages and children from early adolescence into adulthood, cell phones have dramatically increased communication. The Internet is also changing how couples meet and date. Further, innovations in home production, labor-saving devices, and the growth of condominiums have made independent living more accessible for elderly and single individuals, and assisted-living facilities have helped many elderly persons maintain their independence, reducing the need for family assistance. In short, technological changes have influenced many aspects of family life.



*Increases in life expectancy*—In the past 100 years, life expectancy at birth in the United States increased from just over 50 years to more than 75 years. Although increased nutrition was largely responsible for this change in the first half of the twentieth century, medical technology is increasingly extending life, particularly life at older ages. During the past 30 years, advances in cardiovascular care and cancer treatment have had particularly large impacts on survival rates of older Americans.

This increase in life expectancy means that there will be more three- and four-generation families. Grandparents will have more years to interact with grandchildren, make transfers directly to their grandchildren, and affect their life outcomes. Similarly, great-grandparents will no longer be uncommon. Increased life expectancy will also affect the provision of care to elderly parents and grandparents. How these changes will play out in intergenerational relationships and individuals' understanding of their family obligations is as yet unknown. At the same time, many adults increasingly find themselves taking care of parents while simultaneously having responsibilities for their own children. How parents, especially mothers, balance this dual responsibility with work life has become a topic of major concern.

*Changes in economic structure*—Entwined with technological changes are enormous changes in the structure of the U.S. economy over the past one hundred years, especially during the past 30 years. Since 1900, the fraction of persons employed in farming has declined from 60% to 6%. Today, there are five times as many people employed in peripheral farm-related activities, such as retail and wholesale services, than in traditional farming and closely related farm businesses, such as agricultural processing and agricultural services. During the first 50 years of the twentieth century, manufacturing employment grew rapidly, and by 1950 over 30% of employment was in the manufacturing sector. By 2006, less than 11% of U.S. employment was in manufacturing. At the same time there was enormous growth in the service sectors, especially in sectors such as education, health care, and computer software development. The decline in industries that require strength and the increase in those that require knowledge occurred for many reasons, including technological advances, expansion of international trade, and increased migration flows. Although these factors advanced beyond family choices, they likely had a great deal of influence on them.

One example of how these changes may have affected the family is in Gary Becker's theory of household specialization. Becker's theory is based on the notion that because women bear children and have a greater biological investment in them, women specialize in home production while men specialize in market production. Since the era when many models such as Becker's were conceived, industries that depended on male upper body strength have declined as work has moved to a knowledge-based economy. This change is one potential source for the rise of female labor force participation since the 1950s, which has had large ramifications on family life. The rise of a knowledge-based economy also has likely increased the returns to schooling and has led to income inequality between subgroups of those who can successfully engage in this new economy and those who cannot. Perhaps the most important theory from the 1980s and 1990s linked out-of-wedlock childbearing to the erosion of manufacturing and similar jobs that had paid high wages to men with low skills. The loss of economic opportunities for low skilled men reduced their attractiveness as potential husbands.

*Changes in laws, programs, and institutions*—Beginning in the early 1960s, government enacted a series of antidiscrimination and antipoverty laws and policies first during the administration of President John F. Kennedy and then through Lyndon Johnson's administration. In general, these policies were enacted to address widespread racial and social injustices, and how the policies might affect women or families was not a major focus of these legislative and policy changes. Title VII of the Civil Rights Act stands as an example. The Civil Rights Act was intended to address calls for racial justice and equality in the United States. Although protection

from discrimination on the basis of sex was included from the beginning, gender inequality was not the principle reason for its passage. In original versions of the bill, protection from discrimination on the basis of sex was not included. The conventional view is that provisions for sexual equality were included because of a confluence of support from lawmakers who genuinely viewed sex discrimination as a serious problem (including the amendment's sponsor, Representative Howard Smith of Virginia) and Southern politicians who recognized that much of the public did not equate sex and racial discrimination, and that extending antidiscrimination policy to include gender differences in employment and wages might kill the Civil Rights Act altogether. Although antidiscrimination policy was extended to women late in the legislative process, fully one-third of the cases brought to the Equal Employment Opportunity Commission in the first year after enactment alleged sex discrimination.

President Johnson also championed policies to fight the War on Poverty prompted by a national poverty rate that exceeded 19%; it included expanding coverage of existing programs as well as implementing new programs. The Aid to Dependent Children program, started under President Franklin Roosevelt to aid the children of widows in the 1930s, was expanded in 1968 to allow states to use federal funds to aid any other person in the home essential to the child, the so-called "essential persons" clause. This expanded the program to support millions of single parents of any child eligible for aid. In 1965, the Social Security Act converted Social Security to a pay-as-you-go system and established Medicaid and Medicare for low-income families and the elderly. New programs such as Head Start and Job Corps remain to this day the legacy of the War on Poverty.

In 1965, landmark legislation was passed reforming the laws that governed immigration to the United States. The Immigration and Nationality Act abolished the national-origins quota system established by the Immigration Act of 1924. The 1965 law was passed in response to evidence that immigrants from three countries—Ireland, the United Kingdom and Germany—comprised the vast majority of those admitted under the quota system. With national origin no longer a consideration, the locus of immigration shifted from Europe to Latin America and Asia.

Although these policies occurred mostly outside the realm of family policy, collectively they likely had large ramifications on family choice. Antidiscrimination policies that extended to sex discrimination meant women could be more assured of equal pay for equal work and could enter higher-paying jobs traditionally filled by men. This may have been part of the reason for increased participation by women in the labor force. On the other hand, the expansion of the welfare state gave many women with children a means of financial support other than from a husband. Although a lively debate persists, there is evidence of modest effects of welfare on marriage and family structure. Finally, immigration reform changed the composition of the U.S. population and increased the pool of workers in sectors such as child care. There is evidence that immigrants have lowered the cost of child care in the United States. These programs and policies also have affected intergenerational relationships; for example, by increasing the need for adult children to assist parents in obtaining health care through government-sponsored medical programs for the elderly. Groups differ in the background, skill, and economic resources they bring to decision making about care. For example, racial, ethnic and immigrant groups may differ not only in their eligibility for government assistance but also in the value they place on providing care within the family.

### *Changing Family Choices*

A number of social changes are the result of changing family choice. There are also some mass changes in the family. Both of these have had rippling effects on many aspects of family life.

*Increasing age at first marriage*—There has been a dramatic rise in the age at first marriage. For women, the median age at first marriage has increased from 20.3 years in 1960 to 25.3 years in 2003. There are many theories for why this has occurred, but most scholars agree that at least part of this trend is associated with women’s increasing desire to participate in the labor market.

For whatever reason, rises in the age at first marriage have rippling effects on parent-child relationships, union formation and dynamics, and intergenerational relationships. Although marriage has been delayed, men and women continue to form and dissolve relationships outside of formal marriage. As the number of years outside of formal marriage has increased, the importance of these dating and cohabitation relationships has increased as well. Bumpass and Sweet (1989) show that of marriages in 1965–1974, 9% started as cohabitation relationships; Bumpass and Lu (2000) report that 60% of first marriages in 1990–1994 started as cohabitation relationships. There has also been a commensurate rise in premarital sex. Data from the NSFG suggest that 28.3% of unmarried women aged 15 to 19 had had sex in 1970; by 1988 this rate had increased to 51.8%. Because of these trends, relationships between children and parents—particularly between fathers and children—may have been greatly altered. In 1960, fewer than 10% of births were to unmarried women; by 1990 the fraction was near 40%, with the rate for African-American women in excess of 75%. Delays in marriage and childbearing also mean that parents are older when their children are born and the space between generations is larger. This may partially offset the increase in multigenerational families and may alter caregiving over the life course, as people enter and exit roles of donor and recipient at different points than previously. More middle-aged adults are likely to be “sandwiched” by responsibilities, caring for children in their home while also caring for older parents, most of whom live in another household. Improvements in healthy life expectancy may mean that the middle generations are “on call” to provide help even if the call rarely comes.

*Shrinking family size*—In the late 1950s, the number of children per woman peaked at 3.8. Since then through the mid-1980s, the number of children per woman declined steadily. Today, the number stands at just above two children per woman. Clearly, family size affects all dimensions of family life. Smaller families increase the ability to invest more in each child. This includes financial expenditures such as on schooling and clothing, but also time investments. Ethnographic work has documented the extreme “scheduling” of children today and its impact on maternal commitments. Smaller families, and particularly the rise in the number of childless couples, shift the focus of relationships away from the value of rearing children together to the value of being together; this clearly might impact relationship dynamics, although there is as yet a paucity of research that documenting this trend. There is much we do not know about the relationship between family size and intergenerational relationships, despite the centrality of this topic in demographic theories of fertility decline. Fewer children may create less competition for parent-to-child assistance, leading to greater investment in children and perhaps changes in developmental patterns. However, with fewer siblings, adult children will have fewer options for sharing the responsibility of parental caregiving. The lack of potential caregivers may reduce uncertainty about an adult child’s future role and may lead to earlier planning or alterations in career paths or childbearing.

*Women in the workforce*—The enormous rise in female labor force participation and especially the rise among married women was perhaps the most profound change in U.S. society in the twentieth century. In 1948, about 17% of married mothers worked. By 1995, their labor force participation rate reached 70% and has remained above 70% since that time (Mosisa and Hipple 2006). By 2005, work was the norm for mothers even with young children; almost 60% of women with children under age 3 worked.

Increased participation of women in the labor force affects families at each life stage. As more mothers of infants and young children enter or remain in the labor market, the need for child care increases. Some of this need will likely be filled by grandparents or other relatives, perhaps strengthening the ties between the oldest and youngest family members, but some will be provided by paid caregivers, in part because grandmothers are more likely to be employed as well.<sup>1</sup> Similarly, because caring for elderly parents has typically been a role played by daughters, the increased participation of women in the labor force will likely limit the time they have to provide care. At the same time, however, familial resources available to children and potentially needy elderly parents will increase (e.g., by increasing the quality of education available to the child or the quality of care available to the elderly parent). The net effect of these changes for individual family members' welfare is unclear, as is whether the changes are good or bad for families as a whole. It is likely that the implications of women's increased labor force participation for generational relationships vary greatly across families, depending on family members' other needs and resources and the cultural understandings of women's paid work.

The shift of women into the labor market also has implications for assortative mating of couples and relationship dynamics. Classical models of assortative mating relied on whether attributes were used in joint home production or were used in specialized production at work or in the home. As this specialization has broken down, what each person searches for in a mate has likely changed. It is also possible that the rising economic power of women may change the bargaining position of women within relationships. There is now a wide body of evidence that consumption patterns of couples differ considerably as more control of resources shifts from the "wallet" to the "purse." Little is known about how this shift affects the day-to-day dynamics of relationships.

*Greater family instability*—What constitutes an American family has changed greatly. In 1960, there was less than one divorce per 100 married women. By 1978, this number had increased to more than 2.2 divorces per 100 married women. Although this rate has declined steadily, the annual divorce rate remains twice as high today as in 1960. The rate of childbearing outside of marriage also has increased, from approximately 10% of births in 1960 to over 40% since 2000. Cohabitation has gone from a rare occurrence to the modal transition into marriage. Further, because of the turnover in relationships, the number of women who have children with more than one father has risen as well.

This greater family instability makes parent-child and partner relationships considerably more complex. Childrearing is increasingly done by parents that do not reside together, making coordinating resources and decisions more complicated; these decisions are also made with each parent often having obligations to new partners and new stepchildren. Spouses usually care for each other in old age, and at widowhood, adult children become potential caregivers, yet divorce and nonmarital childbearing mean that some older parents will not have a spouse to look after them if they become ill or infirm. Cohabiting partners may not provide the same type of assistance as spouses, but how cohabiting partners and adult children divide responsibilities is uncharted territory. Norms of obligation, altruistic behaviors, and exchange and reciprocity may differ in relationships that are nonbiological or are not enforced by legal obligations. We know little about the long-term nature of stepfamily relationships and the conditions under which stepfamily members are viewed as kin. Some evidence suggests that individuals tend to feel a diminished obligation to provide transfers to nonbiological and nonnuclear family members, yet the number of stepfamilies is growing. Also, with divorce and multipartner fertility, parents are connected to multiple partners and multiple sets of children and grandchildren, each of whom

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<sup>1</sup> See the recent article in the *New York Times* on the importance of grandmothers as child-care providers. <http://www.nytimes.com/2007/05/10/fashion/10granny.html>.

may have competing sets of obligations. Thus, although the number of ties appears to be increasing, the strength of each tie may be less. It remains to be seen how these changes affect family welfare and even whether these changes will themselves alter cultural understandings of what “family” means. Where support from biological family members is inadequate, fictive kin may play a more important role in providing support.

### *Race, Ethnicity, Immigration, and Class*

There are significant racial, ethnic, immigrant, and class differences in the demographic parameters that structure U.S. families. In 2002, the median age at first marriage for white women was 24.7 years, while for African-American women the median age was 28.1 years. White women were on average 28 years old when having their first birth; African-American women were 25.2 years old. This suggests that childbearing in the African-American community has become decoupled from marriage to a larger degree than in the white community. In fact, while about 25% of births to white women are outside of marriage, nearly 70% of births to non-Hispanic black women are outside of marriage. On average, compared with white women, African-American women have 0.2 more children over their lifetime and Hispanic women have 0.7 more children.

In the United States and other developed countries, there is clear evidence that family-related behaviors and outcomes have also become increasingly differentiated by class and/or socioeconomic status over the past 30 to 40 years. For example, the timing of fertility and its link with marriage have become increasingly different by class, with more educated, wealthier, and upper-class groups delaying their fertility to older ages and having most of their children within marriages. Similarly, there has been growing difference by socioeconomic status in the incidence of divorce among married couples, with divorce rates rising much more rapidly among lower socioeconomic status groups compared with those for higher-status groups. Finally, although the incidence of older Americans coresiding with their adult children and grandchildren has declined during the past 40 to 50 years, this decline has been much higher among higher socioeconomic status groups than among lower-status groups.

Research findings about white, European-origin, middle-class families may not generalize to other groups. Issues of paternal absence are greater in the African-American community, and large family sizes among Hispanics affect potential investments per child. The earlier age of childbearing for women with less education and for minority women leads to class and racial differences in the ages and life stages at which women become grandmothers. With increased immigration, the population of the United States is becoming more ethnically diverse; families may span national borders both within and across generations, and racial-ethnic differences may also have an overlay of class or socioeconomic differences. Variation in the timing and number of family transitions through union formation and dissolution also contribute to racial, ethnic, and class differences in who is counted as kin and in the role of fictive kin. Cultural differences among immigrants and the native-born also affect the expected roles that women and men play in families and the responsibilities of younger family members relative to their elders.

These demographic changes are both causes and consequences of changes in intergenerational relationships. They vary across groups within the United States in ways that are likely to affect the health and well-being of individuals and their families. This demographic variation also occurs in a changing cultural and social context that affects how families are able to interact, introduces new ways of understanding intergenerational obligations, and creates new needs for caregiving across generations. Although there are alternative explanations for these patterns—e.g., the rising inequality of income and wealth across groups in the United States stemming from the increasing importance of education and the increasing pressures of economic

globalization—it is clear that understanding these trends is at the core of understanding the ways in which the institution of the family will change in the future.

### *Changing Institutions, Laws, and Public Programs Related to Family Choice*

Above we emphasize a set of changing institutions, laws, and public programs that were neither intended to directly influence family choices nor were particularly influenced by changing family choices, yet they may have had powerful effects on families after their adoption. There are also a set of institutions, laws, and public programs that were either directed at addressing the rising concerns of families or were adopted because of changing family choices.

On January 1, 1970, California enacted the Family Law Act. This act was the first state law that allowed divorce to occur only on no-fault grounds. By 1985, eight states had adopted “pure” no-fault divorce. An additional 22 states added “marital breakdown” to already existing fault-based grounds. This movement toward unilateral divorce reflected several social changes. First was the recognition of society’s movement toward gender-neutral responsibility within marriage. Although men had traditionally been seen as the breadwinner and women as the home provider, changes in family choice by 1970 had eroded these roles. The movement toward no-fault divorce was a recognition that men and women were responsible for both roles within marriage and hence self-sufficiency of each party was expected in divorce, as was joint custody and financial support of children. The rapid movement to no-fault divorce also reflected a practical reality for the court system—the caseloads for the courts had risen precipitously. Between 1960 and 1970, prior to passage of any no-fault divorce laws, divorce rates had risen more than 50%. Following the movement toward no-fault divorce, the Federal Child Support Enforcement Agency was established in 1975 to help fund state child-support enforcement programs to establish paternity and collect and distribute child-support payments. This was in recognition of the many children growing up without two coresiding parents.

There have also been landmark changes in U.S. laws that affected the ability of women to gain access to contraceptives. In 1965, the Supreme Court overturned a Connecticut law of 1879 that made the distribution and use of birth control a crime. This state law stemmed from the Comstock Act of 1873, which made it illegal to use the mail to distribute “obscene” material. In *Griswold v. Connecticut*, the Supreme Court overturned the conviction of Estelle Griswold, the executive director of Planned Parenthood of Connecticut, who had been convicted of distributing birth control information to married couples. One significant aspect of the decision was Justice William O. Douglas’s declaration that the Connecticut statute infringed on the constitutionally protected right to privacy of married persons.

More recently, in recognition of the rising number of cohabitating couples and in response to the rising debate over gay marriage, states have adopted new rights for domestic partners who coreside outside of marriage. The first civil unions in the United States were enacted by Vermont in 2000. Since then, Connecticut and New Jersey also enacted civil union laws. Although California, Maine, and the District of Columbia do not sanction civil unions, the domestic-partnership laws in these jurisdictions effectively grant partners rights that are parallel to marriage. These legal changes have given families access to greater choice in family formation and dissolution than ever before.

### *Technical Change Related to Family Choice*

Some technological changes have directly impacted family choice or have been directly impacted by social changes in family patterns. The advent of birth control pills serves as a prime example. The birth control pill was developed by Gregory Pincus, a physician and biologist who in the 1930s had discovered that hormone regulation prevented ovulation in rabbits. Margaret Sanger, a lifelong advocate of women’s rights and birth control, and Katharine McCormick funded Pincus

to develop a pill for humans. In 1960, the FDA approved the pill for contraception and quickly became popular.

The birth control pill had important affects on family choice. Because its effects were reversible, it allowed women to control and space births to more conveniently fit with other objectives. Because it was effective, it allowed women to separate sexual activity from childbearing. It was also a form of birth control that was entirely under the control of women. A set of scholars believe that the birth control pill was the origin of a host of both positive and negative changes for women since 1960, including increased educational attainment (Goldin and Katz 2000) and rises in out-of-wedlock births (Akerlof et al., 1996).

There have been a host of other innovations that have arisen to support changes in the family that often reinforce trends in place at the time. For example, a number of labor-saving devices for household work have been developed. Bianchi and Sayer (2000) report that although labor force participation of women increased over the last 40 years, time spent with children barely changed; what has changed is time spent doing household work. No doubt this is at least in part aided by the greater efficiency with which household chores can now be accomplished.

### *Summary*

As the above examples attest, there are numerous fundamental changes in the environment that are likely altering the ways in children, parents, and extended families interact with each other. Some of these changes have occurred far enough in the past that we are already able to see the effects on family behaviors; others are new or expected changes whose main impacts are yet to be felt. In addition, we imagine that there will be many more changes with which families will grapple in the future, changes we can only begin to imagine now.

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## APPENDIX 1.B

### List of Dates, Locations, Agendas, and Participants at Full Project Meetings

#### Executive Committee

S. Philip Morgan, PI*	Thomas A. DiPrete*
Duke University	Columbia University
Caroline Bledsoe	V. Joseph Hotz*
Northwestern University	UCLA
Suzanne M. Bianchi*	Seth Sanders*
University of Maryland	University of Maryland
P. Lindsay Chase-Lansdale	Judith A. Seltzer*
Northwestern University	UCLA
	Duncan Thomas*
	UCLA

\*Original co-investigators

#### Working Groups

##### *Parenthood*

Chris Bachrach, NICHD  
Hans-Peter Kohler, Univ. of Pennsylvania  
Jenna Johnson-Hanks, UC-Berkeley  
S. Philip Morgan, Duke Univ.

##### *Unions*

Peter Brandon, Australian National Univ.  
Thomas A. DiPrete, Columbia Univ.  
Lynne Casper, Univ Southern Calif.  
Ron Lesthaeghe, Vrije Universiteit Brussels,  
Univ. of Michigan, UC-Irvine  
Seth Sanders, Univ. of Maryland  
Pamela J. Smock, Univ. of Michigan

##### *Generations*

Suzanne Bianchi, Univ. of Maryland  
V. Jeffrey Evans, NICHD  
V. Joseph Hotz, UCLA  
Kathleen McGarry, UCLA  
Judith A. Seltzer, UCLA

##### *Other NICHD Staff*

Rosalind Berkowitz, King  
Susan Newcomer, Project Officer  
Susan Cortes-Shrank, Contracting Specialist



**Explaining Family Change Meetings and Workshops**

**MEETING 1**

June 2004  
University of Maryland

**MEETING 2**

October 2004  
University of Maryland

**MEETING 3**

February 2005  
University of California, Los Angeles

**MEETING 4**

October 2005  
University of Maryland

**MEETING 5**

February 2006  
University of California, Los Angeles

**MEETING 6**

March 31-April 1, 2007  
Philadelphia, PA

**MEETING 7**

September 2006  
University of Southern California

**MEETING 8**

January 8–12, 2007  
Tucson, AZ

**MEETING 9**

June 2007  
Duke University

**MEETING 10**

August 7, 2007  
New York, NY

**MEETING 1**  
June 3–4, 2004  
University of Maryland  
**Agenda**

**Thursday, June 3**

- 9:00 a.m.            Agenda and Tasks: S. Philip Morgan
- 9:15-9:45            Project Overview: Why We Did What We Did  
Presenter: Joe Hotz  
Presider: S. Philip Morgan
- 9:45-10:30          NICHD and Reviewer Criticisms & Feedback  
Presenter: Lynne Casper  
Presider: S. Philip Morgan
- 10:30-11:00        Break
- 11:00-12:00        Decision-Making  
Presenter: Duncan Thomas and Joe Hotz  
Discussant: Suzanne Bianchi  
Presider: Judith Seltzer
- 12:00-1:30         Lunch: Sandy Hofferth, University of Maryland, discusses the Family and  
Child Well Being Research Network
- 1:30-3:15            Context/Biology  
Presenters: Caroline Bledsoe/Seth Sanders  
Discussants: Thomas DiPrete/S. Philip Morgan  
Presider: Judith Seltzer
- 3:15-3:30            Break
- 3:30-6:00            Unions/Fertility/Family and Work  
Presenters: Thomas DiPrete/S. Philip Morgan/ Suzanne Bianchi
- 6:00-6:30            Discussants: Judith Seltzer/Joe Hotz/Duncan Thomas  
Presiders: Suzanne Bianchi/S. Philip Morgan

**Friday, June 4**

- 8:30-10:15          Children/Intergenerational  
Presenters: Lindsay Chase-Lansdale/Judith Seltzer and Suzanne Bianchi  
Discussants: Suzanne Bianchi/Seth Sanders  
Presider: S. Philip Morgan
- 10:15-10:30        Break
- 10:30-12:30        Number and topics of work groups; identify leaders; procedures  
Presider: S. Philip Morgan

- 12:30-1:30      Lunch: Chris Bachrach will discuss the National Children Study
- 1:30-2:15      Continue number/topics of work groups; leaders, procedures  
                  Presider: S. Philip Morgan
- 2:12-3:15      Plan lists/procedures for inviting working group members  
                  Presider: S. Philip Morgan
- 3:15-4:15      Plan next steps; agenda for next meeting  
                  Presider: S. Philip Morgan

### **Family Change Project Team**

Christine Bachrach, National Institute of Child Health and Human Development  
Suzanne Bianchi, University of Maryland  
Caroline Bledsoe, Northwestern University  
Lynne Casper, National Institute of Child Health and Human Development  
P. Lindsay Chase-Lansdale, Northwestern University  
Thomas DiPrete, Columbia University  
V. Joseph Hotz, University of California, Los Angeles  
S. Philip Morgan, Duke University  
Seth Sanders, University of Maryland  
Judith Seltzer, University of California, Los Angeles  
Duncan Thomas, University of California, Los Angeles

**MEETING 2**  
October 18–19, 2004  
University of Maryland

**Agenda**

**Monday, October 18**

- 9:00-9:15 Welcome, Introductions, Announcements (Suzanne Bianchi)
- 9:15-10:30 Understanding Family Change and Variation: Session 1  
Chair: Seth Sanders  
Presenter: Baruch Fischhoff
- 10:30-10:45 Break
- 10:45-11:45 Discussion of Key Questions with Baruch Fischhoff  
Chair: Thomas DiPrete
- 11:45-12:45 Lunch  
Kathryn Edin comments on the topic of Family Variation  
Chair: Judith Seltzer
- 12:45-2:00 Understanding Family Change and Variation: Session 2  
Chair: Lindsay Chase-Lansdale  
Presenter: Robert Pollak
- 2:00-2:15 Break
- 2:15-3:15 Discussion of Key Questions with Robert Pollak  
Chair: Suzanne Bianchi
- 3:15-4:00 Follow-up Discussion with Baruch Fischhoff  
Chair: Seth Sanders
- 4:00-5:30 Executive Session: Taking Stock  
Chair: Philip Morgan

**Tuesday, October 19**

- 8:45-9:00 Announcements Suzanne Bianchi
- 9-10:15 Understanding Family Change and Variation: Session 3  
Chair: Caroline Bledsoe  
Presenter: Thomas Fricke
- 10:15-10:30 Break
- 10:30-11:45 Discussion of Key Questions with Thomas Fricke  
Chair: V. Joseph Hotz
- 11:45-12:30 Family Variation - Comments by Suzanne Randolph and Audrey Singer  
Chair: Suzanne Bianchi
- 12:30-1:30 Lunch

Follow-up Discussion with Thomas Fricke and Robert Pollak  
Chair: Suzanne Bianchi

1:30-2:30 Executive Session: What have we learned?  
Chair: Philip Morgan

2:30-2:45 Break

2:45-3:45 Executive Session: Next Steps  
Chair: Suzanne Bianchi

3:45-4:30 Executive Session: Pilot Projects  
Chair: Judith Seltzer

### **Family Change Project Team**

Christine Bachrach, National Institute of Child Health and Human Development  
Suzanne Bianchi, University of Maryland  
Caroline Bledsoe, Northwestern University  
Lynne Casper, National Institute of Child Health and Human Development  
P. Lindsay Chase-Lansdale, Northwestern University  
Thomas DiPrete, Columbia University  
V. Joseph Hotz, University of California, Los Angeles  
S. Philip Morgan, Duke University  
Seth Sanders, University of Maryland  
Judith Seltzer, University of California, Los Angeles  
Duncan Thomas, University of California, Los Angeles

### **Invited Guests**

Kathryn Edin, University of Pennsylvania  
Baruch Fischhoff, Carnegie Mellon University  
Thomas Fricke, University of Michigan  
Sandra Hofferth, University of Maryland  
Robert Pollak, Washington University  
Suzanne Randolph, University of Maryland  
Audrey Singer, Brookings Institution

**MEETING 3**  
February 17–18, 2005  
University of California, Los Angeles

**Agenda**

**Thursday, February 17**

- 8:30 Light breakfast available in meeting room
- 9:00 - 9:15 Introductions and Overview  
Judith Seltzer
- 9:15-10:30 *Avshalom Caspi* presentation  
Presider: P. Lindsay Chase-Lansdale
- 10:30 Break
- 10:45-12 Questions and discussion with Caspi  
Presider: P. Lindsay Chase-Lansdale
- 12:00 -1:30 *Thomas Bradbury* informal presentation at lunch  
Presider: Judith Seltzer
- 1:30-2:45 *Philip Cowan and Carolyn Pape Cowan* presentation  
Presider: Duncan Thomas
- 2:00-2:45 Break
- 3:00 -4:15 Questions and discussion with Cowan and Cowan  
Presider: Duncan Thomas
- 4:15-5:30 Closed session for Family Change Project Team  
Review of agenda for next day. Working group reports.  
Presider: S. Philip Morgan

**Friday, February 18**

- 9:00 -10:15 *Linda M. Burton*, “All Things Considered?: Ethnography and Assessing the Nuances of Family Life”  
Presider: Suzanne Bianchi
- 10:15 Break
- 10:30-11:15 Questions and Discussion with Burton  
Presider: Bianchi
- 11:15-1:30 Reactions from invited participants  
Presider: V. Joseph Hotz  
(Discussion continues. Lunch served 12-1:30 p.m.)
- 1:30 – 4:00 Closed session for Family Change Project Team  
Presider: S. Philip Morgan

### **Family Change Project Team**

Christine Bachrach, National Institute of Child Health and Human Development  
Suzanne Bianchi, University of Maryland  
Caroline Bledsoe, Northwestern University  
Lynne Casper, National Institute of Child Health and Human Development  
P. Lindsay Chase-Lansdale, Northwestern University  
Thomas DiPrete, Columbia University  
V. Joseph Hotz, University of California, Los Angeles  
S. Philip Morgan, Duke University  
Seth Sanders, University of Maryland  
Judith Seltzer, University of California, Los Angeles  
Duncan Thomas, University of California, Los Angeles

### **Other EFC Participants**

Teneshia Alston, National Institute of Child Health and Human Development  
Sarah Edgington, University of California, Los Angeles  
Angela Valdovinos, Northwestern University

### **Invited Guests**

Linda Burton, Pennsylvania State University  
Thomas Bradbury, University of California, Los Angeles  
Avshalom Caspi, University of Wisconsin  
Carolyn Pape Cowan, University of California, Berkeley  
Philip Cowan, University of California, Berkeley  
Janet Currie, University of California, Los Angeles  
Phyllis Ellickson, RAND  
Andrew Fuligni, University of California, Los Angeles  
Jenna Johnson-Hanks, University of California, Berkeley  
Anne Pebley, University of California, Los Angeles  
Mark Schuster, University of California, Los Angeles  
Megan Sweeney, University of California, Los Angeles  
M. Belinda Tucker, University of California, Los Angeles

**MEETING 4**  
March 31–April 1, 2005  
Philadelphia, PA

**Thursday, March 31, 2005**

Session at Population Association of America (PAA) Meetings on *Explaining Family Change and Variation*

Chair: S. Philip Morgan, Duke University

Paper 1. Couple Relationships in Economically Disadvantaged Settings, Elijah Anderson, University of Pennsylvania

Paper 2. Constancy and Change in Life Course Development, P. Lindsay Chase-Lansdale, Northwestern University

Paper 3. Explaining Family Change and Variation, V. Joseph Hotz, Duke University

Paper 4. Cross-National Variation in Family Change, Ron Lesthaeghe, Vrije Universiteit Brussels

**Friday, April 1**

Session at PAA Meetings on *Forging the Future in Work, Family, Health and Well-being Research*

Chair: Suzanne M. Bianchi, University of Maryland

Discussant: Lynne M. Casper, National Institute of Child Health and Human Development

*Using a "town hall" format borrowed from IUSSP, this session provides a lively discussion of what we know and what we need to know about the tensions between paid work, family caregiving, and the important domains of union formation, child well-being, intergenerational relationships, and race, gender and class variation. Four leading researchers—Thomas DiPrete (on union formation), Jane Waldfogel (on child well-being), Judith Seltzer (on intergenerational relationships), and Paula England (on race, class, and gender variation in paid work and caregiving)—lay out the major questions. Lynne Casper describes major NICHD initiatives in family change and work and family. We then open the session to exchange with the audience in a series of "one minute questions, one minute responses."*

Paper 1. A Comparative Perspective on Paid Work, Family Caregiving, and Family Formation and Dissolution, Thomas A. DiPrete, Columbia University

Paper 2. Work, Family, Health and Well-Being: What We Know and Don't Know about Outcomes for Children, Jane Waldfogel, Columbia University

Paper 3. Work, Older Families, and Intergenerational Caregiving: What We Know, What We Need to Know, Judith A. Seltzer, University of California, Los Angeles

Paper 4. Work and Family-Related Behavior: What We Know, What We Need to Know about Race-Ethnic, Class and Gender Variation, Paula S. England, Stanford University



**MEETING 5**  
October 13–14, 2005  
University of Maryland

**Agenda**

**Thursday, October 13**

- 9:00-9:15 Welcome, Introductions, Announcements (Bianchi)
- 9:15-10:15 Fertility Group  
Chair: Phil Morgan
1. Philip Morgan (10 minutes) – Overview of Fertility Group Plan of Action
  2. Hans Peter Kohler (10 minutes) – Biology Fertility and Families
  3. Jenna Johnson-Hanks (15 minutes) – Culture and Fertility
  4. Chris Bachrach (10 minutes) – Resources and Fertility Behavior
  5. Philip Morgan (15 minutes) – Contextual Change and Fertility
- 10:15-10:30 Break
- 10:30-12:00 Fertility Group, cont.
6. Morgan & Group (15 minutes) – Chapter 6: An Integrated Model of Fertility Change and Variation
  7. Discussion (55 minutes)
  8. Bachrach & Group (20 minutes) - Deliverables
- 12:00-1:00 Lunch  
Seth Sanders and Phil Morgan discuss Pew dating project
- 1:00-2:45 Generations Group  
Chair: Judy Seltzer
1. Kathleen McGarry (15 minutes)- Overview of her work, unanswered questions in intergenerational research
  2. Discussion (15 minutes) of NIH initiatives related to work of the Generations Group
  3. Discussion of Data Work (PSID – Hotz) (20 minutes)
  4. Brief discussion of Oct 2006 Generations Conference at Penn State (Bianchi and Seltzer) (15 minutes)
  5. Discussion of Key Questions of Generations Group (Bianchi & Group) (30 minutes)
  6. Generations Group Contribution to Contract Deliverables (10 minutes)
- 2:45 – 3:00 Break
- 3:00-5:00 Unions Group, All  
Chair: Tom DiPrete
1. Overview of Unions Group Plan of Action (DiPrete)
  2. Pam Smock
  3. Peter Brandon
  4. Summary of Chapter Outlines and Discussion Questions (Casper and Sanders)
  5. Discussion
  6. Unions Group Contribution to Contract Deliverables

5:00-6:00 Meeting to Discuss Contract Obligations  
Bachrach, Morgan, Bianchi, Seltzer

**Friday, October 14**

8:45-9:00am Announcements (Bianchi)

9:00-10:45 Theory Discussion – Do we need an integrated theory volume? How do we get there?  
Chair: Seth Sanders

10:45-11:00 Break

11:00-12:00 Executive Session: Time Lines, Final Products, NICHD Feedback/Comment  
Chair: Phil Morgan and Chris Bachrach

12:00-1:00 Lunch  
Peter Brandon

1:00-2:30 Wrap Up Session  
Chair: Phil Morgan

2:30-4:00 Breakout into Working Groups

**Family Change Project Team**

Christine Bachrach, National Institute of Child Health and Human Development  
Suzanne Bianchi, University of Maryland  
Caroline Bledsoe, Northwestern University  
Lynne Casper, University of Southern California  
P. Lindsay Chase-Lansdale, Northwestern University  
Thomas DiPrete, Columbia University  
V. Joseph Hotz, University of California, Los Angeles  
S. Philip Morgan, Duke University  
Seth Sanders, University of Maryland  
Judith Seltzer, University of California, Los Angeles  
Duncan Thomas, University of California, Los Angeles

**Other EFC Participants**

Peter Brandon, Australian National University  
Jenna Johnson-Hanks, University of California, Berkeley  
Hans Peter Kohler, University of Pennsylvania  
Kathleen McGarry, University of California, Los Angeles  
Pam Smock, University of Michigan

**MEETING 6**  
February 13–14, 2006  
University of California, Los Angeles

**Monday, February 13**

- 9:00 Welcome, Introductions, Announcements  
Judith Seltzer
- 9:15 Unions Working Group update  
(DiPrete, Chair)  
Introduction of new member: Ron Lesthaeghe  
Background paper posted on EFC Secure Web Page
- 10:30 Generations Working Group update (Bianchi, Chair)
- 12:00 Lunch
- 12:15 Caroline Bledsoe, “High Fertility Gambians in Low Fertility Spain: Mutually  
Entailed Lives across International Space”  
Paper posted on EFC secure web page
- 1:15 Break
- 1:30 Fertility/Parenting Working Group update (Morgan, Chair)  
Discussion of “Social Structure, Social History, and the American Family”  
Paper posted on EFC secure web page
- 3:30 Break
- 3:45 Update on DBSB long-range planning (Bachrach)
- 4:00 Update on general EFC business (Morgan)
- 4:30 Full group adjourns
- 4:30-5:30 Subgroup meeting to discuss contract obligations (Bachrach, Morgan, Bianchi,  
Seltzer)

**Tuesday, February 14**

- 8:30 Announcements and plan for the day (Seltzer)
- 8:45 Standards of evidence discussion (Hotz)
- 10:45 Break
- 11:00 Taking stock, next steps, planning for final recommendations (Morgan)
- 12:00 Boxed lunch in working groups
- 1:00 – 4:00 Working group meetings

### **Family Change Project Team**

Christine Bachrach, National Institute of Child Health and Human Development  
Suzanne Bianchi, University of Maryland  
Caroline Bledsoe, Northwestern University  
Lynne Casper, University of Southern California  
P. Lindsay Chase-Lansdale, Northwestern University  
Thomas DiPrete, Columbia University  
V. Joseph Hotz, University of California, Los Angeles  
S. Philip Morgan, Duke University  
Seth Sanders, University of Maryland  
Judith Seltzer, University of California, Los Angeles  
Duncan Thomas, University of California, Los Angeles

### **Other EFC Participants**

Sarah Edgington, University of California, Los Angeles  
V. Jeffery Evans, National Institute of Child Health and Human Development  
Jenna Johnson-Hanks, University of California, Berkeley  
Hans-Peter Kohler, University of Pennsylvania  
Ron Lesthaeghe, Vrije Universiteit Brussel and University of Michigan  
Kathleen McGarry, University of California, Los Angeles  
Emily Wiemers, University of California, Los Angeles

*Appendix 1.B continued*

**MEETING 7**  
September 15, 2006  
University of Southern California

**Agenda**  
**September 15, 2006**

8:30–8:40	Announcements and discussion of agenda (Morgan, Bianchi, Seltzer)
8:40–9:15	Discussion of next steps by the Unions Group (DiPrete, Seth, Casper, Smock)
9:15–9:55	Update of Intergenerational Group plans (Seltzer, Bianchi, Hotz)
9:55–10:00	Break
10:00–10:40	Update of Parenthood Group plans (Bachrach, Johnson-Hanks, Kohler, Morgan)
10:45–11:00	Preferences Conference Plans (Sanders, Hotz, Thomas) & Lunch
11:00–11:30	Discussion of Tucson meeting (Seltzer, Bianchi, Morgan)
11:30–12:00	Final meeting at Duke, Preliminary Decisions (Morgan)
12:00–5:00	Working group meetings

**Family Change Project Team**

Christine Bachrach, National Institute of Child Health and Human Development  
Suzanne Bianchi, University of Maryland  
Caroline Bledsoe, Northwestern University  
Lynne Casper, University of Southern California  
P. Lindsay Chase-Lansdale, Northwestern University  
Thomas DiPrete, Columbia University  
V. Joseph Hotz, University of California, Los Angeles  
S. Philip Morgan, Duke University  
Seth Sanders, University of Maryland  
Judith Seltzer, University of California, Los Angeles

**Other EFC Participants**

Kate H. Choi, University of California, Los Angeles  
Sarah Edgington, University of California, Los Angeles  
V. Jeffery Evans, National Institute of Child Health and Human Development  
Jenna Johnson-Hanks, University of California, Berkeley  
Rosalind King, National Institute of Child Health and Human Development  
Ron Lesthaeghe, Vrije Universiteit Brussel,  
University of Michigan, University of Californai-Irvine  
Kathleen McGarry, University of California, Los Angeles  
Pamela Smock, University of Michigan

**MEETING 8**  
January 8–12, 2007  
Tucson, AZ

**Agenda**

**Monday, January 8, 2007**

Moderator: Judy Seltzer

- 8:00 Breakfast: Introduction and Logistics (Phil Morgan)
- 8:30–9:00 1) Report from the Planning Committee: Goals for the week, strategy for use of time in Tucson, production of final report (Judy Seltzer)  
2) Taking stock of where we started – Principles, key concepts, life cycle orientation (Judy Seltzer)
- 9:00–9:15 Break
- 9:15–11:00 Moderator: Phil Morgan: Discussion of integrated document, what we know, don't know, key questions (Joe Hotz and Tom DiPrete)
- 11:00-12:00 Review of document (on own)
- 12:00–2:00 LUNCH - Working Groups meet over lunch to discuss integrated document
- 2:00–3:45 Moderator: Suzanne Bianchi Discussion of what we know, don't know, and key questions. Reactions to document.
- 3:45–4:00 Break
- 4:00–5:30 Moderator: Joe Hotz: Discussion of integrated recommendations (Suzanne Bianchi). Document to be distributed at meeting.
- 5:3–6:00 Update on NIH initiatives and federal data initiatives, how to coordinate our recommendations with existing or planned data improvements (Chris Bachrach and Joe Hotz)
- 6:00–6:30 Tucson Planning Committee meeting

**Tuesday, January 9 and Wednesday, January 10**

8:00 Breakfast and marching orders (Phil Morgan)

The Planning Committee will hold a short meeting to go over the day's activities and make any needed adjustments to the next day's schedule. Most writing and subcommittee meetings will include members from each of the standing working groups (Parenthood, Unions, Generations). Standing working groups also to meet

- 8:00-4:00 Working Group writing and redrafting by recommendation subcommittees  
Time will be spent by the various Working Groups on their various writing assignments and by the Subcommittees working on re-drafting proposed recommendations/rationales for consideration by the Full Group.
- 4:00-6:00 Consideration of redrafted recommendations and rationales  
Time will be set aside for the Full Group to reconvene to consider redrafts of recommendations/rationales prepared by the subcommittees working on them. Also, any other is-sues relevant for the full group, especially cross-cutting issues that may arise, will be considered.
- 6:00-6:30 Recap and Next Day Planning  
The Planning Committee will hold a short meeting to go over the day's activities and make any needed adjustments to the next day's schedule based on feedback from the working groups and recommendations subcommittees.

#### **Thursday, January 11**

- 8:00-2:00 pm Working Group writing and redrafting by recommendation subcommittees  
Time will be spent by the various working groups on their various writing assignments and by the Subcommittees working on re-drafting proposed recommendations/rationales for consideration by the Full Group.
- 2:00-7:00 pm Final review and consideration of recommendations and rationales and structure and content of final report  
Meeting will revisit all of the recommendations/rationales and the structure and content of the final report to make sure everyone is on-board and in agreement. it will be important to reach closure and agreement at this time so that the subsequent writing can proceed expeditiously.

#### **Friday, January 12**

- 8:00-12:00 Working Group final meetings and writing  
Working Groups will hold any final meetings they wish to have and to continue the work on their sections of the final report.

#### **Family Change Project Team**

Christine Bachrach, National Institute of Child Health and Human Development  
Suzanne Bianchi, University of Maryland  
Caroline Bledsoe, Northwestern University  
Lynne Casper, University of Southern California  
Thomas DiPrete, Columbia University  
V. Joseph Hotz, University of California, Los Angeles  
S. Philip Morgan, Duke University  
Seth Sanders, University of Maryland  
Judith Seltzer, University of California, Los Angeles

#### **Other EFC Participants**

Audrey Beck, Duke University  
Peter Brandon, Australian National University

V. Jeffery Evans, National Institute of Child Health and Human Development  
Sarah Hayford, Duke University  
Jenna Johnson-Hanks, University of California, Berkeley  
Rosalind King, National Institute of Child Health and Human Development  
Hans-Peter Kohler, University of Pennsylvania  
Kathleen McGarry, University of California, Los Angeles  
Pamela Smock, University of Michigan  
Gary Thompson, Duke University



*Appendix 1.B continued*

**MEETING 9**  
**Preliminary Recommendations and Commentary**  
**on Explaining Family Change and Diversity**  
Duke University  
June 7–8, 2007

**Thursday, June 7**

8:30 Registration and Continental Breakfast  
9:00 Welcome and Overview: S. Philip Morgan  
9:15 The EFC Charge. Christine Bachrach, *The View from NICHD*  
Seth Sanders, *EFC's Proposal and Work Plan*

**Session I: *Theory Development by Parenthood Group: A Theory of Conjunctural Action***

Presider: Caroline Bledsoe

9:45 EFC Presentation S. Philip Morgan  
Commentary Andrew Cherlin  
Commentary Shelly Lundberg  
Open Discussion

11:15 Break

11:30 Discussion Group I

12:30 Lunch

**Session II: *Rethinking Change and Variation in Intimate Unions***

Presider: Thomas A. DiPrete

2:00 EFC Presentation Lynne M. Casper and Pamela J. Smock  
Commentary Larry Bumpass  
Commentary Kenneth Dodge  
Open Discussion

3:30 Break

3:45 Discussion Group II

4:45 Adjourn

**Friday, June 8**

8:30 Continental Breakfast  
9:00 Announcements

**Session III: *Change and Variation in Intergenerational and Intragenerational Relationships: Report of the Generations Group***

Presiders: Suzanne Bianchi and Judith A. Seltzer

9:15 EFC            Presentation Suzanne Bianchi and Judith A. Seltzer  
                          Commentary Linda Burton  
                          Commentary Robert Moffitt  
                          Open Discussion

10:45                Break

11:00                Discussion Group III

12:30                Lunch Discussion: *The Report as a Whole*

**Session IV: Reactions to the EFC's Work and Reports**

1:30                 Introduction V. Joseph Hotz  
                          Comments from panel of discussants: Linda Burton, Larry Bumpass,  
                          Kenneth Dodge, Andrew Cherlin, Shelly Lundberg, Robert Moffitt

2:10 s                Prepared comments from participants or discussion group

3:15                 Break

3:30                 Comments from the floor: Open discussion

3:45                 Comments from EFC and Conclusion

4:00                 Adjourn

**Duke Conference Attendees**

**EFC Members**

Christine Bachrach DBSB, NICHD  
Suzanne Bianchi University of Maryland  
Caroline Bledsoe Northwestern University  
Peter Brandon Australian National University  
Lynne Casper University of Southern California  
P. Lindsay Chase-Lansdale Northwestern University  
Thomas DiPrete Columbia University  
V. Jeffrey Evans DBSB, NICHD  
V. Joseph Hotz UCLA  
Rosalind King DBSB, NICHD  
Kathleen McGarry UCLA  
S. Philip Morgan Duke University  
Seth Sanders University of Maryland  
Judith Seltzer UCLA  
Pamela Smock University of Michigan

**General Attendees**

Mary Dorinda Allard, ATUS, Current Population Survey  
William Axinn, University of Michigan  
Jennifer Barber, University of Michigan

Judith Bradford, Virginia Commonwealth University  
Susan Brown, Bowling Green State University  
Larry Bumpass, University of Wisconsin  
Linda Burton, Duke University  
Shannon Cavanagh, University of Texas at Austin  
Andrew Cherlin, Johns Hopkins University  
Robert Crosnoe, University of Texas at Austin  
A. Rupa Datta, University of Chicago  
Kenneth Dodge, Duke University  
Kathryn Edin, Harvard University  
Paula England, Stanford University  
Barbara Entwisle, University of North Carolina at Chapel Hill  
Jennifer Glass, University of Iowa  
Frances Goldscheider, Brown University  
Kathleen Mullan, Harris University of North Carolina at Chapel Hill  
Robert Hauser, University of Wisconsin-Madison  
Tess Hauser, University of Wisconsin-Madison  
Sarah Hayford, Duke University  
John Hobcraft, University of York  
Sandra Hofferth, University of Maryland, College Park  
Johannes Huinink, University of Bremen  
Guillermina Jasso, New York University  
David S. Johnson, Census Bureau  
Valarie King, Pennsylvania State University  
Rose Kreider, U.S. Census Bureau  
Nancy Landale, Pennsylvania State University  
Celine Le Bourdais, McGill University  
Shelly Lundberg, University of Washington  
Wendy Manning, Bowling Green State University  
Steven P. Martin, University of Maryland  
Sara McLanahan, Princeton University  
Robert Moffitt, Johns Hopkins University  
Mignon Moore, UCLA  
William Mosher, National Center for Health Statistics  
Kelly Musick, University of Southern California  
Randall Olsen, Ohio State University  
Charles Pierret, NLSY, Bureau of Labor Statistics  
Kelly Raley, University of Texas  
Ronald Rindfuss, University of North Carolina at Chapel Hill  
Michael Rosenfeld, Stanford University  
Laura Sanchez, Bowling Green State University  
Liana Sayer, The Ohio State University  
Christine Schwartz, University of Wisconsin-Madison  
Merril Silverstein, University of Southern California  
Arland Thornton, University of Michigan  
Judith Treas, UC Irvine  
M. Belinda Tucker, UCLA  
W. Bradford Wilcox, University of Virginia  
Lawrence Wu, New York University

**MEETING 10**  
**Explaining Family Change**  
New York City  
August 12–13, 2007

**Agenda**

**Sunday, August 12**

12:30–2:30 Lunch meeting

**Monday, August 13**

8:30 – 10:10 American Sociological Association, Sociology of the Family Invited Session:  
*Explaining Family Change and Variation* (with the Section on Sociology of  
Population)

Session Organizers: Suzanne M. Bianchi, University of Maryland; S. Philip  
Morgan, Duke University; Judith A. Seltzer, UCLA

Presider: Suzanne M. Bianchi, University of Maryland

Panel

Megan M. Sweeney, UCLA

Jennifer L. Glass, University of Iowa

Kathleen Mullan-Harris, University of North Carolina

Annette Lareau, University of Maryland

Discussants S. Philip Morgan, Duke University; Judith A. Seltzer, UCLA

10:30 – 4:00

Closed Project Meeting

10:30–12:30

Discussion of Existing Reports/ Introduction

Chair: Judy Seltzer

**Tasks: Raise remaining issues**

10:30–11:00

Parenthood – Phil Morgan; written comments

11:00–11:30

Unions – Lynne; written comments

11:30–12:00

Generations – Suzanne Bianchi, written comments

12:00–12:30

Intro – Seth; written comments:

12:30–12:45

Break

12:45–3:00

Drafting Committee Memos Chair – Phil Morgan

**Tasks: ensure we have the right coverage and priorities**

12:45–1:30

Measurement and Methods

1:30–2:15

Add-ons

2:15–3:00

Big Study

3:00–4:00

Procedures for finishing the report and wrap up. Chair: Suzanne Bianchi

**Tasks: responsibilities and procedures for meeting 9/30 deadline**

3:00–3:30

Procedures for finishing the report.

3:30–4:00

Wrap-up

## **Appendix 2.A**

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There are no appendices for Chapter 2

## APPENDIX 3.A

### Culture, Structure, Identity and Family Change

June 13-14, 2005

6100 Executive Boulevard, Rockville, Maryland  
5<sup>th</sup> Floor Conference Room

#### Preliminary Agenda

##### Monday, June 13

- 10:00 am        Introductions and Logistics: Chris Bachrach, S. Philip Morgan
- 10:15            How research in the area of language and linguistics can inform theories and approaches to studying other forms of culture
- Speaker: Greg Urban, University of Pennsylvania, Anthropology  
                    Moderator: Jenna Johnson Hanks
- 12:00            Lunch
- 12:30            “Cultural models” approaches in anthropology that draw on cognitive science, and other anthropological approaches to understanding and measuring culture
- Speaker: Linda Garro, University of California, Los Angeles  
                    Moderator: S. Philip Morgan
- 2:00             Break
- 2:15             Research in social psychology and anthropology that provides insights into how culture “happens” in social groups, e.g., through group identification, social influence, and social learning
- 2:15-3:30        Speaker: Lynn Smith-Lovin, Sociology, Duke University  
                    Moderator: Hans Peter Kohler
- 3:45-5:00        Speaker: Kathy Ewing, Anthropology, Duke University  
                    Moderator: Chris Bachrach
- 5:00 pm         Announcements and logistics
- 5:15 pm         Adjourn for the day

##### Tuesday, June 14

- 8:30 am         Continental breakfast available in meeting room
- 9:00             Announcements and logistics
- 9:15             Research in sociology that addresses the diffusion of behaviors and ideas over social space, through the interactions of social networks and the influence of media and other institutions
- 9:15-10:30       Speaker: Miller McPherson, U. of Arizona and Duke University  
                    Moderator: Jenna Johnson Hanks

- 10:45-12:00      Speaker: Hans-Peter Kohler, University of Pennsylvania  
Moderator: S. Philip Morgan
- 12:00              Lunch
- 12:30              Research in economics that integrates group identification, and the preferences associated with group identification, into economic “utility functions” that help to predict behavioral choices, Rachel Kranton, Economics, University of Maryland  
Moderator: Chris Bachrach
- 1:45                Break
- 2:00                Open discussion. Moderators: Chris Bachrach, Hans Peter Kohler, Jenna Johnson, Hanks, S. Philip Morgan
- 4:00                Announcements, logistics, adjournment
- 4:00-5:00        **EFC Executive Session**  
Bachrach, Kohler, Johnson-Hanks, Morgan, Bledsoe, Bianchi, Casper, DiPrete, Evans, Sanders

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*This meeting is jointly sponsored by the Demographic and Behavioral Sciences Branch (DBSB) of NICHD, the Explaining Family Change Project, and Duke University.*

Contact Persons: Chris Bachrach, NICHD, [cbachrach@nih.gov](mailto:cbachrach@nih.gov)  
S. Philip Morgan, Duke University, [pmorgan@soc.duke.edu](mailto:pmorgan@soc.duke.edu)

## **Highlights from the Culture, Structure, Identity and Family Change Meeting**

June 13-14, 2005

*Many people made the Culture Meeting possible. Christine Bachrach (NICHD), Phil Morgan (Duke University), Jenna Johnson-Hanks (University of California, Berkeley), Hans-Peter Kohler (University of Pennsylvania) and Caroline Bledsoe (Northwestern University) organized the Meeting. Diane Eagle, Janice Wahlman, Brittany Dawson and Leila Rodriguez (NICHD) provided logistical support. Leila Rodriguez wrote the final report.*

### **Introduction**

This report summarizes the results of the Culture Meeting held on June 13-14, 2005, at the Demographic and Behavioral Sciences Branch (DBSB) of the National Institute of Child Health and Human Development (NICHD), National Institutes of Health. Co-hosted by the Explaining Family Change Project (EFC) and Duke University, the Meeting's primary goal was the brainstorming of ways to incorporate the concepts of culture and identity into demographic research.

Demographic research cuts across many of the other social science disciplines. Common themes and even common research methods do not, however, translate into a common understanding of concepts. Because the invited scholars come from different disciplinary backgrounds (anthropology, sociology, demography, economics), a second necessary goal was to find synergies and contradictions in the ways that social scientists think about these notions.

The Explaining Family Change Project is a multidisciplinary undertaking towards the development of new models for understanding family variation and change. It aims to answer two basic questions: why do individuals organize into family units; and what accounts for how families are organized. Throughout this report, the different paradigms used to think about culture and identity will be related to these two basic questions; specifically to how each perspective can shed light into answering them.

Each section of this report corresponds to one of the seven presentations at the Culture Meeting. A short paragraph summarizing the topic presented is followed by a more detailed review of the presentation's key points. This, in turn, is followed by a bulleted list of questions raised from the presentation, and a paragraph on the ensuing discussion. The final section of the report summarizes the synergies and contradictions in the way the different perspectives treat concepts of culture and identity. The theories and models we use affect the paths along which we reason. This report provides seven different ways of thinking about family change, which will hopefully lead to new questions and answers.

### **Discourse-Centered Approach to Language and Culture**

*Greg Urban presented on the discourse-centered approach to language and culture. Key points in this perspective are that culture is localized in publicly-accessible signs; the non-transparency of meaning (what people say during an interview is not necessarily what they would say in other contexts); and the circulation of discourse.*

The discourse-centered approach to culture has the central premise that culture is localized in publicly accessible signs. The most important ones are actually occurring instances of discourse,



and have a representational value. Because it is publicly accessible, it is possible to compare actual instances of discourse usage to empirically study the extent of sharing and continuity of culture (Urban 1991).

This approach diverts from mid-twentieth century scholars who viewed culture as a synthesis, where one society has one language and one culture. The three realms were seen as discrete units, and could be studied independently of one another. This synthesis became problematic because boundaries between cultures are not clear-cut, and cultural elements are not shared equally between individuals.

Culture is socially learned and socially transmitted. Because it travels from an individual or group to another, instead of asking questions about what someone's culture is, the discourse-centered approach emphasizes questions about what travels between groups and people, and how it makes that journey. In other words, culture cannot be studied as a static entity; culture exists in motion (Urban 2001).

Different forces affect cultural motion. The first of these is *inertia*: culture that is already there will tend to be transmitted. *Entropy* is the tendency to disorder, which disrupts perfect copying or transmission of culture, and hence induces changes in the course of motion ("drift"). *Interest* in different cultural elements also affects their transmission. Different cultural elements may hold differing degrees of interest for individuals, and therefore achieve different breadth or rates of transmission and longevity. Finally, *metaculture* (or culture about culture) may impart a force to the object culture; for example, film reviews affect the acceptance of a film.

Families and kinship form part of circulating discourse. Narratives (myths, stories, news, gossip, etc.) are the discourse loci where expectations about kinship roles and other identities unfold. Roles are generalized rules about narrative expectations. The narratives about roles lead to specific behaviors, which would be fleeting without them. There is a circulatory relationship between discourse and action; discourse both makes and remakes social context within which it occurs.

This presentation triggered several questions:

- Source of narratives and the relationship between the source and recipient
- Movement of discourse

Narratives come from different sources. If they originate from an official person, they might not be culturally sensitive to the community. People decide whether or not to adopt a new discourse, and the relationships that people have with whoever is trying to bring discourse in community can be traced.

The circulatory property of discourse means that the circulation of representations requires conduits but creates them at the same time. Both the direction and acceleration of discourse are researchable.

### **Culture as Schemas**

*Linda Garro's presentation demonstrated cognitive anthropology's contribution to the study of culture and cultural knowledge. The content-oriented perspective, which emphasizes differential knowledge of cultural domains, is compatible with the focus on cultural models, which mediate information processing. Her process-oriented perspective stresses the interaction between historically-contingent available cultural resources and structure.*

Cultural models (or cultural schemas or schemata) theory was introduced in the 1980's. It states that in a large measure, information processing is mediated by innate mental structures (see Shore 1996). This perspective is compatible with the content-oriented view, which stemmed from the

cognitive anthropology notion that culture is not a material entity. Rather, it is the form of things that people have in mind; a socially-transmitted information pool with which we do our own thinking.

While placing culture in the mind, this view does not necessarily contradict Urban's claim that culture is essentially publicly-accessible. Asserting that culture is socially-transmitted implies that it also exists outside the mind, although this point was not delved into during the presentation or ensuing discussion (see "Introduction" in Strauss and Quinn 1997 for statement on cultural meanings as interaction between extrapersonal and intrapersonal realms).

Interest in intracultural variation stems from this cognitive definition, as well as interest in the ways in which differential opportunities to learn (such as those structured by gender) may contribute to that variability. In other words, this perspective seeks to understand why some people know more about certain domains and cultural practices than others. Intracultural variation, therefore, is accounted for by people having differential knowledge about cultural content (see Garro 2000).

Cognitive anthropologists developed an explicit methodology for discerning how people construe their world of experience from the way they talk about it. Methodologically, cultural schemas research tends to rely on conversations- you infer the existence of the cultural models from what informants say.

Garro favors an orientation towards process that revolves around the interplay between the range of historically-contingent cultural resources available for endowing experience with meaning, and the socially and structurally grounded processes through which individuals learn about, orient towards, and interpret possibilities. This dynamic view of culture is concerned with variability and change, and requires viewing individuals as actively involved in the construction of meaning, although only at times consciously (see Harkness, Super and Keefer 1992 for example on how cultural models gain directive force).

This form of meaning construction can often be seen as a socially-embedded narrative thinking, dependent upon culturally available resources that shape motives (see Strauss 1992). Individuals can simultaneously hold alternative interpretive frameworks, and what is seen as relevant may change through time and in relation to ongoing events. Emphasizing process in a content-oriented perspective allows one to study culturally-shared understandings of a particular phenomenon, and how these reflexive assessments that may be altered by new experiences.

Discussion following this presentation centered upon:

- How to move from cultural schemas perspectives to the types of claims that family demographers want to make
- What determines the different availability of schemas for people
- How new information is integrated into pre-existing models

Cultural models can be thought of as prepackaged units insofar as they are composed of a set of ideas. People are exposed to models through social interaction and social structure. If a model no longer works, then people will use another one and in the process face different kinds of constraints.

### **Affect Control Theory**

*Lynn Smith-Lovin discussed Affect Control Theory as a model mediating structural and processual views of how people are socially competent. The model states that during interactions, people import meanings from a larger culture to create local realities.*

In the 1950's and 60's, structural-functionalists saw the knowledge of rules as the key to being a competent social actor. This view was criticized on the grounds that it is too static, and it was countered by processual models that stressed the creative actions of agentic social actors. Under this model, social structure is actually repetitive patterns of agentic social actors creating streams of action.

Affect control theory mediates structural and processual views on what it takes for people to be competent social actors. This model states that people create local realities during interaction by evoking symbols; importing meanings from the larger culture. Cultural meanings provide stability and patterns to social interaction. When people encounter a situation or role previously unknown, they are not completely lost, but rather use cultural meanings to process responses.

Affect control theory differs from symbolic interaction in several ways: it uses a common metric which is mathematical in form; it links culture to local interactions through measured meanings; it provides a social account of individual emotions, behaviors, attributes, and labeling; and it uses the situation and not the individual, as the unit of analysis.

The common metric is a very general measurement of meaning. It allows the use of *impression-formation equations* to describe how meanings change in different contexts and situations. These equations are actor-behavior-object regressions that help to see how actors' impressions are shaped by their actions and the objects of those actions. Using those equations as descriptions of the empirical reality of how meanings change, the *affect control principle* is applied: that people try to maintain meanings during the course of interaction (see Robinson and Smith-Lovin 2006).

Evaluation, potency, and activity (EPA) dimensions are used to explain substantial variance in semantic meanings across vocabularies in a wide variety of language cultures. Within a culture, EPA meanings are relatively stable across a variety of important social dimensions (age, socioeconomic status, gender).

How, then, do meanings change as a result of situations, and of exposure to the actions of others? The dynamic part of this model is driven by a control-system. There's a *reference state*: people are trying to maintain the culturally-given meanings that come with their and other people's role identities and behaviors. There is also an *observed state*: this depends on the occurrences of a particular situation. Based on the difference between the two, there is a *response* to try and bring meaning back. The affect control principle dictates that individuals behave in ways that maintain their affective expectations generated by their meaning of the situation. Thus for example, during a business meeting each individual present is aware of his or her role and that of the others. If someone interrupts the speaker with an unexpected behavior (such as jumping on the table), he or she is disrupting the reference state, and someone will act in a way to make the situation meaningful again (such as reprimanding the person).

*Deflection* is the amount of disruption in the definition of the situation that's produced by current events. Use of the common metric allows for a mathematical definition of that deflection. Deflection is a property of the situation and not of the individual. Hence, when deflection occurs in a situation between two people, a third person can repair the action. In the previous example, person to bring meaning back into the situation does not necessarily have to be the speaker or the interrupter. Meaning occurs at the level of the situation, so identity is more than an individual attribute.

The discussion following this presentation centered on two topics:

- How reframing happens
- How the model explains differences in meaning

Relabelling can happen through a very large deflection that affects enough people simultaneously that they have to think about things differently to make sense of them. Alternatively, it can occur through a combination of identities in the locus of one person that shifts meaning because of a greater structure. For example, as women evolved from caregivers to become also professionals, reframing of “women” occurred (for more on the model’s treatment of multiple identities see Smith-Lovin 2003).

Finally, reframing can occur through social networks, as having positive social connections with numerous people can change one’s view of particular situations. The model tends to assume consensus with subcultural differences. People can agree on meanings, but not necessarily labels. For example, people tend to agree on what constitutes an abortion, but not on the label, as some see it as a medical procedure, others as a crime.

### **The Media and Culture**

*Using the example of Turkish “honor killings” in Berlin, Kathy Ewing focused her presentation on how discourse controlled by powers such as the media can shape cultural meanings, and how culture can operate at levels beneath those of the predominant discourse.*

Recently, three Turkish brothers gunned down their sister at a bus stop. The event was first treated as a regular murder by the newspapers. A discussion was held at a local school near where the murder occurred, and several young Turkish boys claimed that the girl deserved to be murdered. The school principal was outraged, and the situation turned into a large media event. The press said this was the sixth “honor killing” in Berlin over four or five months. This series of murders didn’t spark interest until the last one occurred in conjunction with the media event, which was followed by policy recommendations on how to handle the integration of the Turkish community.

Ewing uses this background to explain how powers such as the media can shape cultural meanings through discourse. Ewing defines culture as the practices by which people negotiate meaning, status and action. Therefore, it is more appropriate to use the term “cultural practices”, which captures the processual nature of culture. Like culture, identities are not static. People have multiple identities and shifting selves. Identities are highly contextual and shift from one moment to the next as relationships shift.

Most anthropologists address causality vaguely. Like Foucault, many focus not on the causes of discursive shifts but on their consequence. Instead of searching to isolate individual factors that cause change, this approach seeks to understand the conjunction of factors involved in it.

The media too, cannot be placed in a straightforward cause and effect relationship. The media interacts with a number of different factors to produce sometimes dramatic changes in people’s practices and understandings. In the case of the Turkish honor killings, the media flurry and ensuing open discussion of certain topics that had previously been considered taboo (such as patriarchal oppression and enslavement of women in Turkish Muslim homes) occurred in conjunction with other events that enabled such discussion to occur. The September 11 attacks, the murder of Theo Van Gogh in Amsterdam, added with the fact that youth gangs have been emerging, plus a movement that made it “cool” to be foreign/Turkish led to surge in honor killings as a means way of obtaining status. The meaning of honor killing has then been transformed from a village tradition to a status-enhancing practice for Turks in Germany. The media, however, discussed the killings as a sign that the Turkish community is not integrating, and is reenacting a village tradition in Germany today.

One of the effects from the media flurry is that political proposals that before had been seen as too conservative are now being presented as the next step that Germany should take in handling integration problems. The media controversy enabled the furthering of a political process that hadn't been possible before (such as banning girls from wearing headscarves in school when previously only teachers were prohibited from doing so).

Finally, there are some methodological considerations stemming from this perspective. Along with shifting identities and experiences, the structure of people's memories shifts too. If people have shifting, negotiated identities, in terms that are themselves fluid, the questions asked in an interview must be carefully planned, as each identity evokes different memories. Identities are labels that people attach to themselves or that are attached to them. Discourse analysis involves trying to uncover the layers of what goes into constituting a particular utterance.

Following the presentation, several questions were raised on:

- The relationship between German national identity and media interpretation of honor killings
- Changed meanings of the killings versus the media conflating them
- How ideas on integration have changed from this example

Developmental idealism is important, for this model closely informs our notions of who we are. German national identity formed as it recovered from the Nazi era, and the Turkish honor killings enable them to define an "other"-which they are not. German media links the village tradition with the honor killings in Berlin. Because these events are recent and are still being played out in the media, there have been few long-term effects yet. However, change in what is permissible in talk and policy proposal is already a consequence. Furthermore, the two reactions in the Turkish community have been an expression of outrage to the murders, and worries about the disruption of relationships of Turks to German natives.

### **Ecological Affiliation and Blau Space**

*Miller McPherson used the Blau space model to explain how organizations change over time in response to their composition. This model, he argues, can be applied to study other entities such as preferences, schemas, and meanings.*

Industrial societies are very complex and exhibit great social differentiation. Social space has evolved into numerous dimensions. This differentiation can be represented in its simplest form on a two-dimensional grid, with traits such as social rank and material wealth as its axis. In such a grid, the points represent individuals. McPherson defines social structure as the probability of contact between two people. This definition explains the organization of the points (people) in Blau space (McPherson 2004).

The points on the grid can be randomly associated (which does not occur with social phenomena), or they can have homophilous association. With homophilous association, the probability of contact between two people is a declining function of distance in Blau space. When two points are distant from each other, the probability of contact is very small. Network distance, then, is produced by distance in dimensions in Blau space. The homophily principle applies to almost all social distinctions, such as age, race, gender, height, education.

Organizations can also be represented on the grid, as boxes overlapping with the points or individuals who belong to them. If a random sample of individuals and a random sample of organizations are represented on the grids, the boxes will be located where the most people are. The boxes or organizations are not static; they change in response to the exit and entry of new members and where they are located in Blau space. New members might mean that the

organization changes little, that its mean shifts, or that it acquires increased variance (for details on how organizations change, see McPherson, Popielarz, and Drobnic 1992). Underlying this organizational model is the homophily principle: network connections between people inside the organization and those outside it dictate the entry into and exit from the organization.

Organizational change constitutes a dynamic process as organizations grow and decline, expand and contract, and move around. This system can be modeled with a set of equations. Organizations (as well as any other niche represented in Blau space) compete for people's limited time and energy. There are forces of attraction and repulsion in this model, as boxes jostle each other and produce over time "the dance of the adaptive landscape". Niches form social entities, and they spread and contract in dynamic interaction with other niches. This model explains change in the mean of the niche, change in the dispersion of the niche, and change in the density of exploitation in the niche (see McPherson 1983 for more on the ecological model of the competition of social organizations).

This model can be expanded beyond organizations to situate preferences, identities, cultural artifacts, and meanings in Blau space. Such entities will also be clustered into niches. The location and size of these niches fluctuates over time; new social forms are more likely in regions with heavily overlapped membership, and old social forms are most likely to die in overlapped regions. Conflicting social forms are more likely to occur in overlapped regions. This model can explain why certain attitudes, or memberships, or marriages, or don't occur.

The family can be conceptualized as an entity in Blau space, and as such will overlap with other entities. The attitudes, beliefs, associations, and other social entities that inhabit the family niche are measurable. Changes in family structure are associated with changes in other entities in the niche.

This model is advantageous in that it is applicable to all social survey variables. It provides a metric for understanding the relationships among a wide variety of social entities, and it provides a dynamic model which combines entities into populations, communities, and systems.

Miller's presentation raised the following questions:

- The effect of large historical events on Blau space
- Role for agency in the model

Events such as a war alter the composition of Blau space, by pulling out the young men from the system. The model, however, does not specifically address agency. It focuses on the dimensions of Blau space which characterize positions under the homophily principle.

The main principles of the model are the central importance of thinking ecologically and the importance of homophily.

### **Social Interactions and Social Networks**

*Hans-Peter Kohler presented the results of research on social networks and fertility decisions using data from the Kenya Diffusion and Ideational Change Project and the Malawi Diffusion and Ideational Change Project (<http://www.pop.upenn.edu/networks>). This work uses the concepts of social learning and social influence to explain the mechanisms through which social networks influence a woman's use of family planning methods, and contraceptive decision-making more generally. Network density becomes an important factor in determining which mechanism operates.*

While the "diffusion of innovation" has become an important aspect of explaining fertility change during the demographic transition, diffusionist arguments often do not specify the micro

understandings of why social interaction processes matter and how diffusion and social influences occurs through social networks. To fill this gap, Kohler and colleagues started a project in Kenya collecting longitudinal social network data about who and how many people respondents talk to about family planning. They found that there is much talk about both HIV and family planning, and that often these conversation networks are large. Most network ties are “close” ones, such as relatives from the same compound, but respondents also had many “weak” ties.

Their model incorporates two mechanisms that explain why interactions matter: social learning and social influence. When a person faces a decision under uncertainty (such as whether or not they should use family planning methods- and if so, which), engagement in a social network allows them to talk to someone who has already made a decision. This interaction is essentially a learning process and thus constitutes *social learning*. This concept implies that the interaction has no effect on a person’s preference, but rather the individual engaged in the interaction to obtain additional information and reduce uncertainty. In contrast, when social interactions primarily operate by reinforcing norms or influencing a person’s preferences, *social influence* occurs.

Kohler his colleague’s data provides a way of studying this distinction by measuring network density (with whom ego had conversations and also the relationships of ego’s network partners among themselves) and by studying how networks with different densities affect fertility decisions. They argue that information about the density of networks provides a way of distinguishing between social learning and social influence. In particular, if a person wants to maximize their learning component in the face of uncertainty, they presumably want to select a network where individuals don’t know each other very well and therefore select a relatively sparse network. If social influence dominates in social interaction processes, however, it can be expected that dense networks – that is, networks in which members tend to know each other – are more important than sparse network. Dense networks are likely to have stronger effects in terms of norms-reinforcement, and they are likely to exert a stronger influence of preferences and attitudes of individuals toward family planning.

Their empirical model is a regression analysis model where family planning use is the dependent variable. The explanatory variables of the model includes a measure of density as well as an interaction between percentage using family planning and network density. If the interaction is relevant, then networks with different densities have differential effects on the family planning use of the respondent (see Kohler, Behrman, and Watkins 2001 detailed statement on the model).

The results suggest that there is a striking dual existence of both the dominance of social learning and social influence in the two Kenyan regions: in some areas, social influence is found to be the dominating mechanisms through which social interactions affect fertility decisions, and in another region, social learning is the dominant mechanism. Kohler argues that the main difference between the two regions is related to market integration. The region that is more integrated in market activities has a reduced social influence effect, but the social learning component remains.

Support for this argument is also provided by Susan Watkins’s qualitative research that has been conducted as part of the Kenya Diffusion and Ideational Change Project. In particular, her analyses describe how innovations enter the population through various pathways by demonstrating how perception of children’s values has changed in Kenya in response to socioeconomic and political changes, and family planning programs (see Watkins 2000).

Kohler also described how formal models of social interactions can explain a micro-foundation for “diffusionist explanations” of fertility change, and these models can explain how social interactions can result in (i) path-dependence and persistent heterogeneity in the adoption of innovations (such as low fertility or family planning), (ii) social multiplier effects that reinforce the effect of socioeconomic changes on fertility behaviors, and (iii) multiple equilibria

that represent high/low fertility regimes and allow for rapid “fertility transitions” as populations move from the high to the low fertility equilibrium.

Questions following this presentation centered on:

- The distinction between social learning and social influence

Both concepts can be thought of as a continuum. In most contexts it is likely to find both mechanisms operating. It is useful, however, to think about social learning as an exercise to reduce uncertainty. Where social influence is weak, social learning remains.

### **Group Identification and Economic “Utility Functions”**

*Rachel Kranton presented an alternative model to the classic economic models of coordination game versus punishment stream to explain individual rational choice. Her alternative model incorporates notions of identity and has additional explanations for preferences.*

The central tenet of classical economics is the individual rational decision-making actor. This precept raises the question of why people facing the same set of economic incentives make different fertility decisions, and what factors besides economic incentives are affecting these decisions. While the classical economic model embraces the concept of preferences (individual actors make choices to maximize utility given these preferences), these are narrowly defined. Behavioral economists incorporate concepts of self-control and cognitive biases into economic models, but preferences are still treated largely as individualistic- they display no particular pattern within society.

Culture and social norms are treated as equilibria. Economists explain group patterns as “equilibrium” outcomes. Two models explain these outcomes. The first is the coordination game. The choice to drive on the left or the right side of the street, for example, requires multiple equilibria: either everybody drives on the right or on the left. Different societies find different equilibria. Culture and social norms are simply aspects of equilibrium of the coordination game.

The second model is one of repeated interactions and sanctions. As rational actors interact with other people over time, they make choices, some of which can be punished by others in the future. Knowing this prevents actors from making particular choices in the present. The incentive for the punisher to punish the deviator is that failure to do will result in him or her being punished by someone else. Individuals follow norms, then, to avoid being punished. This model relies on repeated streams of punishment, which sustain the equilibrium. While both highly popular, neither one of these two models accounts for change in norms, or differences across groups.

Kranton and colleague George Akerlof formulated an alternative model that argues that preferences themselves can be a way of modeling culture and “social norms”. Preferences may be systematically different in different groups, as people have notions of their identity, which affects preferences. By incorporating identity into economic analysis, the tradeoffs and interplay between norms and economic incentives can be observed (see Akerlof and Kranton 2005).

Their model uses an extended utility function that incorporates identity (defined as a person’s sense of self) as a motivation for behavior. In the function, identity is based on social categories and how people in these categories should behave. Identity affects economic behavior through four channels. First, it changes the payoffs from one’s own actions. Second, it changes the payoffs of others’ actions. Third, the choice of different identities affects an individual’s economic behaviors. Finally, the social categories and behavioral prescriptions and behavioral prescriptions can be changed, affecting identity-based preferences (for a detailed explanation of this utility function and its application, see Akerlof and Kranton 2000).



Modeling identity departs from social difference. Each society has its own set of social categories, and appropriate and inappropriate behaviors (norms) associated with each. Following these norms gives people a sense of being in that particular social category. If an individual is offended by another one's actions that violate the norms for behavior, he or she will sanction that. The choice of identity may be the most important economic decision an individual makes, as this will dictate their preferences.

Following this presentation, participants asked about:

- Defining "identity" as anything that structures preferences and patterns

Identity is not the only factor structuring these preferences. Without identity, it's still possible to detect patterning, but it won't be socially-defined. Identity, then, is what structures social patterning.

### Conclusions

*The Culture Meeting ended with a discussion on the ideas provided by the seven speakers. Participants discussed synergies and contradictions in the way the presentations addressed notions of culture and identity. These are offered as concluding remarks of this report.*

- What is culture?

Participants agreed with the notion that culture is a process and not simply a material entity. As such, it is subjected to interpretation, negotiation, and reconfiguration. Culture is highly repetitive, and leads to patterning. Such shared patterning by social actors is what in fact constitutes social structure.

The culture as schemas view further argues that people have access to a range of schemas, which may be more or less articulated, more or less elaborated, more or less compelling, and more or less applicable in a given situation. The ways in which participants discussed culture subjected the concept to different levels of abstraction.

- Where is culture?

There were two views on this question: culture exists in people's minds, versus culture is found in publicly-accessible signs. These are seemingly contradictory statements, yet it is crucial to think of culture as being in both places; such view explains why culture affects individual behavior and why individual agency can "move" cultural norms and shared practices. The publicly-accessible signs can be considered discourse which reflects what goes on in people's mind. The most important signs are narratives, which are captured in interviews.

Culture can also be represented in Blau space. The fact that meanings and models are socially embedded means that they are socially structured—that is, unequally distributed within a population, within "Blau space," and even within a cultural group. People may have more or less knowledge of and access to particular schemata.

- What is its purpose?

There was general agreement on viewing culture as providing means (to understand new situations). People do not tend to interpret the world de novo, but use schemas, mental maps, or short cuts to understanding situations, treating "this" as an example of a broad category of similar "thises". In any given situation, there are not only the abstract schemas and the concrete action,

but also an intermediary process of matching—deciding which maps or schemas are relevant and how they apply.

Culture defines models for action. By providing meanings and maps for interpreting specific contexts, culture also provides preferences associated with different identities. These preferences motivate specific behaviors. Insofar as culture provides motivations, rather than resources, it probably does so through offering particular kinds of imagined future selves.

- How is culture transmitted? How does it change?

Social interaction and social networks are essential to the transmission of culture. Contact with other people provides individuals with the different schemas that they can draw on to give meaning to particular situations.

Context is a crucial determinant in cultural change. Cultural categories are not fixed, and since context is always changing, culture must too. Culture's inertial characteristic means that it does not change unless it has to. When a particular situation arises where deflection occurs from people's reference state, there is some sort of response to try and bring meaning back. Some circumstances may require that cultural meanings themselves change to return to a new reference state.

People rely on a cultural schema until it is no longer useful for giving meaning to situations (often because of entropy); they then make use of another one. More or less subconsciously, individuals "choose" how to make sense of specific contexts.

- What methodological implications arise from this?

To understand why individuals organize into family units and what accounts for how families are organized, it is imperative to think about the cultural processes at work, and how they relate to people's identity.

To understand "culture", meaning and interpretation are fundamental, whether this is expressed in words or in numbers. Culture might explain something or give meaning to it; either way it is possible to gather adequate data.

Meaning is non-transparent: what individuals respond in an interview situation is contextual. Interviewers must be attentive to how wording of questions invokes more or less of some aspects of an individual's identity.

### **Biographical Sketches of Presenters**

***Kathy Ewing, Ph.D.***, is Associate Professor of Anthropology and Religion at Duke University. She received her Ph.D. from the University of Chicago. Since then she has served as Visiting Lecturer at the University of California, San Diego; Visiting Assistant Professor at the University of North Carolina at Chapel Hill and Duke University; and as Visiting Professor at Bogazici University in Turkey and McMaster University in Canada. Her research interests include globalization, identity, migration, psychological anthropology, and religious movements. Her areal specialties are Europe, the Middle East, and South Asia.

***Linda Garro, Ph.D.***, is Professor of Anthropology at the University of California at Los Angeles. She received her Ph.D. from Duke University. Her research interests include cognitive anthropology, medical anthropology, and research methods. Geographically, she focuses on Mesoamerica and northern North America.

***Hans-Peter Kohler, Ph.D.***, is Associate Professor of Sociology and Research Associate at the Population Studies Center at the University of Pennsylvania. In his research he attempts to integrate demographic, economic, sociological, and biological approaches in empirical and theoretical models of demographic behavior. Specifically, he is interested in the determinants of low and lowest-low fertility in Southern and Eastern Europe, and the role of interaction processes for fertility and AIDS-related behavior. He has published two books, co-edited a third one, and has published over fifty articles and reviews. Dr. Kohler received his Ph.D. in Economics at the University of California at Berkeley.

***Rachel Kranton, Ph.D.***, is Professor of Economics at the University of Maryland. Previously she has been a Visiting Associate Professor at Princeton University, a consultant for the World Bank, and has worked for USAID and Catholic Relief Services in Cairo, Egypt. Her fields of interest include microeconomics, industrial organization, development economics, economics of institutions, and behavioral economics. She has received numerous honors and awards for her teaching and research. Dr. Kranton received her Ph.D. from the University of California at Berkeley.

***Miller McPherson, Ph.D.***, is Research Professor at Duke University and Professor at the University of Arizona. He received his Ph.D. from Vanderbilt University. Before joining the staff at Duke, he held faculty positions at Cornell University, the University of South Carolina, and the University of Nebraska. He has interest in the areas of organizations, associations, social networks, and quantitative methods. His current work involves applying his general ecological theory of affiliation to cultural entities such as attitudes, beliefs and social identities. He has over forty articles published in scholarly journals.

***Lynn Smith-Lovin, Ph.D.***, is Robert L. Wilson Professor of Sociology at Duke University, and is an affiliated faculty with Women's Studies and the Duke Interdisciplinary Initiative in Social Psychology at that institution. Previously she was Associate Professor at the University of South Carolina, Associate Professor at Cornell University, and a Professor at the University of Arizona. She received her Ph.D. from the University of North Carolina at Chapel Hill. Her research areas encompass social psychology, emotions, and gender. She has published over sixty articles and book chapters, a book, and numerous book reviews and commentaries.

**Greg Urban, Ph.D.**, is Arthur Hobson Quinn Professor of Anthropology at the University of Pennsylvania. His research interests concern cultural and linguistic anthropology, cultural motion, discourse, corporations and culture, South American Indians, and metaculture. Dr. Urban has published over forty articles in scholarly journals, is the author of three books including *Metaculture: How Culture Moves Through the World* (2001) and has co-authored four more. He obtained his Ph.D. from the University of Chicago.

### Meeting Participants

Christine A. Bachrach  
Demographic and Behavioral Sciences Branch  
National Institute of Child Health & Human Development  
6100 Executive Boulevard, Rm. 8B07, MSC 7510  
Bethesda, Maryland 20892-7510  
Phone: 301.496.9485  
E-mail: [cbachrach@nih.gov](mailto:cbachrach@nih.gov)  
<http://www.nichd.nih.gov/about/cpr/dbs/dbs.htm>

Suzanne M. Bianchi  
Department of Sociology  
University of Maryland  
College Park, MD 20742  
Phone: 301.405.6409  
E-mail: [sbianchi@socy.umd.edu](mailto:sbianchi@socy.umd.edu)  
[http://www.popcenter.umd.edu/people/bianchi\\_suzanne](http://www.popcenter.umd.edu/people/bianchi_suzanne)

Caroline Bledsoe  
Department of Anthropology  
Northwestern University  
1810 Hinman Ave.  
Evanston, IL 60208-1330  
Phone: 847.491.4825  
E-mail: [cbledsoe@northwestern.edu](mailto:cbledsoe@northwestern.edu)  
<http://www.cas.northwestern.edu/anthropology/faculty/bledsoe.html>

Peter Brandon  
Department of Sociology  
University of Massachusetts Amherst  
W33D Machmer Hall  
Phone: 413.545.4070  
E-mail: [brandon@soc.umass.edu](mailto:brandon@soc.umass.edu)  
<http://www.umass.edu/sadri/people/pbrandon.html>

Lynne Casper  
Demographic and Behavioral Sciences Branch  
National Institute of Child Health & Human Development  
6100 Executive Boulevard, Rm. 8B07, MSC 7510  
Bethesda, Maryland 20892-7510

Phone: 301.435.6983  
E-mail: casperl@mail.nih.gov

Tom DiPrete  
Columbia University/Duke University, Sociology  
Phone: 212.854.5826  
E-mail: tad61@columbia.edu  
<http://fds.duke.edu/db/aas/Sociology/faculty/tdiprete>

V. Jeffery Evans  
Demographic and Behavioral Sciences Branch  
National Institute of Child Health & Human Development  
6100 Executive Boulevard, Rm. 8B07, MSC 7510  
Bethesda, Maryland 20892-7510  
Phone: 301.496.1176  
E-mail: jeff\_evans@nih.gov

Katherine P. Ewing  
Arts and Sciences Council  
Duke University  
102 Social Sciences  
Durham, NC 27708-0088  
Phone: 919.684.5170  
E-mail: katherine.ewing@duke.edu  
<http://fds.duke.edu/db/aas/CA/faculty/katherine.ewing>

Jennifer Johnson-Hanks  
Department of Demography  
University of California, Berkeley  
2232 Piedmont Avenue  
Berkeley, CA 94720  
Phone: 510.643.5646  
E-mail: johnsonhanks@demog.berkeley.edu  
<http://www.demog.berkeley.edu/~johnsonhanks/>

Linda Garro  
Department of Anthropology  
University of California, Los Angeles  
241 Haines Hall  
375 Portola Plaza  
Los Angeles, CA 90095-1553  
Phone: 310.206.6249  
E-mail: lgarro@anthro.ucla.edu  
[http://www.anthro.ucla.edu/faculty.php?lid=182&display\\_one=1](http://www.anthro.ucla.edu/faculty.php?lid=182&display_one=1)

Rosalind King  
Demographic and Behavioral Sciences Branch  
National Institute of Child Health & Human Development  
6100 Executive Boulevard, Rm. 8B07, MSC 7510  
Bethesda, Maryland 20892-7510

Phone: 301.435.6986  
E-mail: rozking@mail.nih.gov

Hans-Peter Kohler  
Department of Sociology  
272 McNeil Bldg  
3718 Locust Walk  
Philadelphia, PA 19104-6297  
Phone: 215.898.7686  
E-mail: hpkohler@pop.upenn.edu  
<http://www.ssc.upenn.edu/~hpkohler>

Rachel Kranton  
Department of Economics  
University of Maryland  
College Park, MD 20742  
Phone: 301.405.3487  
E-mail: kranton@econ.umd.edu  
<http://www.wam.umd.edu/~rkranton/>

Annette Lareau  
Department of Sociology  
Temple University  
756 Gladfelter Hall  
Philadelphia, PA 19122  
Phone: 215.204.5594  
E-mail: lareau@astro.temple.edu  
<http://astro.temple.edu/~lareau/>

Miller McPherson  
Department of Sociology  
Duke University  
348B Soc/Psych Bldg.  
Durham, NC 27708  
Phone: 919.660.5787  
E-mail: [mcphersn@soc.duke.edu](mailto:mcphersn@soc.duke.edu)  
<http://fds.duke.edu/db/aas/Sociology/faculty/mcpherson>

S. Philip Morgan  
Sociology Department  
Duke University  
268 Soc-Psych Bldg.  
Durham, NC 27708-0088  
Phone: 919.660.5747  
E-mail: pmorgan@soc.duke.edu  
<http://fds.duke.edu/db/aas/Sociology/faculty/pmorgan>

Susan Newcomer  
Demographic and Behavioral Sciences Branch  
National Institute of Child Health & Human Development

6100 Executive Boulevard, Rm. 8B07, MSC 7510  
Bethesda, Maryland 20892-7510  
Phone: 301.435.6981  
E-mail: [newcomes@mail.nih.gov](mailto:newcomes@mail.nih.gov)

Isabel Otero  
NICHD  
Phone: 301.435.4434  
E-mail: [isotero@mail.nih.gov](mailto:isotero@mail.nih.gov)

Leila Rodriguez  
Demographic and Behavioral Sciences Branch  
NICHD  
E-mail: [rodriguell@mail.nih.gov](mailto:rodriguell@mail.nih.gov)  
<http://www.personal.psu.edu/lur113>

Seth Sanders  
Department of Economics  
University of Maryland  
College Park, MD 20742  
Phone: 301.405.3497  
E-mail: [sanders@econ.bsos.umd.edu](mailto:sanders@econ.bsos.umd.edu)  
[http://www.popcenter.umd.edu/people/sanders\\_seth](http://www.popcenter.umd.edu/people/sanders_seth)

Lynn Smith-Lovin  
Department of Sociology  
Duke University  
348A Soc/Psych  
Durham, NC 27708  
Phone: 919.660.5786  
E-mail: [smithlov@soc.duke.edu](mailto:smithlov@soc.duke.edu)  
<http://fds.duke.edu/db/aas/Sociology/faculty/smithlov>

Greg Urban  
Department of Anthropology  
University of Pennsylvania  
325 University Museum  
33rd & Spruce Streets  
Philadelphia, PA 19104  
Phone: 215.898.0895  
E-mail: [gurban@sas.upenn.edu](mailto:gurban@sas.upenn.edu)  
<http://www.sas.upenn.edu/~gurban/>

**List of Background Reading for Culture Meeting**

- Akerloff, George A., and Rachel Kranton. 2000. "Economics and Identity" *The Quarterly Journal of Economics* 115(3): 715-153.
- . 2005. "Identity and the Economics of Organizations" *Journal of Economic Perspectives* 19(1): 9-32.
- Garro, Linda C. 2000. "Remembering What One Knows and the Construction of the Past: A Comparison of Cultural Consensus Theory and Cultural Schema Theory." *Ethos* 26(3): 275-319.
- Harkness, Sara, Charles M. Super, & Constance Keefer. 1992. "Learning to be an American Parent: How Cultural Models Gain Directive Force." In *Human Motives and Cultural Models*, edited by Roy D'Andrade and Claudia Strauss. Cambridge: Cambridge University Press.
- Kohler, Hans-Peter; Jere R. Behrman, and Susan C. Watkins. 2001. "The Density of Social Networks and Fertility Decisions: Evidence from South Nyanza District, Kenya." *Demography* 38(1): 43-58.
- McPherson, Miller. 1983. "An Ecology of Affiliation." *American Sociological Review* 48(4): 519-532.
- . 2004. "A Blau Space Primer: Prolegomenon to an Ecology of Affiliation." *Industrial and Corporate Change* 13(1): 263-280.
- McPherson, Miller, Pamela Popielarz, and Sonja Drobnic. 1992. "Social Networks and Organizational Dynamics." *American Sociological Review* 57(2): 153-170.
- Quinn, Naomi. 1996. "Culture and Contradiction: The Case of Americans Reasoning About Marriage." *Ethos* 24(3): 391-425.
- Rindfuss, Ronald R., Minja Kim Choe, Larry Bumpass, and Noriko O. Tsuya. 2004. "Social Networks and Family Change in Japan." *American Sociological Review* 69(6): 838-861.
- Robinson, Dawn T., and Lynn Smith-Lovin. 2006. "Affect Control Theory" In *Sociological Theories in Social Psychology*, edited by Peter Burke. Stanford, CA: Stanford University Press.
- Shore, Bradd. 1996. *Culture in Mind: Cognition, Culture, and the Problem of Meaning*. New York: Oxford University Press.
- Smith-Lovin, Lynn. 2003. "Self, Identity, and Interaction in an Ecology of Identities" In *Advances in Identity Theory and Research*, edited by Peter Burke, Timothy Owens, Richard Serpe, and Peggy Thoits. New York: Kluwer Academic/Plenum.
- Strauss, Claudia. 1992. "What Makes Tony Run? Schemas as Motives Reconsidered" In *Human Motives and Cultural Models*, edited by Roy D'Andrade and Claudia Strauss. Cambridge, MA: Cambridge University Press.



Strauss, Claudia, and Naomie Quinn. 1997. *A Cognitive Theory of Cultural Meaning*. Cambridge: Cambridge University Press.

Urban, Greg. 1991. *An Approach to Culture and Language: Native South American Myths and Rituals*. Austin: University of Texas Press.

———. 2001. *Metaculture: How Culture Moves through the World*. Minneapolis: University of Minnesota Press.

Watkins, Susan Cotts. 2000. "Local and Foreign Models of Reproduction in Nyanza Province, Kenya." *Population and Development Review* 26(4): 725-759.

## APPENDIX 3.B

### Culture, Religion and Family February 10-11, 2006 279 Haines at UCLA

#### Friday, February 10

- 9:00 – 9:15 Introduction and Logistics
- 9:15 - 10:30 An Economic Perspective on Fertility Decline among Catholics  
Presenter: Eli Berman  
Discussant: Hans-Peter Kohler
- 10:45 – 12:00 Gender Attitudes and Family Ideals among Evangelicals  
Presenter: Sally Gallagher  
Discussant: Liz Drogin
- 12:00 – 12:30 Lunch
- 12:30 – 1:45 Religious Ideology and Parenting: The Case of Evangelicals  
Presenter: John Bartkowski  
Discussant: Jenna Johnson-Hanks
- 2:00 – 3:15 Cultural Influences on the Family Roles of Arab-American Women  
Presenter: Jen'nan Ghazal Read  
Discussant: Phil Morgan
- 3:30 – 4:45 How Christianity Shapes Husband and Fathers  
Presenter: Brad Wilcox  
Discussant: Christine Bachrach
- 5:00 – 5:45 Open Discussion (Commentary on the Day)  
5:45 Concluding Remarks: Conference Adjourns

#### Saturday, February 11

- 9:00 Announcements and Logistics
- 9:15 – 10:15 A Theory of Structure  
Commentator: William Sewell
- 10:30 – 11:15 The Social Cognitive Neuroscience (SCN) Approach  
Commentator: Matt Lieberman
- 11:30 – 12:15 The Demographic Approach  
Commentator: Ron Lesthaeghe
- 12:30 Final Remarks: Conference Ends

**Culture, Religion, and Family Conference**  
February 10-11, 2006 at UCLA

**Invited Guests and Suggested Readings**

**John Bartkowski (Mississippi State)**

- Ellison, C., J. Bartkowski, and M. Segal. 1996. "Conservative Protestantism and Parental Use of Corporal Punishment." *Social Forces* 74 (3): 1003-1028.
- Bartkowski, J., and B. Wilcox. 2000. "Conservative Protestant Child Discipline: The Case of Parental Yelling." *Social Forces* 79 (1): 265-290.
- Bartkowski, J. 1999. "One Step Forward, One Step Back: 'Progressive Traditionalism' and the Negotiation of Domestic Labor in Evangelical Families." *Gender Issues* (Fall): 38-61.

**Sally Gallagher (Oregon State)**

- Gallagher, S., and C. Smith. 1999. "Symbolic Traditionalism and Pragmatic Egalitarianism: Contemporary Evangelicals, Families, and Gender." *Gender and Society* 13 (2): 211-233.
- Gallagher, S. 2004. "The Marginalization of Evangelical Feminism." *Sociology of Religion* 65 (3): 215-237

**Jen'nan Ghazal Read (UC Irvine)**

- Read, J.G. 2004. "Cultural Influences on Immigrant Women's Labor Force Participation: The Arab-American Case." *International Migration Review* 38: 52-77.
- Read, J.G. 2003 "The Sources of Gender Role Attitudes Among Christian and Muslim Arab-American Women." *Sociology of Religion* 64(2): 207-222.
- Read, J.G. 2004. "Family, Religion, and Work Among Arab-American Women." *Journal of Marriage and Family* 66: 1042-1050.

**Brad Wilcox (UVA)**

- Wilcox, B. 2006. "Family." In *Handbook of Religion and Social Institutions*, edited by Helen Rose Ebaugh. New York: Springer.
- Wilcox, B. 2004. "Tending Her Heart: Religion, Ideology and Emotion Work in Marriage." In *Soft Patriarchs, New Men: How Christianity Shapes Fathers and Husband*.

**Eli Berman (UC San Diego)**

- Berman, Eli. 2000. "Sect, Subsidy, and Sacrifice: An Economist's View of Ultra-Orthodox Jews." *Quarterly Journal of Economics*, 115(3): 905-953.
- Berman, Eli, Laurence R. Iannaccone, and Giuseppe Ragusa. 2005. "From Empty Pews to Empty Cradles: Fertility Decline among {European} Catholics." Working paper, University of California at San Diego.
- Berman, Eli, and Ara Stepanyan. 2004. "How Many Radical Islamists? Indirect Evidence From Five Countries." Working Paper.

**William Sewell (U Chicago)**

- Sewell, William. 1991. "A Theory of Structure: Duality, Agency, and Transformation." *American Journal of Sociology* 98 (1): 1-29.

**Matthew Lieberman (UCLA)**

**Ron Lesthaeghe (VUB)**

**Discussants**

Christine Bachrach (NIH)

Jenna Johnson-Hanks (UC Berkeley)

Phil Morgan (Duke)

Hans-Peter Kohler (UPenn)

## APPENDIX 3.C

### Consilience, Cognition, and Culture Conference

Northwestern University

June 5-6, 2006

#### June 5

- 9:00–3:00 Parenthood Group Working meeting
- 3:30–5:00 Jean and John Comaroff, U. of Chicago
- 6:00–9:00 EFC Working Dinner (Bachrach, Kohler, Johnson-Hanks, Morgan, Smock)

#### June 6

- 9:00–9:15 Announcements: Morgan
- 9:15–10:30 Waxman, Sandra R. (Presider: Philip Morgan)  
[www.psych.northwestern.edu/~waxman/](http://www.psych.northwestern.edu/~waxman/)
- Research interests Cognitive development; language and conceptual development in infancy and early childhood; acquisition of concepts, word-meaning, and reasoning; early inductive reasoning.
- 10:45–12:15 McAdams, Dan P. (Presider: Chris Bachrach)  
[www.psych.northwestern.edu/~mcadams/](http://www.psych.northwestern.edu/~mcadams/)
- McAdams, D. P. (2006). *The Redemptive Self: Stories Americans Live By*. New York: Oxford University Press.
- Research interests: Narrative psychology. The development of a life-story model of human identity. Generativity and adult development. Themes of power, intimacy, and redemption in human lives. Modernity and the self.
- 12:15–2:00 Lunch
- McDade, Thomas (Presider: Jenna Johnson-Hanks)  
Research interests: Biocultural Perspectives on Health and Human Development; Medical Anthropology and Global Health; Ecological immunology; Stress; Health Disparities
- 2:00–3:15 Richeson, Jennifer A. (Presider: Hans-Peter Kohler)  
[www.psych.northwestern.edu/~richeson/](http://www.psych.northwestern.edu/~richeson/)
- Research interests. Richeson's research focuses on prejudice, stereotyping, and intergroup relations. Broadly speaking, she investigate the ways in which social group memberships such as race and gender impact the way people think, feel, and behave.
- 3:30–4:30 General Discussion

4:30–5:30 Executive session EFC Parenthood Group

6:30–9:00 Dinner

**June 7**

9:00–12:00 EFC-Parenthood Meetings (No local arrangements needed)

**Consilience Conference Invited Guests**

**Christine A. Bachrach**

Demographic and Behavioral Sciences  
Branch  
NICHD  
Executive Building, Room 8B07  
6100 Executive Boulevard, MSC 7510  
Bethesda, MD 20892-7510  
[cbachrach@nih.gov](mailto:cbachrach@nih.gov)  
301-496-1174

**Charles Camic**

Department of Sociology  
Northwestern University  
1808 Chicago Av. Room 103  
Evanston, IL 60208-1330  
[c-camic@northwestern.edu](mailto:c-camic@northwestern.edu)  
847-491-5671

**P. Lindsay Chase-Lansdale**

Institute for Policy Research  
School of Education and Social Policy  
Northwestern University  
2040 Sheridan Road  
Evanston, IL 60208-4100  
[lcl@northwestern.edu](mailto:lcl@northwestern.edu)  
847-467-6906

**Jean Comaroff**

Department of Anthropology  
University of Chicago  
Wilder House  
5811 S. Kenwood  
Chicago, IL 60637  
[jcomaro@uchicago.edu](mailto:jcomaro@uchicago.edu)  
773-702-0230

**John Comaroff**

Department of Anthropology  
University of Chicago  
Wilder House  
5811 S. Kenwood  
Chicago, IL 60637  
[jcomarof@uchicago.edu](mailto:jcomarof@uchicago.edu)  
773-702-7701

**Jennifer Johnson-Hanks**

Department of Demography  
University of California, Berkeley  
2232 Piedmont Avenue  
Berkeley, CA 94720  
[johnsonhanks@demog.berkeley.edu](mailto:johnsonhanks@demog.berkeley.edu)  
510-643-5646

**Hans-Peter Kohler**

Department of Sociology  
Population Studies Center  
University of Pennsylvania  
272 McNeil Bldg  
3718 Locust Walk  
Philadelphia, PA 19104-6297  
[hpkohler@pop.upenn.edu](mailto:hpkohler@pop.upenn.edu)  
215-898-7686

**Dan P. McAdams**

Human Development and Social Policy/  
Department of Psychology  
Northwestern University  
Annenberg Hall, Room 209  
2120 Campus Drive  
Evanston, IL 60208-0001  
[dmca@northwestern.edu](mailto:dmca@northwestern.edu)  
847-491-4174

**Thomas McDade**

Department of Anthropology  
Northwestern University  
1810 Hinman Avenue, Room 59  
Evanston, IL 60208-1330  
[t-mcdade@northwestern.edu](mailto:t-mcdade@northwestern.edu)  
847-467-4304

**S. Philip Morgan**

Sociology Department  
Duke University  
268 Soc-Psych Bldg  
Durham, NC 27708-0088  
[pmorgan@soc.duke.edu](mailto:pmorgan@soc.duke.edu)  
919-660-5747

**Jennifer A. Richeson**  
Department of Psychology  
Northwestern University  
Swift Hall, Room 119  
2029 Sheridan Road  
Evanston, IL 60208-2710  
[jriches@northwestern.edu](mailto:jriches@northwestern.edu)  
847-467-1331

**Pamela Smock**  
Sociology & Women's Studies/  
Population Studies Center  
University of Michigan  
426 Thompson St.  
Ann Arbor, MI 48106-1248  
[pjsmock@umich.edu](mailto:pjsmock@umich.edu)  
734-763-2264

**Sandra R. Waxman**  
Department of Psychology  
Northwestern University  
Swift Hall Room 212  
2029 Sheridan Road  
Evanston, IL 60208-2710  
[s-waxman@northwestern.edu](mailto:s-waxman@northwestern.edu)  
847-467-2293



**Consilience Conference Additional Reading**

McAdams, Dan P. 2004. "The Redemptive Self: Narrative Identity in America Today," in *The Self and Memory*, edited by Denise Beike, James Lampinen, and Douglas Behrend. New York: Psychology Press.

McAdams, Dan P., and Jennifer L. Pals. 2006. "A New Big Five: Fundamental Principles for an Integrative Science of Personality." *American Psychologist*, 61 (3): 204-217.

McDade, Thomas W., Sharon Williams, and J. Josh Snodgrass "What a Drop Can Do: Dried Blood Spots as a Minimally-Invasive Method for Integrating Biomarkers into Population-Based Research"

McDade, Thomas W., and Carol M. Worthman. 2004. "Socialization Ambiguity in Samoan Adolescents: A Model for Human Development and Stress in the Context of Culture Change." *Journal of Research on Adolescence*, 14(1): 49-72.

Richeson, Jennifer A., and Sophie Trawalter. 2005. "Why Do Interracial Interactions Impair Executive Function? A Resource Depletion Account." *Journal of Personality and Social Psychology* 88 (6): 934-947.

Shelton, J. Nicole, and Jennifer A. Richeson. Forthcoming. "Interracial Interactions: A Relational Approach." *Advances in Experimental Social Psychology*.

Shelton, J. Nicole, Jennifer A. Richeson, and Jessica Salvatore. 2005. "Expecting to be the Target of Prejudice: Implications for Interethnic Interactions." *Personality and Social Psychology Bulletin*, 31 (9): 1189-1202.

Waxman, Sandra R., and Douglas L. Medin. "Core Knowledge, Naming and the Acquisition of the Fundamental (Folk)biologic Concept 'Alive.'" In *Proceedings of the 5th International Conference on Cognitive Science*, edited by N. Miyake (pp. 53-55). Mahwah, NJ: Erlbaum.

Waxman, Sandra R., and Jeffrey L. Lidz. Forthcoming. "Early Word Learning." In *Handbook of Child Psychology*, 6th ed., Vol. 2.

### Consilience Volume Outline

The idea is to “model” this chapter similar to Wilson’s consilience book. Key sections of the chapter are:

#### **Introduction** (SPM 6/17/2006) , 1000 words

Our theory building in this book aims at *consilience*, a term we adopt from Wilson (1998:8) to signify a “jumping together” of perspectives and facts to produce a “unity of knowledge”. Our efforts, and Wilson’s call for consilience, resonate with current trends toward multidisciplinary and interdisciplinary theory and research. In fact, we view such research efforts and theory building as “mid-level” or localized attempts at consilience. These efforts differ in kind from those that begin within a discipline and attempt to “push out the sides of the box” to incorporate a broader range of phenomena (e.g., Becker’s 1981 seminal work on the economics of the family). The later are closer to Kuhn’s “normal science” whereby existing frameworks are maintained in the face of incongruous results by rather modest alterations in key aspects of the theory. In contrast, the former are more inclusive and innovative by beginning with the most valuable and fundamental insights across disciplines, a *jumping together* of fundamental insights. In this chapter, we show how key insights from the biological and social sciences contribute to the theory of family change/differences that we offer.

First, we address a few preliminary questions: Why bother? Or what is the advantage of consilience? And, what assumptions underlie consilience as a scientific goal? We begin with the assumptions, as we see them: i) Cause exists in the world at levels from the “cell to the society” and beyond, ii) Causal processes interact across these many “levels”, iii) Scientists can develop standards for agreeing on the best ways to model and understand these processes. Wilson (1998:9) claims that “trust in consilience is the foundation of the natural sciences ... (and) ... the momentum is overwhelmingly toward conceptual unity.” In the social sciences, disciplinary boundaries are being challenged and efforts such as ours (also see Massey 2005; Gintis 2006; and work in neuroeconomics, e.g., Glimcher and Rustichini 2004) reach for this same broad conceptual unity. We are more cautious than Wilson in that we do not seek the integration of the humanities, although science certainly has humanities implications (as do the humanities for science).

Are these assumptions problematic? They are already widely accepted by those with a scientific orientation – those that believe “order” and “cause” exist in the world and that humans can produce useful models of these regularities. With due respect to those uncomfortable with these assumptions, we will simply “move on” (see Wilson 1989:11).

Why bother with consilience? What is its advantage? Our first answer follows from underlying assumptions. We assume causes exist and causal processes operate both within and across more micro and more macro “levels”. Thus, adequate models and understanding require unified knowledge. Take the common but crucial example of genetic and environmental influences on behavior. If these effects were independent of one another (or additive), then they could be studied independently. But if they interact, fundamental understanding is lost by separate analysis. The co-evolution of the human brain and social structure (i.e., mental schemas and institutional resources) lie at the heart of our approach, and they span, by definition, the more micro level of genes to the more macro cultural and social levels of analysis.

Consilience is also laudable by the traditional criteria used to compare theories or models. That is, scientists seek theories/models that are useful for an important and broad set of problems, ones that fit the relevant data, and ones that are parsimonious. Consilience incorporates all three. As unified knowledge consilient theories address a broad array of questions within and across

micro and more macro levels. Our focus is on family change/differences, an important and broad array of questions, but the processes we described in the previous chapter apply to many other aspects and types of social change. In order to become a key feature of our unified theory a concept or process has to be viewed as an important concept/process in the substantive domain from which it was drawn. That is, it has fit data from a broad range of situations in order to be a candidate as a “pillar” of our consilient theory construction. An important example is the general model of learning that we will describe below, a model useful for understanding both language acquisition in humans and social learning across species. Finally, a unified consilient model is the ultimate in parsimony since, to the extent possible, a core set of concepts and processes are used across more micro and macro levels.

While our goals and claims generally follow Wilson’s (1998) there are several places where we seek some distance from Wilson’s views or protection against common misreadings of *Consilience*. First and as noted above, we do not think that incorporation of the sciences and the humanities is a useful current exercise. Secondly, our claims (and Wilson’s!) are not reductionist. We believe that causal properties operate at multiple levels, but that as a general rule, processes at a more macro level are NOT simply the aggregation of more micro level processes (see for instance, Wilson 1998:150-163). Third, Wilson asserts that the social sciences can learn much from the procedures and content of the physical sciences. We stress that the opposite is true as well. Social scientists need not be junior partners in consilience efforts. Take for example, the import of patriarchal gendered schemas transposed into scientific explanations (e.g., Keller 1985). It is clear that social as well as scientific factors have influenced our basic understandings in the physical and social sciences. Finally, we believe Wilson has underappreciated the potential contributions of social sciences such as anthropology, history and sociology. Below we identify and incorporate these contributions into our consilient theory of family change and variation.

**Economics** (HPK takes lead) 2200 words

**Biology** (HPK takes lead), including 2200 words

- Relevant aspects of human nature
- Dispositions (including psychological traits such as Big Five)
- Modularity of the brain (and perhaps other organs)

**Psychology**, including 2000 words

- Model of learning that is consilient with our theory
- Schema representation in the brain
- Duality of learning
- language learning as one example of learning

**Behavioral Economics** (HPK takes lead), 2000 words

- limits to rationality
- “failures” in decision-making under uncertainty and intertemporal trade-offs
- set point theory
- hot/cold cognition
- altruism/trust/

**Sociology** (SPM takes lead), including 1500 words

- materials/resources as source of structure
- network theory
- micro-macro interaction
- path dependence, etc

In *Consilience*, Wilson (2001:186-188) saves some of his harshest criticism for sociology. Wilson (2001:188) reuses the claim that sociologists are “biophobic – fearful of biology ..” and that sociology remains “the stronghold of the Standard Social Science Model (SSSM).” This model sees humans as a *blank slate* fully “the product of environment and historical antecedents” (Wilson 2001:188; also see Pinker 2002). But Wilson’s two-page description and dismissal misses sociology’s important contributions to the understanding of human behavior and the potential of sociology as an intellectual site where consilience can take hold. Specifically, Wilson’s biophobic slight is an appropriate caricature of sociology’s past but not its present. While always a “big tent” discipline, today sociology is even more receptive to a range of empirical and theoretical approaches. Further, unless the theory is going to be fully reducible to more micro-levels of analysis some attention to macro-processes is crucial. Sociology (along with anthropology) is where this work has taken place.

For instance, a central concept in our theory is *structure*, patterned social behavior not even observable at more micro levels. Structure has components that are virtual (*schema*) and real (*materials*). Sewell (1998) fashioned his understanding of structure from ‘raw materials’ found within sociology. His critique centered on sociologists’ common treatment of schema (variously labeled as ideology, culture, etc) and materials (referred to as structure, institutions, etc) as fully separable and competing loci of change. Sewell’s conception of the mutually constituent nature of schema and materials moved beyond common sociological conceptions. But it sprang from the futility of less dynamic conceptualizations within sociology.

The *materials* conception of resources/constraints on behavior is especially comfortable for sociologists. They have long maintained that pecuniary characterizations of constraints are problematic because they exclude the power of existing institutions to both define appropriate options and to reward specific ones.

A second contribution of sociology that flows from its more macro orientation is its focus on social networks. Characteristics of social networks cannot be reduced to a more micro level and yet they can influence behavior. Those embedded in more dense networks may have access to both more materials for action/resistance and may be subject to more severe sanctions. .. H-P ? what else here.

A third contribution of sociology has been a long term interest in micro-macro level processes. Resulting knowledge demonstrates that causal processes operate at both micro and macro levels and that there are interactions across levels. [Kohler’s interaction effects here.] For sociologists these micro-macro distinctions referred to individual humans and groups of humans. But, in principle, generalizing across more levels is nonproblematic.

The final sociological contribution is shared with history, more specifically in intellectual niches with sociology (historical sociology) or history (social history).

**Anthropology** (JJH takes lead) 1500 words

**Demography** (SPM takes lead), including exposure, events and relationships to conjunctures 500 words

Demography’s contribution to our consilient theory is threefold. The first contribution follows from demographers’ focus on explaining events, also the focus of our theory. Demographers focus primarily on a subset of events, vital events (e.g., births and deaths). Perhaps the most fundamental demographic insight was that the appropriate units of analysis for events are units of exposure. Units of exposure (e.g., days, months, years) map precisely onto “conjunctures”, a key concept in our theoretical formulation. This exposure-conjuncture mapping provides both a statistical and conceptual framework for organizing empirical work. For instance, life-tables and event-history analysis provide powerful tools for analyzing exigencies affecting behavior at a point in time.

The second demographic insight, an empirical regularity actually, is that family change is often a period phenomenon. While the theory of cohort change is elegant and plausible, the evidence against a “cohort replacement” explanation of change is overwhelming. This is especially true in the areas of human fertility and union formation (see NiBrochain 1992). In attempting to account for rapid change affecting a broad cross-section of birth cohorts (period change), demographers have stressed the importance of the “diffusion of ideas” that, in the case of fertility for instance, make fertility control a legitimate choice or that provide new frames that motivate use. Or debates about abortion can lead persons to reassess their appropriateness for themselves and others. Likewise, new schema regarding the proper response to an unfulfilling marriage can help account for dramatic increases in marital disruption in a relatively short period of time. These examples show how new virtual structures, schemas, can produce rapid and pervasive change. Consequently, they help account for many empirical results that have fit poorly with explanations requiring changes in material structure (our “materials” concept, e.g., social institutions).

The third demographic contribution is the concept of the individual life course. While related to the psychological concept of development, the life course is focused on the trajectories of behavior that result from sequences of conjunctures. While the unit of analysis for events is exposure, a person-month or person-year of exposure, organizing these exposure segments so as to retain the consistent social space persons inhabit and the reality that past behaviors have implications for future ones is key conceptually and empirically.

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## APPENDIX 4.A

### Invitation to Participate in Union's Group Program Development

*The following email was sent on February 15, 2005 to approximately 100 scholars worldwide.*

#### Explaining Change and Variation in Couple Relationships—Invitation for Dialogue

We are members of an interdisciplinary team of scholars who have a contract with the NICHD to develop and execute a substantive, interdisciplinary research-based planning process for answering the question of what drives family change and variation in the United States and other industrialized countries. As a major part of its effort to determine future funding priorities, the NICHD has asked us to assess existing research, theory and scientific methods in this area. The ultimate goal of the project is intended to be the development of innovative models for research and data collection that can constitute a coordinated program of research capable of significantly enhancing our understanding of family change and variation at both the individual and the societal level. To accomplish this ambitious objective, we seek input from leading scholars in the area of family research as well as to integrate input from scholars not traditionally engaged in family research but whose theories, methods and data might broaden our understanding of the family. We have established a web site for this project at <http://www.soc.duke.edu/~efc/>. For those less familiar with family research we provide a short description of trends and some major issues in the BACKGROUND section below.

Our project is divided into three broad working groups. One of these groups concerns changes and variation in the various types of couple relationships (heterosexual, gay, marital, cohabitating, and so forth) that characterize contemporary industrialized societies such as the U.S. We seek a better understanding of this change and variation from many theoretical and disciplinary perspectives. In particular, we would like to obtain your input in our study. We are at a very initial stage of defining a substantive agenda, which is illustrated in the set of very general questions below. We would be very interested in your responses to these questions, which can be as brief or extensive as you have time for. We are particularly interested in any working papers which you would be willing to share with us that pertain to these questions.

- 1) What are the major gaps in our descriptive knowledge of major trends and subgroup variation in unions?
- 2) What are the major gaps in our understanding of the explanation for these trends and subgroup variation?
- 3) For the major gap or gaps that you identified in (1) and (2) above, what is most need in order to fill these gaps? Do the gaps exist because of a lack of data? Do they exist because of a lack of adequate theories? Or do they come from both theoretical and data deficiencies?
- 4) If you identified either major theoretical or data gaps in (3) above, please give us your perspective on an approach or approaches that in your opinion offer considerable promise for filling the gaps.
- 5) At the end of this message, we have appended a list of scholars with whom we have initiated communication. **TO WHOM ELSE SHOULD WE BE TALKING?** We ask both for the names of specific individuals that you would recommend, and also for areas of scholarly inquiry that you believe hold promise for making progress on our agenda.

We invite you to participate in a dialogue that we are establishing within the scholarly community on these important questions. Your feedback is helpful to us at any stage of this project, but it

would be particularly helpful to us during the early agenda-setting stages of this project. Thank you in advance for your participation—Thomas DiPrete (tdiprete@soc.duke.edu) and Seth Sanders (sanders@econ.bsos.umd.edu), co-organizers of Module 2, Explaining Change and Variation in Couple Relationships

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BACKGROUND: Changes in couple relationships in the U.S. since the mid-twentieth century have been profound. In the 1950s, a young woman would likely marry before her nineteenth birthday. Her husband would be the principal breadwinner within a fairly stable work career while she remained at home, typically raising three or more children within a nuclear family close to the home of the wife's or husband's parents (though with some variation by ethnic group). But by the 1980s, the family situation had changed dramatically. Advances in birth control and abortion law allowed parents greater control over fertility, and reduced the chances of pregnancy from sexual unions prior to and outside of marriage. Perhaps as a consequence of these technological and legal changes, women of the 1980s are having at least one less child than did their mothers, and romantic unions outside of marriage have achieved new prominence (cohabitation, for example, now precedes half of all first marriages). Divorce law reform in the 1970s for the first time allowed one partner to leave a marriage unilaterally, and divorce rates rose through the 1970s and early 1980s to the point where between 40% and 50% of all marriages will end in divorce, although many will remarry. In addition, female labor force participation increased from 35% in the 1960s to 60% in the 1990s while the labor force participation of men, particularly low skilled men, slowly declined. As a result, wives now earn more than husbands in a quarter of American families headed by a married couple. These changes have occurred against a possibly growing divergence of patterns across sub-populations defined by race, ethnicity, and sexual orientation. Meanwhile, the distribution of union forms varies widely across the industrialized countries of Europe, North America and East Asia. These changes in couple relationships have been well documented. But the mechanisms by which these changes have occurred are not well understood. Furthermore, we know relatively little about trends and variation in the characteristics of couple relationships. Has the nature of what partners expect from each other changed over time? Is it different across sub-populations? Has there been a shift in "power" between men and women, and does the relative power of women within relationships differ across sub-populations? Has there been a change in the negotiation process within relationships, and how has it affected union formation and dissolution? Have there been important changes in the meaning people attach to unions? Strategies for mate selection, techniques for conflict resolution, biology, sex, culture, and the various attributes of what is commonly called love probably play important roles in the development of successful unions. We wish to better understand these roles. Changes in technology, in culture, in demographics, and in the economy may have changed the meaning of union success, the difficulty of achieving it, and the distribution of responses to perceived deficiencies in relationships. We wish to understand these changes.

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CORE INVESTIGATIVE GROUP: Designing New Models for Explaining Family Change and Variation

S. Philip Morgan, Principal Investigator  
Suzanne M. Bianchi, Caroline Bledsoe, Lindsay Chase-Lansdale, Thomas A. DiPrete, V. Joseph Hotz, Seth Sanders, Judith Seltzer, Duncan Thomas

## APPENDIX 4.B

### Plan for Action

The National Institute of Child Health and Human Development (NICHD) has charged a group of interdisciplinary researchers with devising a plan for coordinated research on the family. The overarching question is “What explains family change and variation? The plan we devise will guide the development of new data collection and analysis projects and is likely to have a broad influence on research in this field.

Thomas DiPrete, a sociologist, Seth Sanders, an economist, and Lynne Casper, a demographer and the NICHD Project Officer, are responsible for developing the portion of the plan that relates to family unions. Our first step was to solicit input from a wide array of experts in different disciplines working in the area of family unions. We have synthesized these suggestions and organized them around the current structure for the overall project. Below we present a draft of the “key questions” that emerged from the recommendations we received and from other discussions with researchers. This is only a working list of key questions. Throughout the project we plan to work with you and with other researchers to add, delete, and reorganize these questions, so that we have as comprehensive a list of empirical questions as possible.

This is the beginning not the end of our work. Our charge is to put together a coordinated research program to answer the questions we have assembled with regard to unions. We have decided that the best way to make progress is to call together a small working group of researchers with broad knowledge who are on the cutting edge of research on family unions. We believe that you are one of these researchers and are asking for your help in the process.

What will the group do? In many ways it depends on what the group chooses to do. We have been granted wide latitude to develop “new models” for research on fertility and family change and variation. But our immediate goal is to assess what we know about these and other related questions, to write clearly about the gaps that exist in our knowledge and to suggest ways to fill these gaps. We hope the group can recommend good summaries that we can collect and distill and will know people who might be willing to assess the evidence and theory in areas in which no good summaries exist. If it is useful, and there are specific research ideas, data collection techniques etc. that need to be tested, we have the ability to seed small pilot projects that would be of key interest. While this will be real work, our job would not be to do all of the work ourselves (no doubt we will do some of it) but to work with many people in the field to see that the plan is completed.

We greatly appreciate your input to date, and hope you will become a permanent member of our working group. It is fair to ask “what is in it for us?” First and foremost, this is an opportunity to influence the direction of research and funding from NICHD on issues in family demography. NICHD is serious about this project informing their next investments in data collection in this area and those who participate we believe will have the opportunity to influence the content, design, and value of future resources available for studying the family. Second, we do have funding for travel expenses and a limited amount of funding for compensation for participants. However, we have a fixed budget and we will need to think collectively about how to best allocate this funding to ourselves, to other researchers, and to projects to get our work done. We believe we have about \$50,000 for such expenses but we do have the ability to lobby the leadership of other project groups for more funding should particularly exciting opportunities arise. Finally, and I know to many this may be the most motivating reason to participate, this is a real chance to advance science with a group of like minded researchers.



## **A Note on the Structure of the Overall Project**

Our strategy, shown in the schematic in Figure 1, begins at a very abstract level. We will construct an overarching theory that combines four orienting, conceptual frameworks: household and family decision-making, the role of biology in family and fertility processes, individual development across the life course, and the role of context in shaping family behavior and patterns. These interacting factors comprise the minimum set for a useful, abstract theory of family social change and difference.

We then apply these abstract notions to five key substantive domains, or aspects, of family life: choices about entry and exit from couple relationships including cohabitation, marriage and divorce; decisions about when and whether to have children and whether to have them within marriage; the relationship between childhood circumstances and adult outcomes; family relationships that cross household boundaries; and the changing interface between work and family life. We are organizing ourselves into three work groups (on unions, fertility, and intergenerational relationships) in order to accomplish this work.

Theoretical work at this lower level of abstraction can be thought of as building “mid-level” or “mid-range” theory. Theory at this level is derived and informed by the overarching theory but it is more amenable to empirical test because it is more closely linked to specific behaviors. The usefulness of the mid-range theory provides indirect evidence of the usefulness of the overarching theory. Iterating between these levels of abstraction and iterations between mid-level theory and empirical test provide the dynamics that lead to a refined model of family change and difference.

The unique and exciting innovation here is the simultaneous and co-coordinated work on multiple mid-level theories and thus the multiple iterations across these levels of abstraction. Resources from NICHD make this large-scale effort possible and this work promises a substantial advance in conceptualization and theory. These advances, in turn, will point toward the next key research needs.

Our workgroup structure and our plan of research mimics the theoretical schematic in Figure 1: interlocking work groups populate these domains to review the existing literature, survey existing data sources and critique current methodological practice.

## **A Draft List of Key Questions**

1. What is the meaning of dating, cohabitation, marriage, remarriage, and divorce as measured in traditional demographic research? Most research in the area of union formation and dissolution describes transitions into relationships as the result of conscious decision-making on the part of two actors. But, what influences the extent to which individuals consciously hold and purposefully implement intentions or expectations about these family union and dissolution behaviors? What aspects of the relationships between two people (e.g., quality of relationship, companionship, physical attraction, social reproduction and economic production, division of labor) are most salient in determining these intentions or expectations?
2. Are intentions, expectation, desires and conscious decisions the primary theoretical constructs to emphasize in studies of union formation and dissolution, or would other constructs provide better purchase for developing behavioral models? How could measurement of appropriate constructs be improved and their appropriateness for members of different race, ethnic, class, and immigrant groups assured?

3. How do individual-level cognitive schema and prototypes related to building a family relate to coupling decisions (e.g., dating, cohabiting, marriage, or remarriage), the decision to leave such unions, and related behaviors that result in coupling and dissolution?
4. How might intentions, desires, decisions, cognitive schema and prototypes related to union formation and dissolution help us to explain the increased age of marriage and the decline in marriage among some subgroups, the rising rates of cohabitation, the decoupling of marriage and childbearing?
5. How do intentions, desires, decisions, cognitive schema and prototypes vary by subgroups (e.g., race/ethnicity, region, rural vs. urban and religion) and do they explain differences in the delay and decline of marriage, cohabitation and the decoupling of marriage and childbearing among these groups?
6. To what extent are recent trends in the age at marriage, divorce, and cohabitation driven by ideational change?
  - a. Some scholars (notably Ron Lesthaeghe) see trends towards heightened valuation of individual autonomy and gender equality, coupled with a decreased willingness to accept the authority of church or state coupled with an increased orientation toward consumption
  - b. They argue that these ideational trends have produced a second demographic transition consisting of rising age and marriage and heightened divorce rates, followed by heightened rates of pre-marital cohabitation and nonmarital births, followed by a rise in post-marital cohabitation.
  - c. How can this theory best be tested? How does one disentangle the exogenous effects of culture on behavior from the effects of behavioral change on attitudes? What is the mechanism by which culture changes, by which cultural change is communicated to people, by which cultural change produces changes in attitudes, preferences and behavior, and ultimately changes in demographic rates?
7. Why is the ordering of marriage and childbearing reversed from the normative pattern amongst low-income men and women? Is Edin's theory correct that lower-income couples have raised a higher socioeconomic bar for marriage than for childbearing? How is the relationship between marriage and childbearing changing for middle-class persons? It is likely that delayed marriage is increasing the rate of unmarried childbearing, but what about the reverse effects: what role does childbearing play in the timing and duration of cohabitation and marriage? Are the effects of childbearing on timing and duration changing or are they stable?
8. How has the trend in "assortative mating" been changing over time and across subgroups? Assortative mating includes inter-racial, inter-ethnic marriage and inter-faith marriage, changes in the age distribution between partners, changes in the probability of marrying someone from the same SES, etc. How do factors such as the relative scarcity of men and women and the total size of the marriageable pool (urban vs. rural etc.) affect assortative mating?
9. What is the effect of biological factors related to beauty on partner choice? Can we measure exogenous aspects of beauty such as face symmetry? How has the tradeoff between beauty and other factors changed over time?

10. Are changes in the rates of marriage and cohabitation producing increasing homogenization or increasing polarization in society? What are the socioeconomic and cultural bases of polarization if it exists? How important is union status in explaining increases in income inequality? Does its role in lifetime inequality differ from its role in cross-sectional inequality? More generally, is the relationship between marriage and quality of life changing, and is the relationship the same across major social groups?
11. How have dating and courtship patterns changed? What is the impact of this change on rates and timing of cohabitation, marriage, and divorce?
12. What do trends in remarriage look like, how does cohabitation after divorce affect rates of remarriage, and how do remarriage rates vary across population groups?
13. How have changes in religious identification and religious participation affected the timing and form of unions and marriage?
14. Why did the divorce rate rise so dramatically until the middle 1980s and why has it been slowly declining since then? To what extent was the increase due to changes in perceived marital quality, to what extent was it due to changing responses to the same (low?) level of marital quality, and to what extent is it a consequence of changes in the prevalence of cohabitation?
15. Why is there such heterogeneity in divorce rates by state?
16. What does marriage mean to Americans, how much variation is there in this meaning across subgroups, and how has this meaning changed over time? Romantic love is clearly an important part of the definition, but how is romantic love related to socioeconomic factors and gender identity? Does one decide whom one might love based upon a determination of one's worth in the marriage market? How does love depend upon personal feelings of success or failure? Is it hard for a woman to love a man who is not economically successful because a woman expects a man to be a breadwinner? Or is it because it is hard to love someone who feels himself a failure because he sees being a breadwinner as an essential part of his masculinity? Or is it because it is hard to love a man who is threatened by the prospect of being less successful than his female partner? To what extent have changes in these conceptions of gender changed the socioeconomic correlates of romantic love?
17. How is the meaning of marriage operationalized in terms of:
- The bearing and raising of children
  - Emotional intimacy
  - Patterns of time use: Time spent together, apart (including both work and leisure), with children, and with extended family and friends
  - Forms of communication
  - The nature of household decision-making and conflict resolution concerning major issues such as money, careers, the domestic division of labor, the raising of children, and geographic location
18. How do issues of power within relationships affect the willingness of men and women to enter relationships under given circumstances and to leave relationships when circumstances

change? How are changes in rates of cohabitation, marriage, and divorce influenced by changes in the relative power of men and women within relationships?

19. What are the causal links between patterns of household decision-making (and inequalities in household decision-making), decision-making outcomes, and relationship quality? Are these links contingent on education, race, or religious identification and involvement? How are these factors trending and what do the trends imply about relationship quality in the future?

20. What are the major trends in the rate and form of unions of same sex couples? What are the explanations for these trends?

21. Is the slowing of rates of change in family forms an indication that we are moving into a period of stability, or will rates of change once again accelerate to reinforce or alter recent trends?

### **Plan for Action; Substantive Goals**

In keeping with the contract requirements, the major substantive goals of the work group are as follows:

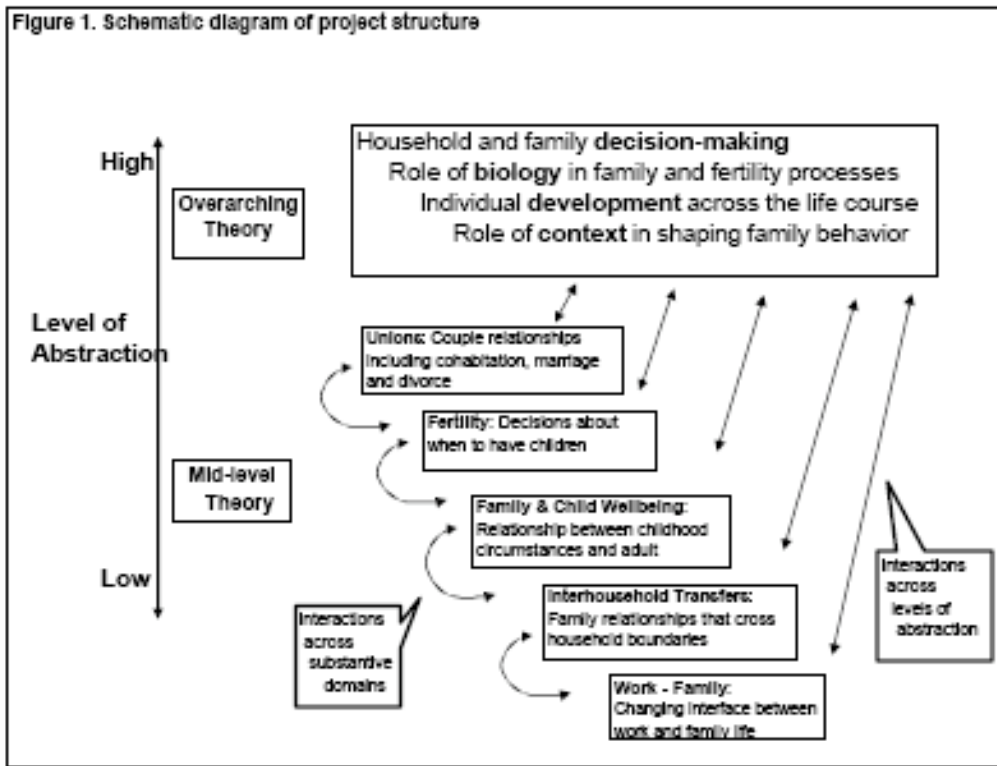
1. Review and revise the list of key questions that will guide subsequent work, and situate these questions within the theoretical schema in figure 1.

2. Review existing research, data sources, methodologies, and theoretical approaches in order to assess the state of knowledge with respect to the key questions. In each case, each review would highlight

- What we know
- The major studies that support this knowledge.
- The major data that support the research findings of these studies.
- The methodological approaches of these studies
- The limitations of existing studies (i.e., what we don't know)
- The data, theoretical, and methodological reasons for these limitations.

3. Develop new theoretical approaches and methodologies. We anticipate that the work of step II will lead to a substantial revision, specification, and clarification of the key questions. The work group would then take as its charge (a) the operationalization of at least a subset of the revised key questions into researchable questions, and (b) the development of appropriate theoretical approaches, methodological approaches, and data-gathering strategies for answering these questions.

Figure 1. Schematic diagram of project structure



## APPENDIX 4.C

### Commissioned Papers and Authors' Biosketches

#### Commissioned Papers

Introduction: Anchoring the Future: Change and Variation in Romantic Union Formation and Dissolution

*Lynne M. Casper, Department of Sociology, University of Southern California*

*Pamela J. Smock, Population Studies Center and Department of Sociology, University of Michigan*

Chapter 1: Household Formation and the “Second Demographic Transition” in Europe and the US: Insights from Middle Range Models

*Ron J. Lesthaeghe, Population Studies Center and Department of Sociology, University of Michigan, and Department of Sociology University of California-Irvine;*

*Lisa Neidert, Population Studies Center, University of Michigan*

*Johan Surkyn, Vrije Universiteit Brussels*

Chapter 2: Economic Theories of Union Formation

*Aloysius Siow, Department of Economics, University of Toronto*

Chapter 3: Different Slopes for Different Folks: A Psychology Perspective on Union Formation, Relationship Quality, and Couple Dissolution

*Scott M. Stanley, Department of Psychology and Center for Marital and Family Studies, University of Denver*

*Galena Kline Rhoades, Center for Marital and Family Studies, University of Denver*

*Sarah W. Whitton, Center for Marital and Family Studies, University of Denver*

Chapter 4: Signaling the Value of Marriage

*Steven L. Nock, Department of Sociology and Psychology, University of Virginia*

Chapter 5: Economics, Culture, and Heterosexual Cohabitation in the United States: Current Knowledge and Future Directions for Research

*Pamela J. Smock, Population Studies Center and Department of Sociology, University of Michigan*

*Lynne M. Casper, Department of Sociology, University of Southern California*

*Jessica Wyse, Department of Sociology and Gerald R. Ford School of Public Policy*

Chapter 6: Gay and Lesbian Families: A Research Agenda

*Gary J. Gates and V. Lee Badgett, Williams Institute, UCLA School of Law*

Chapter 7: What Explains Race and Ethnic Variation in Cohabitation, Marriage, and Divorce, and Nonmarital Fertility?

*R. Kelly Raley, Department of Sociology, University of Texas at Austin*

*Megan M. Sweeney, Department of Sociology, University of California, Los Angeles*

Chapter 8: Adolescent Dating Relationships: Implications for Understanding Adult Unions

*Wendy D. Manning, Peggy C. Giordano, and Monica Longmore, Center for Family and Demographic Research and Department of Sociology, Bowling Green State University*

Chapter 9: An Anthropological Perspective on Marriage

*Naomi Quinn, Department of Cultural Anthropology, Duke University*

Chapter 10: An Economic View of Culture, Identity, and Family Change

*Rachel Kranton, Department of Economics, University of Maryland*

Chapter 11: Economic Transformation, Work-Family Issues, and Marriage

*Jennifer L. Glass, Department of Sociology, University of Iowa*

Chapter 12: Patterns of Union Formation and Dissolution in Europe and the United States: A Comparative Perspective

*Matthijs Kalmijn, Department of Sociology, Tilburg University*

Chapter 13: Utilizing Relationship Matrices to Study Romantic Unions: A Cross-Country Comparison

*Peter D. Brandon, Demography and Sociology Program, Australian National University*

Conclusion: A Roadmap for Progress in Explaining Change and Variation in Romantic Unions

*Lynne M. Casper, Department of Sociology, University of Southern California*

*Thomas DiPrete, Department of Sociology, Columbia University*

*Seth Sanders, Department of Economics, University of Maryland*

*Pamela J. Smock, Population Studies Center and Department of Sociology, University of Michigan*

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**Author Biosketches**

**M. V. Lee Badgett** is the research director and visiting professor at the Williams Institute of UCLA Law School for 2005-7. She is also an associate professor of economics at the University of Massachusetts Amherst. Her 2001 book, *Money, Myths, and Change: The Economic Lives of Lesbians and Gay Men* (University of Chicago Press) examines family policy and sexual orientation discrimination. She is working on a new book investigating the effects same-sex marriage will have on marriage and gays, lesbians, and bisexuals themselves, drawing on U.S. and European experiences with same-sex marriage.

**Peter Brandon** received his Ph.D. from the University of Chicago in 1992. He also has a Masters degree from the University of Michigan and a Bachelors degree from Michigan State University. After completing his doctoral studies, he joined the research staff at the Institute for Research on Poverty (IRP) at the University of Wisconsin. In 1996 he left the IRP to become Assistant Professor of Sociology at the University of Massachusetts, Amherst. From 2002 until 2005, Brandon was Associate Professor of Sociology at the University of Massachusetts; in 2005 he left Massachusetts to assume his current position as ARC Professorial Fellow and Professor in the Research School for Social Sciences at The Australian National University. His research interests include: inequality and poverty; child and family well-being; social program evaluation; kin-provided assistance over the life course; work and family; lone parent households; immigration children; and the health disparities among children. His most recent work focuses on family change and diversity, child disability, survey methods, and immigration.

**Lynne M. Casper** is Professor of Sociology at the University of Southern California. Her previous positions include Health Scientist Administrator and Demographer in the Demographic

and Behavioral Sciences Branch at the National Institute of Child Health and Human Development (NICHD) where she directed the family and fertility research portfolio and the training program in population studies, and Statistician and Demographer in the Fertility and Family Statistics Branch at the U.S. Census Bureau where she was the senior analyst for the family and households, child care and voting programs. She is co-editor of the books *Work, Family, Health, and Well-being* (2005, Erlbaum) and *The Handbook of Measurement Issues in Family Research* (2006, Erlbaum). Dr. Casper is co-recipient of the American Sociological Association's 2002 Otis Dudley Duncan Award for Outstanding Scholarship in Social Demography for the book *Continuity and Change in the American Family*. She has published extensively in the areas of families and households, work and family, cohabitation, fatherhood, child care, voting and demographic methods in such journals as *The American Sociological Review*, *Demography*, *Family Planning Perspectives*, *The Journal of Family Issues*, *The Journal of Marriage and the Family*, and *Social Biology*. She currently serves as an elected member on the Boards of the Population Association of America and the Sociology of Population section of the American Sociological Association.

**Thomas A. DiPrete** is Professor of Sociology and Chair of the Sociology at Columbia University. His research interests include social stratification, demography, economic sociology, and quantitative methodology. Current and recent research projects include the comparative structure of inequality in European and American labor markets, the sources of variation and change in family structure in the U.S. and Europe, social polarization in the U.S. and its link with segregation in social networks along several potential dimensions of social cleavage, the causes of the widening gender gap in higher education in favor of women, and the role of social comparison and cumulative advantage processes in the trend toward rising inequality at the top of the earnings distribution.

**Gary J. Gates** is Senior Research Fellow at the Williams Institute, UCLA School of Law. Dr. Gates is co-author of *The Gay and Lesbian Atlas* and is widely acknowledged as a national leading expert on the demography and geography of the gay and lesbian population. His doctoral dissertation included the first significant research exploring characteristics of same-sex couples using U.S. Census data. He has since published extensively on the demographic and economic traits of the lesbian and gay population. His work has been featured in many national and international media outlets, including the *New York Times*, the *Washington Post*, the *Los Angeles Times*, *USA Today*, the *Financial Times*, and *National Public Radio*. Prior to completing his Ph.D. at the H. John Heinz School of Public Policy and Management at Carnegie Mellon University, Dr. Gates facilitated the development of and co-authored a statewide HIV prevention plan for Pennsylvania. Gates' background includes a Master of Divinity degree from St. Vincent Seminary and a Bachelor of Science degree in Computer Science from the University of Pittsburgh at Johnstown. Dr. Gates' current research projects include a series of studies exploring the demographics and economic traits of Asian Pacific Islanders, Latino/as, and African-Americans in same-sex couples in California, a study of bi-national same-sex couples in the United States, and an NIH-funded research project comparing same-sex couples in the United States and Canada.

**Peggy C. Giordano** is Distinguished Research Professor of Sociology at Bowling Green State University. Her research centers on basic social network processes, including friendships and dating relationships, and the ways in which these relationships influence a variety of developmental outcomes, especially adolescent sexual behavior and delinquency involvement. She is the principal investigator of the NICHD funded four-wave Toledo Adolescent Relationships Study. This study examines the nature and meaning of adolescent relationship experiences (e.g., family, peers, and dating partners) in an effort to discover their relative impact



on sexual behavior and contraceptive practices, as well as involvement in other problem behaviors. Dr. Giordano has followed a cohort of male and female serious juvenile offenders from adolescence into parenthood. With funding from the W.T. Grant Foundation, Manning, Longmore, and Giordano are examining the intergenerational processes that perpetuate involvement in crime and heighten risks for other negative child outcomes such as psychological distress.

**Jennifer Glass** is Professor of Sociology at the University of Iowa. She has published over 30 articles and books on work and family issues, gender stratification in the labor force, and mother's employment and mental health. Her research has been funded by the National Science Foundation and the Alfred P. Sloan Foundation and has appeared in the *American Journal of Sociology*, *American Sociological Review*, *Social Forces*, *Journal of Marriage and the Family*, *Journal of Health and Social Behavior*, and *Demography*, among others. She received the Reuben Hill Award from the National Council on Family Relations, and a fellowship from the Center for Advanced Study in the Behavioral Sciences. She has chaired the Sex and Gender Section and the Family Section of the American Sociological Association, and served on the Council of the ASA. Her research interests include work and family life, the employment behavior of women with children, and employment and family effects on mental health. She is currently researching the effects of workplace policies and benefits on wage growth among mothers, fathers, and non-parents to try to understand the origins of the "motherhood wage gap" that continues to economically disadvantage mothers and their children. A related project focuses on the effects of religious fundamentalism on young men's and women's transitions to adulthood and subsequent marital stability and occupational attainment.

**Matthijs Kalmijn** is Professor in the Department of Social Cultural Sciences at Tilburg University. He holds a professorship with the label family and the life course. Kalmijn is a senior founder and coordinator of the research program 'Netherlands Kinship Panel Study,' which is subsidized by the Nation Science Foundation. His current research focuses on several sub-areas in sociology including marriage formation, partner choice, and divorce, intergenerational solidarity and intergenerational reproduction, and the relation between demographic and socioeconomic dimensions of the life course. His prior research on ethnicity includes work on black/white intermarriage, the socioeconomic assimilation of Caribbean Americans, ethnic differentiation in American society, and also race and cultural capital. All his studies are based on statistical analyses of large-scale (and often newly collected) social survey data.

**Rachel E. Kranton** received her Ph.D. in Economics from the University of California, Berkeley in 1993. She has been a member of the Economics Department of the University of Maryland since that time. Her research considers economic institutions and how personal relationships and the social setting affect economic outcomes. In 1996-1997, she was Fellow at the Russell Sage Foundation, and in 2001-2002 she was a member of the Institute for Advanced Study. She has also served on the editorial board of the *American Economic Review*.

**Ron J. Lesthaeghe** earned his Ph.D. (1970) in the Social Sciences at the University of Ghent, and obtained his M.A. in Sociology (1968) from Brown University. He has been Research Associate at the Office of Population Research at Princeton University (1971-73), and worked for the Population Council as regional representative for West and Central Africa (1975-76). Since 1971 he was Lecturer and then Professor of Demography and Social Science Methodology at the Free University of Brussels (VUB). From 1988 to 1991 he was Dean of Faculty of Economics, Sociology and Political science at (VUB). Since 2005, Dr. Lesthaeghe has been Emeritus professor at VUB. He has held Visiting Professorships at the Institut des Sciences Politiques de Paris (Colson Chair, 1989-93), the Université Catholique de Louvain (Leclercq Chair, 1996-97),

the University of Antwerp (Belgian Franqui Chair, 1999-2000), and Harvard University (Erasmus Chair, 2001-02). He is a member of both the Belgian and the Dutch Academies of Science. Dr. Lesthaeghe served on the Fachbeirat of the Max Planck Institut für Demografie in Rostock, Germany (1999-2004). In 2003, he received the Irene Taueber Award of the Population Association of America (PAA). Dr. Lesthaeghe ranked 10th among the most influential demographers in the period 1950-2000 by 637 colleagues responding to the CICRED demographers' survey. In 2005 he was recipient of the quinquennial Ernest-John Solvay Prize of the FWO (highest Belgian National Science Foundation award in the social sciences and humanities). He is currently Visiting Professor at the Departments of Sociology/ Population Studies Centers of the Universities of Michigan (Ann Arbor) and of California (Irvine).

**Monica A. Longmore** is Professor of Sociology at Bowling Green State University. Her interests focus on social psychology processes, including the nature and consequences of dimensions of the self-concept, especially the impact of self-conceptions on adolescent dating and sexual behavior. Dr. Longmore is Co-investigator on the Toledo Relationships Study project. She is Principle Investigator, with Co-Investigators Manning and Giordano, of the Social Relationships, Identity, and Sexual Risk Taking Project funded by the Department of Health and Human Services. The primary aim of this project is to develop a conceptual and descriptive portrait of specific adolescent identities associated with variations in heterosexual sexual experience.

**Wendy D. Manning** is Professor of Sociology at Bowling Green State University and Director of the Center for Family and Demographic Research. She is a family demographer who focuses on adult and adolescent relationships. Peggy C. Giordano, Wendy D. Manning and Monica A. Longmore have a four-wave multi-method NICHD funded project focusing on adolescents' dating and sexual relationships and transitions from adolescence to early adulthood. With Pamela Smock, Manning is currently working on a NICHD funded project that broadens our understanding of adult relationship formation and maintenance. This work draws on qualitative data collection and analysis to examine dating, cohabitation, and marriage among young adults.

**Lisa Neidert** is Senior Research Associate in the Population Studies Center at the University of Michigan.

**Steven L. Nock** is Professor of Sociology and Director of the Marriage Matters project. He earned his Ph.D. at the University of Massachusetts-Amherst in 1976. Before coming to the University of Virginia, he was on the faculty of Tulane University, and then at the National Academy of Sciences. He has investigated issues of privacy, unmarried fatherhood, cohabitation, commitment, divorce, and marriage. His most recent book, *Marriage in Men's Lives* won the William J. Good Book Award from the American Sociological Association for the most outstanding contribution to family scholarship in 1999. His current research, the Marriage Matters project, examines the legal innovation known as Covenant Marriage in Louisiana, Arizona and Arkansas. In these states, couples wishing to marry must choose between: the standard regime of a marriage governed by no-fault divorce laws, and a Covenant Marriage regime, which is governed by fault-based divorce laws. The latter is more difficult to enter and more difficult to dissolve. This ongoing project, funded by the National Science Foundation and other sources, seeks to determine the role of law in marriage by following a large sample of newly married individuals in each type of marriage for five years.

**Naomi Quinn** is Professor Emerita of Cultural Anthropology at Duke University. She earned her B.A. in 1961 at Radcliffe College and her Ph.D. at Stanford University in 1971. She is a psychological anthropologist whose enduring interest is the nature of culture. She has been part

of a current effort in cognitive anthropology to build a theory of culture on the basis of schema theory and connectionist modeling, and within this framework to demonstrate how meanings become internalized, shared, motivating, enduring historically and within individuals, and thematic across cultural domains. In pursuit this larger program, she has investigated the American cultural model of marriage. Most recently, she has become interested in questions about culture and attachment raised by this research on marriage, and specifically how the meanings surrounding adult intimate relationships, and other beliefs and practices, are shaped by the cultural patterning of early attachment and separation. She plans to pursue these questions through cross-cultural research in Ghana, West Africa. Her theoretical and methodological contribution to her field is most fully represented by *Cultural Models in Language and Thought* (1987), co-edited with Dorothy Holland; *A Cognitive Theory of Cultural Meaning* (1997), co-authored with Claudia Strauss, and *Finding Culture in Talk: A Collection of Methods* (2005), which she singly edited.

**R. Kelly Raley** is Associate Professor, Department of Sociology, and Research Associate of the Population Research Center, University of Texas at Austin. She is also on the Journal of Marriage and Family editorial board and is ending her term on the American Sociological Association Family Council this year. Her research focuses on family trends, the social determinants of family formation, and the impact of family change on social stratification. Recently her research on the impact of family change on social stratification has focused on the association between maternal cohabitation and children's transition to adulthood. Her findings, published in the Journal of Marriage and Family as well as Sociology of Education, suggest that cohabitation is associated with more difficult transitions into adulthood, perhaps because this family arrangement is so unstable. Another line of Raley's research investigates the social factors that shape union formation and stability. With Larry Bumpass, she investigated recent trends in marital and union stability and found that minorities and women with lower levels of education have experienced continued increases in divorce and union instability, while Anglos and women with college education have experienced declines in marital dissolution. The question of why African Americans are less able to form stable unions has puzzled researchers for decades. One important factor is the weaker economic position of minorities, but because this explanation is not sufficient, some point to the possibility that cultural factors also contribute. Recently some researchers point to the fact that Mexicans have similar marriage rates as Anglos despite their weak economic position as evidence for cultural influences. A paper published by Raley, Durden and Wildsmith suggests that other non-cultural factors, particularly selectivity in the migration stream, contribute to early marriage among the Mexican origin population.

**Galena Kline Rhoades**, M.A., is a sixth-year graduate student in the Child Clinical Psychology program at the University of Denver. She is a research associate at the Center for Marital and Family Studies. She is currently Psychology Intern at the University of Medicine and Dentistry of New Jersey. Her research to date has focused on three areas of relationship development: the influence of family background on young-adult social adjustment and romantic relationships, the effectiveness of premarital education, and understanding why premarital cohabitation is often associated with poor marital outcomes. She is currently working on a national longitudinal study of cohabiting couples, tracking their commitment, reasons for cohabitation, mental health, and relationship outcomes. Additionally, she is particularly focused on within-couple differences with regard to these constructs and how such differences might relate to outcomes. She has published steadily in her graduate career, and has developed particular experience and expertise in both research and statistical methodology. The conceptual and empirical work that she and Scott Stanley have been focused on has played a strong role in shaping some of the core risk modification strategies of *Within My Reach*, a curriculum designed for low income, single parents, to improve relationship skills and decision making.

**Seth Sanders** received his Ph.D. from the University of Chicago in 1993 and joined the Maryland faculty in 1999. Prior to his position at Maryland he was Associate Professor at the Heinz School of Public Policy at Carnegie Mellon University and was a National Fellow at the Hoover Institution at Stanford University. Dr. Sanders' main area of interest is labor economics with a particular emphasis on economic demography. The wide variety of topics he has studied include the economic impact of the coal boom and bust, the use of welfare programs, the economic progress of Asian Americans in the U.S. economy, and the economic demography of gays and lesbians in America. Among his ongoing research is a project funded by the Appalachian Regional Commission to examine socioeconomic and demographic change in Appalachia. Funded by the National Institute of Child Health and Human Development (NICHD), another of Dr. Sanders' recent research projects is a demographic study of alternative household structures, the purpose of which was to provide the first systematic demographic study of the gay and lesbian population in the United States. Other recent research projects include a study evaluating the effects of teenage childbearing on the outcomes of mothers and children and the construction of a data set measuring the degree of job destruction and creation over time and by area in the U.S.

**Aloysius Siow** is Professor of Economics at the University of Toronto. His research interests include economics of the family, labor, and microeconomics. He received his Ph.D. in Economics at the University of Chicago in 1981. Some of his recent publications include: "Who marries whom and why", (with Eugene Choo), in the *Journal of Political Economy*, "Why Dowries?", (with Maristella Botticini), in the *American Economic Review*, and "Differential Fecundity and Gender Biased Parental Investments in Health", (with Xiaodong Zhu), in the *Review of Economic Dynamics*. His forthcoming publications are: "Estimating a marriage matching model with spillover effects", (with Eugene Choo), in *Demography*, and "Class, Gender and Marriage", (with Gillian Hamilton), in the *Review of Economic Dynamics*.

**Pamela J. Smock** is Professor of Sociology and Research Professor at the Population Studies Center at the University of Michigan-Ann Arbor. She is a family demographer and sociologist; her scholarship focuses on the causes and consequences of family patterns and change, engaging their intersections with economic, racial/ethnic, and gender inequalities. She has published on cohabitation, the economic consequences of divorce and marriage, nonresident fatherhood, child support, remarriage, and the motherhood wage penalty. With Wendy Manning, she has received funding from the National Institute of Child Health and Human Development (NICHD) for research on nonresident fatherhood. Currently, they are receiving NICHD support for research on cohabitation that seeks to deepen knowledge through qualitative data collection and analysis. Smock is currently Chair of the Section on Family of the American Sociological Association.

**Scott Stanley** is Research Professor and Co-director of the Center for Marital and Family Studies at the University of Denver. He has published widely, with research interests including commitment theory, communication, conflict, confidence, risk factors for divorce, the prevention of marital distress, and cohabitation. Along with Dr. Howard Markman and colleagues, he has been involved in the research, development, and refinement of the Prevention and Relationship Enhancement Program (PREP) for over 25 years. Stanley has co-authored various books, including *Fighting for Your Marriage*, *12 Hours to a Great Marriage*, *A Lasting Promise*, and *The Power of Commitment*.

**Johan Surkyn** is currently Professor of Economic, Social and Political Sciences, and Business at Vrije Universiteit Brussel. His recent projects include: "Differential Internal Migration According to Household Characteristics", with Ron J. Lesthaeghe, "Construction and Actualization of a

Database ‘Household Dwellings’”, and “Differential Internal Migration According to Household Characteristics”. Recent publications include "Value Orientations and the Second Demographic Transition (SDT) in Northern, Western and Southern Europe: An update"; “When History Moves On: Foundations and Diffusion of a Second Demographic Transition”, presented at The Seminar on Ideational Perspectives on International Family Change; and “Changing Attitudes and Values Across Europe: Social Cohesion and the Role of the Family”, presented at the EPC Conference in 2003.

**Megan Sweeney** is Associate Professor of Sociology at the University of California, Los Angeles. Her research interests focus on the determinants and consequences of family transitions in the United States, with a particular emphasis on variation over historical time, across subpopulations, and over the life course. Her current work investigates the emotional, physical, and behavioral well-being of children and adolescents living in stepfamilies. Professor Sweeney spent the 2005-06 academic year as Fellow at the Center for Advanced Study in the Behavioral Sciences.

**Sarah Whitton** is Postdoctoral Fellow in Clinical Psychology at Judge Baker Children’s Center, Harvard Medical School. She completed her doctoral training at the University of Denver, where she worked on various research projects through the Center for Marital and Family Studies. Much of her research is focused on exploring how close relationships, especially those between spouses and between parents and children, influence and are influenced by the individual’s mental health. She is particularly interested in the links between marital distress and depression, focused on identifying the mechanisms through which depression and relationships affect one another, as well as the individual and relationship characteristics that increase risk for depression in the face of relationship distress. Dr. Whitton also has a line of research examining the positive factors that serve to maintain and enhance relationship health, including commitment and sacrifice.

**Jessica J. Wyse** has a B.A. in American Studies from Wesleyan University and a Master of Public Policy from the Ford School of Public Policy at the University of Michigan. She is currently in her second year of a joint Ph.D. program in Sociology and Public Policy at the University of Michigan. Under a grant from the National Poverty Center, she is Co-PI on a project analyzing the changes of long-term childhood poverty rates by race from the 1970s to the 1990s using the Panel Study of Income Dynamics. She is also working with the National Poverty Center conducting interviews about welfare use and coping in low-income families. In an upcoming project, and also with the National Poverty Center (NPC), she will be a research assistant on a multi-site analysis of transitional employment programs for ex-offenders sponsored by the MDRC, the Joyce Foundation and NPC. Finally, she is working with Professor Pamela J. Smock on a qualitative interview study of cohabiting couples. Before graduate school Jessica worked at the Women's Prison Association and as a paralegal with the Juvenile Rights Division of the Legal Aid Society. Jessica is primarily interested in sociology of the family, social stratification, the sociology of crime, and child and family policy. She is currently a Graduate Student Instructor for an introductory Sociology class with a focus on social stratification.

## APPENDIX 4.D

### Workshop Agenda and Participants on a Multidisciplinary Examination of Change and Variation in Romantic Unions

September 13-14, 2006  
University of Southern California, Los Angeles

#### **Sponsors:**

The National Institute of Child Health and Human Development  
of the National Institutes of Health, U.S. Department of Health and Human Services (U.S.  
DHHS)

The Explaining Family Change and Variation (EFC) Project  
The Romantic Unions Committee of the EFC  
College of Letters and Sciences, University of Southern California

**Objectives:** The goals of this conference are 1) to educate the EFC research group about the chapters that have been commissioned by the Romantic Unions subgroup, 2) to provide chapter authors with feedback from members of the EFC group and the Romantic Unions subgroup, 3) to discuss how the chapters can be better integrated, pinpoint gaps in knowledge and identify intersections with the EFC's goals, and 4) to obtain input from all workshop participants on the best targets of opportunity for advancing research in the area of romantic unions.

**Session Structure:** Presenters will have 15 minutes to present their chapter drafts, focusing heavily on recommendations for future research. Discussants will then be given 7 minutes to raise questions, suggest revisions, and provide general feedback. Subsequently, there will be about 20 minutes for all workshop participants to raise questions and comment on the papers.

DAY 1

**Theoretical Perspectives on Romantic Unions**

- 9:00-10:00 Continental Breakfast
- 10:00-10:30 **Welcome and Introduction to the Workshop**  
  
Lynne M. Casper, University of Southern California  
Seth Sanders, Columbia University
- 10:30-11:30 **Household Formation and the “Second Demographic Transition” in Europe and the US: Insights from Middle Range Models**  
  
Chair: Lynne M. Casper, USC  
Presenters:  
Ron J. Lesthaeghe, University of California, Irvine, and University of Michigan  
Lisa Neidert, University of Michigan  
Johan Surkyn, Vrije Universiteit, Brussels  
Discussants:  
Thomas A. DiPrete, Columbia University (Romantic Unions)  
Peter D. Brandon, Australian National University (Romantic Unions)  
Christine A. Bachrach, NICHD (Parenthood)
- 11:30-12:30 **Economic Theories of Union Formation**  
Chair: Seth Sanders, University of Maryland  
Presenter: Aloysius Siow, University of Toronto  
Discussants:  
Peter D. Brandon, Australian National University (Romantic Unions)  
V. Joseph Hotz, UCLA (Generations)  
S. Philip Morgan, Duke University (Parenthood)
- 12:30-1:30 LUNCH
- 1:30-2:30 **Signaling the Value of Marriage**  
Chair: Rosalind King, NICHD  
Presenter: Steven L. Nock, University of Virginia (Pamela J. Smock, University of Michigan will summarize)  
Discussants:  
Pamela J. Smock, University of Michigan (Romantic Unions)  
V. Joseph Hotz, UCLA (Generations)  
P. Lindsay Chase-Lansdale, Northwestern University (EFC)
- 2:30-3:30 **Economics, Culture, and Heterosexual Cohabitation in the United States: Current Knowledge and Future Directions for Research**  
Chair: Peter D. Brandon, Australian National University  
Presenters:  
Pamela J. Smock, University of Michigan  
Lynne M. Casper, University of Southern California  
Jessica Wyse, University of Michigan

Discussants:

Ron Lesthaeghe, University of California, Irvine, University of Michigan  
(Romantic Unions)  
Judith A. Seltzer, UCLA (Generations)  
S. Philip Morgan (Parenthood)

3:45-4:45

**Gay and Lesbian Families: A Research Agenda**

Chair: Lynne M. Casper, USC

Presenters:

Gary J. Gates, UCLA  
M. V. Lee Badgett, UCLA and University of Massachusetts-Amherst

Discussants:

Seth Sanders, University of Maryland (Romantic Unions)  
Judith A. Seltzer, UCLA (Generations)  
Christine A. Bachrach, NICHD (Parenthood)

4:45-5:45

**What Explains Race and Ethnic Variation in Cohabitation, Marriage, Divorce, and Nonmarital Fertility?**

Chair: Peter D. Brandon, Australian National University

Presenters:

R. Kelly Raley, University of Texas at Austin  
Megan M. Sweeney, UCLA

Discussants:

Pamela J. Smock, University of Michigan (Romantic Unions)  
Suzanne Bianchi, UCLA (Generations)  
Caroline Bledsoe, Northwestern University (EFC)

5:45-7:30

**Reception, USC University Club Courtyard**



***DAY 2 Variation in Romantic Unions (Continued)***

- 8:00-8:30 Continental Breakfast
- 8:30-8:45 Welcome and Plan for the Day: Lynne M. Casper, University of Southern California
- 8:45-9:45 **Adolescent Dating Relationships: Implications for Understanding Adult Unions**  
Chair: Lynne M. Casper, USC  
Presenters:  
Wendy D. Manning, Bowling Green State University  
Peggy C. Giordano, Bowling Green State University  
Monica A. Longmore, Bowling Green State University  
Discussants:  
Seth Sanders, University of Maryland (Romantic Unions)  
P. Lindsay Chase-Lansdale, Northwestern University (EFC)  
S. Philip Morgan, Duke University (Parenthood)

***The Importance of Context in Family Change and Variation***

- 10:45-11:45 **An Economic View of Culture, Identity, and Family Change**  
Chair: V. Jeffery Evans, NICHD  
Presenters:  
Rachael Kranton, University of Maryland  
(Seth Sanders, University of Maryland, will summarize)  
Discussants:  
Peter D. Brandon, Australian National University (Romantic Unions)  
V. Joseph Hotz, UCLA (Generations)  
Caroline Bledsoe, Northwestern University (EFC)
- 12:45-1:45 **Economic Transformation, Work-Family Issues, and Marriage**  
Chair: Ron J. Lesthaeghe, University of California, Irvine and University of Michigan  
Presenter: Jennifer L. Glass, University of Iowa  
Discussants:  
Thomas A. DiPrete, Columbia University (Romantic Unions)  
Suzanne M. Bianchi, University of Maryland (Generations)  
Rosalind Berkowitz King, NICHD (Parenthood)
- 1:45-2:45 **Utilizing Relationship Matrices to Study Romantic Unions: A Cross Country Comparison**  
Chair: Pamela J. Smock, University of Michigan  
Presenter: Peter D. Brandon, Australian National University  
Discussants:  
Ron Lesthaeghe, University of California, Irvine and University of Michigan (Romantic Unions)

Suzanne M. Bianchi, University of Maryland (Generations)  
S. Philip Morgan, Duke University (Parenthood)

*Wrap-up*

3:00-4:00 Summary and Synthesis of Recommendations  
Presenters:  
    Seth Sanders, University of Maryland (Romantic Unions)  
    Thomas A. DiPrete, Columbia University (Romantic Unions)

4:00-5:00 Group Discussion and Workshop Recommendations  
Moderator: S. Philip Morgan, Duke University (Parenthood)

## **Workshop Participants**

Chris Bachrach  
National Institute of Child Health and Human Development  
National Institutes of Health  
6100 Executive Blvd., Room 8B07  
Bethesda, MD 20892-7510  
cbachrach@nih.gov

Lee Badgett  
University of California-Los Angeles  
The Williams Institute on Sexual Orientation Law and Public Policy  
UCLA School of Law  
Box 951476  
Los Angeles, CA 90095-1476  
badgett@law.ucla.edu

Elaine Bell-Kaplan  
University of Southern California  
Department of Sociology  
3620 South Vermont Avenue  
Kaprielian Hall, Room 352  
Los Angeles, CA 90089-2539  
ekaplan@usc.edu

Vern Bengtson  
University of Southern California  
Departments of Sociology and Leonard Davis School of Gerontology  
Los Angeles, CA 90089-0191  
bengtson@usc.edu

Suzanne M. Bianchi  
University of Maryland-College Park  
Department of Sociology  
2112 Art Sociology Building  
College Park, MD 20742  
sbianchi@socy.umd.edu

Tim Biblarz  
University of Southern California  
Department of Sociology  
3620 South Vermont Avenue  
Kaprielian Hall, Room 352  
Los Angeles, CA 90089-2539  
biblarz@usc.edu

Caroline H. Bledsoe  
Northwestern University  
Department of Anthropology  
1810 Hinman Street  
Evanston, IL 60208-1310  
cbledsoe@northwestern.edu

Peter Brandon  
The Australian National University  
Demography & Sociology Program  
Research School of Social Sciences  
Canberra ACT 0200, Australia  
Peter.Brandon@anu.edu.au

Frank Carrillo  
University of Southern California  
Department of Sociology  
3620 South Vermont Avenue  
Kaprielian Hall, Room 352  
Los Angeles, CA 90089-2539  
fcarrill@usc.edu  
Phone: 213-740-8859  
FAX: 213-740-3535

Lynne M. Casper  
University of Southern California  
Department of Sociology  
3620 South Vermont Avenue  
Kaprielian Hall, Room 352  
Los Angeles, CA 90089-2539  
lcasper@usc.edu

P. Lindsay Chase-Lansdale  
Northwestern University  
Institute for Policy Research  
2040 Sheridan Road  
Evanston, IL 60208-4100  
lcl@northwestern.edu

Casey Copen  
University of Southern California  
Department of Sociology and  
Leonard Davis School of Gerontology  
Los Angeles, CA 90089-0191  
ccopen@usc.edu

Thomas A. DiPrete  
Columbia University  
Department of Sociology  
415 Fayerweather Hall  
Mail Code 2551  
1180 Amsterdam Ave.  
New York, NY 10027  
tad61@columbia.edu

Sarah Edgington  
University of California-Los Angeles  
Dept. of Sociology and  
California Center for Population Research  
264 Haines Hall  
Los Angeles, CA 90095-1551  
sedging@ucla.edu

V. Jeffery Evans  
National Institute Child Health and Human Development  
National Institutes of Health  
6100 Executive Blvd., Room 8B07  
Bethesda, MD 20892-7510  
evansvj@exchange.nih.gov

Robin Fontaine  
County of Orange, Drug & Alcohol Programs  
Santa Ana, CA  
rfontaine@ochca.com

Gary Gates  
University of California-Los Angeles  
The Williams Institute on Sexual Orientation Law and Public Policy  
UCLA School of Law  
Box 951476  
Los Angeles, CA 90095-1476  
gates@law.ucla.edu

Peggy C. Giordano (Not Attending)  
Bowling Green State University  
Center for Family and Demographic Research  
Department of Sociology  
Bowling Green, OH 43403  
pgiorda@bgnet.bgsu.edu

Jennifer Glass  
University of Iowa  
Department of Sociology  
W140 Seashore Hall  
Iowa City, IA 52242  
jennifer-glass@uiowa.edu

Sarah Hayford  
Duke University  
Department of Sociology  
268 Sociology Psychology Building  
Durham, NC 27708-0088  
shayford@soc.duke.edu

Sharon Hays  
University of Southern California  
Departments of Sociology and Women's Studies  
3620 South Vermont Avenue  
Kaprielian Hall, Room 352  
Los Angeles, CA 90089-2539  
sharonrh@usc.edu

V. Joseph Hotz  
University of California-Los Angeles  
Department of Economics  
Box 951477  
Los Angeles, CA 90095-1477  
hotz@ucla.edu

Jennifer Johnson-Hanks (Not Attending)  
University of California, Berkeley  
Department of Demography  
2232 Piedmont Avenue  
Berkeley, CA 94720  
johnsonhanks@demog.berkeley.edu

Matthijs Kalmijn (Not Attending)  
Tilburg University  
Department of Social Cultural Sciences  
P.O. Box 90153  
Warandelaan 2, Building S room S188  
5000 LE Tilburg  
NETHERLANDS  
M.Kalmijn@uvt.nl

Rosalind Berkowitz King  
National Institute of Child Health and Human Development  
National Institutes of Health  
6100 Executive Blvd., Room 8B07  
Bethesda, MD 20892-7510  
rozking@mail.nih.gov

Paul Kitchen  
University of Southern California  
Department of Sociology  
3620 South Vermont Avenue  
Kaprielian Hall, Room 352  
Los Angeles, CA 90089-2539  
pkitchen@usc.edu

Hans-Peter Kohler (Not Attending)  
University of Pennsylvania  
Department of Sociology  
272 McNeil Bldg.  
3718 Locust Walk  
Philadelphia, PA 19104-6297  
hpkohler@pop.upenn.edu

Rachel Kranton (Not Attending)  
University of Maryland-College Park  
Department of Economics  
College Park, MD 20742  
kranton@econ.umd.edu

Ron Lesthaeghe  
University of Michigan and University of California-Irvine  
35 Boesbeeklaan  
B-9051 Ghent  
BELGIUM  
RLesthaeghe@yahoo.com

Monica A. Longmore (Not Attending)  
Bowling Green State University  
Center for Family and Demographic Research  
Department of Sociology  
Bowling Green, OH 43403  
mseff@bgnet.bgsu.edu

Wendy D. Manning  
Bowling Green State University  
Center for Family and Demographic Research  
Department of Sociology  
Bowling Green, OH 43403  
wmannin@bgnet.bgsu.edu

Kathleen McGarry  
University of California-Los Angeles  
Department of Economics  
Box 951477  
Los Angeles, CA 90095-1477  
mcgarry@ucla.edu

Mignon Moore  
University of California-Los Angeles  
Department of Sociology  
264 Haines Hall – Box 951551  
Los Angeles, CA 90095-1551  
moore@soc.ucla.edu

S. Philip Morgan  
Duke University  
Department of Sociology  
268 Sociology Psychology Building  
Durham, NC 27708-0088  
pmorgan@soc.duke.edu

Kelly Musick  
University of Southern California  
Department of Sociology  
3620 South Vermont Avenue  
Kaprielian Hall, Room 352  
Los Angeles, CA 90089-2539  
musick@usc.edu



Lisa Neidert (Not Attending)  
University of Michigan  
Population Studies Center, Institute for Social Research  
426 Thompson St.  
Ann Arbor, MI 48106-1248  
lisan@umich.edu

Steve Nock (Not Attending)  
University of Virginia  
Sociology Department  
P.O. Box 400766, Cabell 543  
Charlottesville, VA 22904  
nock@virginia.edu

Naomi Quinn (Not Attending)  
Duke University  
Department of Cultural Anthropology  
Box 90091  
Durham, NC 27708-0091  
naomi.quinn@duke.edu

R. Kelly Raley  
University of Texas at Austin  
Department of Sociology  
1 University Station A1700  
Austin, TX 78712  
kraley@prc.utexas.edu

Galena Kline Rhoades (Not Attending)  
University of Denver  
Center for Marital and Family Studies  
2155 S Race St.  
Denver CO 80208  
gakline@du.edu

Edson Rodriguez  
University of Southern California  
Department of Sociology  
3620 South Vermont Avenue  
Kaprielian Hall, Room 352  
Los Angeles, CA 90089-2539  
erodrig@usc.edu

Sarah Ruiz  
University of Southern California  
Department of Sociology and  
Leonard Davis School of Gerontology  
Los Angeles, CA 90089-0191  
sarahruiz@usc.edu

Seth G. Sanders  
University of Maryland-College Park  
Department of Economics  
3105 Tydings Hall  
College Park, MD 20742  
sanders@econ.umd.edu

Judith A. Seltzer  
University of California-Los Angeles  
Department of Sociology  
375 Portola Plaza, 264 Haines Hall  
Los Angeles, CA 90095-1551  
seltzerj@ucla.edu

Merril Silverstein  
University of Southern California  
Departments of Sociology and Gerontology  
3620 South Vermont Avenue  
Kaprielian Hall, Room 352  
Los Angeles, CA 90089-2539  
merrils@usc.edu

Aloysius Siow  
University of Toronto  
Department of Economics  
150 St. George St.  
Toronto, ON M5S 3G7, CANADA  
siow@chass.utoronto.ca

Pamela J. Smock  
University of Michigan  
Population Studies Center, Institute for Social Research  
426 Thompson St.  
Ann Arbor, MI 48106-1248  
pjsmock@umich.edu

Scott M. Stanley (Not Attending)  
University of Denver  
Department of Psychology, Center for Marital and Family Studies  
Frontier Hall, Room 214  
2155 S. Race St.  
Denver, CO 80208  
Phone: 303-871-3062  
sstanley82@aol.com

Johan Surkyn (Not Attending)  
Vrije Univeriteit Brussel  
Department of Social Research - SOCO  
Pleinlaan 2  
B-1050 Brussel  
BELGIUM  
Johan.Surkyn@vub.ac.be

Megan M. Sweeney  
University of California-Los Angeles  
Department of Sociology  
264 Haines Hall – Box 951551  
Los Angeles, CA 90095-1551  
msweeney@soc.ucla.edu

Duncan Thomas (Not Attending)  
University of California-Los Angeles  
Department of Economics  
Box 951477  
Los Angeles, CA 90095-1477  
dt@ucla.edu

M. Belinda Tucker  
University of California-Los Angeles  
Department of Psychiatry & Biobehavioral Sciences  
BOX 951759, 760 Westwood Plaza, Box 62  
1001 Westwood Blvd 2nd Floor  
Los Angeles, CA 90095-1759  
mbtucker@ucla.edu

Sarah Whitton (Not Attending)  
Harvard Medical School  
Judge Baker Children's Center  
53 Parker Hill Ave  
Boston, MA 02120  
swhitton@jbcc.harvard.edu

Jessica Wyse  
University of Michigan  
Department of Sociology and  
Gerald R. Ford School of Public Policy  
Room 3001 LSA Building  
500 South State  
Ann Arbor, MI 48109-1382  
jwyse@umich.edu

## APPENDIX 4.E

### Table of Contents and Abstracts for Unions Conference Volume

#### *Rethinking Change and Variation in Intimate Unions*

The book considers several aspects of intimate unions. These include various disciplinary perspectives on the formation, quality, and dissolution of intimate unions; the variation in intimate unions (i.e., cohabitation, gay and lesbian, families, adolescent dating relationships, the differences in intimate union formation and dissolution by race and ethnicity and the diversity in the living arrangements of couples); and the importance of context in explaining change and variation in intimate unions (e.g., culture and the economy). While the book is U.S.-focused, it incorporates international perspectives on marriage, cohabitation, and divorce to frame the U.S. experience in a global context. Specific recommendations for advancing knowledge on the quality of relationships and union formation and dissolution are addressed in each chapter, and the bracketing introductory and concluding chapters synthesize the various recommendations, elaborate on suggestions for advancing theoretical perspectives and data needs, and consider how these chapters might promote multiple lines of inquiry on intimate unions.

The unique and exciting innovation here is the multidisciplinary approach --- the simultaneous and co-coordinated work on multiple mid-level theories and thus the multiple iterations across these levels of abstraction. This work promises a substantial advance in conceptualization and theory. In turn, these advances will point toward the next key research needs.

#### **Annotated Outline**

**Lead Editors:** Lynne M. Casper, University of Southern California; Thomas A. DiPrete, Columbia University; Seth Sanders, University of Maryland-College Park; Pamela J. Smock, University of Michigan.

PART I: Introduction

#### **Forward:**

S. Philip Morgan, Professor of Sociology, Duke University  
Principal Investigator of the entire Explaining Family Change and Variation Research Network

#### **Introduction: *Anchoring the Future Change and Variation in Romantic Union Formation and Dissolution***

Lynne M. Casper and Pamela J. Smock

This chapter will set the context for the rest of the chapters in the volume by summarizing change and variation in union formation and dissolution. The authors will describe changes in marriage, cohabitation, divorce, remarriage, and same-sex unions over time, and examine variations in these behaviors among population subgroups (e.g. race, ethnicity and education). They will then provide the rationale for this volume and supply a roadmap to guide the reader through the remainder of the book.

PART 2: Theoretical Perspectives on Intimate Unions

## **Chapter 1: Household Formation and the “Second Demographic Transition” in Europe and the US: Insights from Middle Range Models.**

Ron L. Lesthaeghe, Lisa Neidert, and Johan Surkyn

This chapter will first introduce the reader to the basic features of the demographic changes in patterns of household formation, by now often referred to as a “second demographic transition” (SDT), and then link these to more general societal changes that emerged roughly from the 1960s onward. These changes pertain to various domains, and include economic transformations as well as cultural shifts. It is clear that we are using a multi-factor explanation for the SDT in which both economic and cultural factors are necessary. None of these factors taken separately are sufficient, and all are non-redundant. But their respective weight and role can vary across societies, and much of this variation is an outcome of historical path dependency.

Two models will help place the various explanatory mechanisms in perspective. These models form mini-theories, just like what Robert Merton had in mind when he referred to “middle range theories” in sociology. That is why we call these “middle range models,” because they, too, are of direct use in describing processes while remaining close to a specific body of empirical evidence. The two models that we shall use here are (i) the “Ready, Willing, and Able” model of innovation and diffusion (RWA for short) and (ii) the “footprints” model of selection and adaptation.

The former is a model of preconditions for innovation in and diffusion of new forms of behavior, and it is ideally suited for identifying the limiting conditions and/or bottlenecks in such processes (Lesthaeghe and Vanderhoeft, 1999). The term stems directly from A.J. Coale’s summary reformulation (1973) of conditions permitting the start of the historical, “first” demographic transition. However, a more elaborate RWA-model has been developed and will be used here.

The footprints model, on the other hand, is designed to show how individual choices during the life course are processes of self-selection, partially oriented by values, but equally to illustrate the feed-back mechanisms of a particular choice upon the initial steering conditions. Ideally, the model needs panel data for testing, but the mechanism leaves very specific “footprints” that can be detected in cross-sections (without these being adequate substitutes for panels). In essence, the model is of the “life cycle” type, but it also accommodates successive cohort shifts. In fact, the latter are necessary to allow for the observed development of a new demographic regime.

## **Chapter 2: Economic Theories of Union Formation**

Aloysius Siow

The objective of this chapter is to survey analytic constructs that economists have used to study the formation and dissolution of romantic partnerships, and the related question of whether childbearing takes place inside or outside of committed relationships. The paper stresses how two questions that are fundamentally interrelated: “Who gets what from the gains of romantic partnerships?” and “Who marries whom?” The paper considers two important paradigms. The first, models of transferable utility, assumes that partners maximize the joint gains to partnership, and on the margin can transfer marital surplus to resolve changes in circumstances that otherwise might lead to disputes. The second, models of non-transferable utility, allows each partner to pursue his or her self-interest within the partnership, and on the margin marital surplus can not be transferred. In the latter case, partners can agree to a division of the gains from a romantic partnership but partners cannot fully commit to uphold this agreement. Because of this, partners may take strategic action within the partnership including individual control over resources, which then affects each of the partners’ relative position of power.

The chapter also focuses on the dynamic aspects of romantic partnership formation and dissolution. It explicitly considers the search process by which people meet, choose whether to form a romantic partnership and eventually choose whether to end the partnership. It considers how the meeting process has been modeled and the potential for a richer understanding of this process. Many features of romantic partnership formation and dissolution fit well in this framework, including cohabitation without formal marriage, gender differences in the timing of entry into romantic partnerships and divorce. The chapter discusses within this model how the emergence of internet dating, changes in family laws and changes in reproductive technologies affect 1) “Who marries whom?”; 2) changes in the total gains to romantic partnerships; and 3) the relative gains of men and women. Because relative rises in the age at marriage and cohabitation are so closely linked to whether children are born inside or outside of formal marriage, we discuss current economic models of the rise in rate of children born outside of marriage. We conclude with a discussion of potential avenues for theoretical development and data collection efforts that might help test the theoretical ideas discussed.

### **Chapter 3: An Anthropological Perspective on Marriage**

Naomi Quinn

The research described in this chapter provides a way to conceptualize the cultural side of marriage, change in which typically lags behind social and institutional change. It presents and briefly illustrates a cultural model of American marriage and the methods of discourse analysis used to reconstruct this model from metaphors, reasoning, and key words in extensive interview discourse. The chapter explains, in terms of a theory of culture that draws on connectionism and neurobiology, how such a shared model comes to be deeply motivating, and describes several sources of deep motivation that are inherent in this model of marriage.

These sources of motivation emerge, first, from a triad of expectations about the lastingness, mutual benefit (in terms of psychological fulfillment), and intimacy of marriage, that can be traced to early attachment and American ideas about marital love. Another source of powerful motivation intrinsic to the American model of marriage derives from the moral imperative to be fulfilled as a person, and the inherent contradiction between that imperative --- with its contractual expectation that an unfulfilling marriage be ended --- and the expectation of marital lastingness. Finally, motivational force inheres in the general American understanding about working hard to overcome difficulty and achieve success, imported into the marriage model to mean that one should work hard to overcome marital difficulties and succeed at marriage.

Social scientists who study change in marriage may be inclined to give culture short shrift, emphasizing instead the socio-economic functions and benefits of marriage, and often treating cultural understandings of it as a residual category. Even when they do forefront culture, they typically have a highly impoverished view of it, tending to treat cultural values or norms impinging on marriage as free-standing, rather than derived from larger, more complex cultural models. This overlooks the values and norms that most strongly motivate marital behavior, embedded in a larger cultural model that has not been delineated. There is a further tendency in economic and sociological treatments of marriage to involve the use of an economic language of “tastes” and “preferences” that disallows deep motivations. An appreciation for Americans’ cultural model of marriage --- in all its fullness and motivational force --- complicates treatments of marriage, including marital change. The necessary longitudinal study to chart change in this cultural model has not yet been conducted.

#### **Chapter 4: *Different Slopes for Different Folks: A Psychology Perspective on Union Formation, Relationship Quality, and Couple Dissolution***

Scott M. Stanley, Kline Rhoades, and Sarah W. Whitton

This chapter examines some of the distinctives of the history of relationship and marital research conducted by psychologists. It begins by exploring the history of such work, noting how clinical psychology, in particular, developed a strong focus on relationship distress and mechanisms of conflict. The authors note the extensive and productive history of the study of conflict, including the refinement and use of observational methods. They go on to discuss how many now believe that this focus became limiting, since other constructs of likely importance have not received the same degree of attention. The new trends in psychological research on couples toward studying larger, more complex, and often more positive constructs is briefly noted, with citations given to access and understand these changes in the field.

Historically, one of the distinctives of the work by psychologists has been a focus both on understanding distress, and its treatment or prevention. As such, a vast amount of work by psychologists reflects the desire to elucidate risks or test ways to ameliorate them. This fact is reflected in the body of studies including basic science and outcome research reports.

The chapter next focuses on work done by clinical and social psychologists on relationship formation and dissolution. Studies on the latter have been very much focused on the role of conflict. Different views of how relationships come apart are contrasted, with the resulting conclusion that there is much left to learn. Regarding the former, the chapter discusses Social Exchange Theory, briefly noting contributions by both psychologists and sociologists (and economists), and focusing on work by social psychologists such as Caryl Rusbult in the area of commitment theory, sacrifice, and cohabitation. Much attention is given to the fundamental notion from Thibaut and Kelley's work on the transformation of motivation, and how this concept is reflected in the literature on social exchange, interdependence, commitment, and sacrifice. This provides a prime way to conceptualize couple formation—one that produces many testable derivatives.

The authors conclude by underscoring and explaining the traditional focus on measurement in psychology, and mentioning advances in statistical methods that allow stronger focus on individual trajectories. The chapter concludes with a general statement of the benefits of multi-disciplinary work.

#### **Chapter 5: *Signaling the Value of Marriage***

Steven L. Nock

This chapter attempts to explain how marriage acquires value. The author argues that as fewer people decide to marry, marriage assumes greater symbolic social significance. Relying on economic signaling theory, the chapter suggests that marriage signals three things in high demand in the labor force: commitment, maturity, and deferred gratification. Married individuals are seen to possess these desirable traits more predictably than are their unmarried counterparts.

This is increasingly true as more people elect not to marry, thereby signaling that the married differ from the unmarried. The same traits signaled by marriage are also signaled by a college degree. The conclusion suggests that declining marriage rates are likely to produce greater social and economic inequality because those who marry will also be those who graduate from college.

Employers may also subtly discriminate against the unmarried by their expressed preferences for greater amounts of education.

### PART III: Variation in Intimate Unions

#### **Chapter 6: *Economics, Culture, and Heterosexual Cohabitation in the United States: Current Knowledge and Future Directions for Research***

Pamela J. Smock, Lynne M. Casper, and Jessica Wyse

This chapter examines the rise in heterosexual cohabitation with special attention to economic and cultural influences on entries into, and “exit” out of cohabitation via marriage or relationship dissolution. The authors focus both on macro-level accounts and micro-level empirical studies, the latter of which form the bulk of cohabitation research in the United States.

Drawing on a theoretical perspective that suggests social structure consists of resources (e.g., economic) and cultural schema, the authors summarize past research with special attention to these two components of social structure, arguing that their interaction sets the stage for the emergence of what might be termed the “cohabitation revolution” and that attention to both sets of factors is necessary to explain the rise in cohabitation. It also argues that identifying the differential distribution of resources and cultural schema accessible to population subgroups will advance understanding of social class and racial/ethnic variations in cohabitation patterns.

Finally, the chapter presents eight recommendations for future research and data collection that would enhance scientific understanding of cohabitation. These recommendations are organized around achieving two main goals: 1) to ensure that surveys on which family demographers and social scientists rely are responsive to, and reflective of, recent and continuing family change; and, 2) to encourage research and data collection that links theoretical perspectives about social change and the social locations of population subgroups with the prevalence, roles, and meanings of cohabitation. The authors conclude that such efforts will deepen our understanding of cohabitation, and, in particular, enhance knowledge about subgroup variation in cohabitation and the sources cohabitation’s increasing popularity.

#### **Chapter 7: *Gay and Lesbian Families: A Research Agenda***

Gary J. Gates and M. V. Lee Badgett

This chapter examines the vast chasm between the volatile and veracious political debate concerning lesbian and gay families and the relative lack of relevant research about such families. In it, the authors describe the current state of social science research focusing on same-sex couples. It is within this neglected area of study, the authors believe, that a better understanding of relationship dynamics will be realized. Homosexual relationships offer an interesting perspective on how relationships form and thrive not only in the absence of clear social norms and legal institutions, but also in the absence of differing gender roles and norms.

After summarizing the data sources commonly used in this area of study, the authors discuss the challenges associated with collecting data on sexual minorities and provide examples for how such challenges can be overcome. Among the problems the authors discuss are understanding and measuring how individuals identify their own sexual orientation, and errors in measurement and coding procedures.



The authors then identify several reasons why lesbian and gay families might be different from other unions, including, 1) differing relationship and gender norms; 2) the fact that two men or two women in a romantic relationship are likely to have relatively similar emotional, financial, and social resources, and 3) issues of social stigma, and a lack of legal support. The authors continue the chapter with a discussion of relationship formation and dissolution among homosexual couples, fertility rates, child-rearing and the lack of research in this area, an analysis of the research on household resource allocation, income, and relationships between homosexual couples and their extended families. The chapter concludes with recommendations for research priorities that focus on lesbian and gay families.

**Chapter 8: *What Explains Race and Ethnic Variation in Cohabitation, Marriage, and Divorce, and Nonmarital Fertility?***

R. Kelly Raley and Megan M. Sweeney

This chapter reviews what is known about the factors that contribute to race differentials in marriage, nonmarital fertility, and family stability, and suggests some promising avenues of theoretical development for further understanding racial and ethnic differences in union formation and dissolution. The chapter begins with a brief review of previous findings on race-ethnic variation in stable union formation and nonmarital fertility. Next, it presents suggestions for directions for future research by discussing the multiple dimensions that distinguish marriage from other couple relationships, suggesting that the social understandings that differentiate marriage from other couple relationships are weakening. That is, marriage is becoming deinstitutionalized.

The authors argue that marriage continues to be distinct from other couple relationships along at least three dimensions. First, marriages continue to involve a greater degree of economic cooperation and gendered specialization. Second, marriage has an interpersonal dimension, including love, sex, commitment and trust. (Cohabiting relationships also have a strong interpersonal dimension, but a continuing difference between these relationships and marriage involves levels of trust and commitment.) Third, marriage involves a social dimension. This social dimension is most easily observed in the changes in kinship relations and the formal relations with other institutions that marriage brings. By far the majority of studies attempting to explain race-ethnic variation in marriage have focused on the economic aspects, but recent ethnographic research suggests the importance of other dimensions as well. Identifying the specific aspects of marriage that give it its unique status can assist the search for explanations for why so many young adults, particularly African Americans, adopt alternative family arrangements. Finally, the chapter discusses data needs to more fully explore these multiple dimensions of marriage to better understand race-ethnic variation. While most research has focused on poor or near poor families, this chapter asserts that an analysis of the middle class is likely to lead to a richer understanding of race-ethnic variation in the family.

**Chapter 9: *Adolescent Dating Relationships: Implications for Understanding Adult Unions***

Wendy D. Manning, Peggy C. Giordano, and Monica A. Longmore

This chapter reviews the patterning and meaning of adolescent dating relationships and discusses empirical and theoretical reasons why adolescent relationships matter for understanding adult romantic relationships. The authors emphasize the importance of race and gender variations in examining adolescent relationships, both because different genders and races approach relationships in different manners, and because it is important to consider these differences at

younger ages, given the great empirical variations in unions among *adults* of different races and ethnicities.

This chapter posits the argument that researchers interested in adult relationships should pay close attention to adolescent dating relationships. Such relationships are an integral part of learning how to navigate other relationships, develop identities, and make decisions about sexuality and sexual behavior. Marriage and cohabitation patterns that emerge across ethnic and racial lines, the authors argue, are in part a direct result of adolescent experiences and exposure. However, the authors recognize that certain variations, such as economic aspects of adult relationships, cannot be deduced directly from adolescent experiences. The chapter concludes by considering future directions for research in terms of theoretical orientations, measurement, methodological approaches, and substantive questions.

### **Chapter 10: *Utilizing Relationship Matrices to Study Intimate Unions: A Cross-Country Comparison***

Peter D. Brandon

Changes in families over the past thirty years have created methodological challenges for survey research on family variation. Some argue that standard household survey methods used for collecting data on families have been outpaced by the transformation of families, and hence estimates of family variation are inaccurate, hampering opportunities for cross-country comparisons of family variation. Rectifying this situation is possible through greater use of relationship matrices. This underutilized data collection method can precisely portray family variation and facilitate cross-country comparisons. As an initial illustration of the usefulness of this method for family research, relationship matrices data on young persons from Australia and the U.S. are exploited to demonstrate that these matrices can: 1) depict individuals' living arrangements; 2) identify patterns in partnering and childbearing; 3) describe demographic diversity across types of couples; and, 4) aid cross-country comparisons of family variation. Only the most basic of methods are used in the current paper, however, the matrices leave open possibilities for more advanced methods, using either the cross-sectional data or the longitudinal data. Future work will pursue the more advanced methods.

## PART IV: The Importance of Context in Change and Variation in Intimate Unions

### **Chapter 11: *Economic Transformation, Work-Family Issues, and Marriage***

Jennifer L. Glass

This chapter parses the connections between time conflicts, work overload, the high levels of tension such stressors produce, and their possible effects on marriage. The chapter raises such questions as: are time pressured adults less likely to date/marry, what kinds of alternative work arrangements create the perception of more time for family life, and perhaps most importantly, what kind of a "marriage penalty" do we pay for these institutional pressures? Specific topics include the effects of children on parents' time use, the changing forms of work and how they affect marital interaction, and the efficacy of flexible work arrangements in promoting marital and family well being.

The chapter continues in dissecting different explanations for: 1) the rising divorce rate in dual earner households, especially compared to single earner households with minor children; 2) the increase in nonmarital childbearing among older and more affluent single women; and 3) class

differences in cohabitation. It discusses, among other possible explanations, whether market substitutes for marriage in the form of purchased companionship, domestic labor, sexual access, and even children outside the institution of marriage affect the perceived gains to marriage. Finally, the chapter concludes with suggestions for future data collection and research designs.

**Chapter 12: *Patterns of Union Formation and Dissolution in Europe and the United States: A Comparative Perspective***

Matthijs Kalmijn

The majority of demographic, sociological, and economic literature on marriage and divorce has focused on the erosion of marriage. The first aim of this chapter is to describe differences and similarities that exist between the United States and Europe, as well as whether large differences actually exist within Europe. Specifically, the comparison focuses on the timing of marriage and cohabitation, the prevalence of cohabitation, the risk of divorce, and the dissolution risk of cohabiting unions. To describe these differences, the author uses data from the Fertility and Family Surveys from 21 European countries and the United States. In addition to comparing across countries, it also makes comparisons across cohorts to assess changes in the various countries.

After exploring differences and similarities, the chapter will attempt to explain the findings, by using both economic and cultural theories about unions. For this end, it uses a simple macro-level design in which it relates the demographic differences to aggregate economic and cultural indicators.

PART V.

**Conclusion: *A Roadmap for Progress in Explaining Change and Variation in Intimate unions***

Lynne M. Casper, Thomas DiPrete, Seth Sanders, and Pamela J. Smock

This chapter will summarize the recommendations made in this volume and construct a roadmap outlining directions for future theoretical and empirical work in this area of inquiry.

## APPENDIX 4.F

### Consultants to the Unions Group

**The Intimate Unions Group thanks the following researchers for their contributions to this project**

Gunnar Andersson  
Chris Bachrach  
Elaine Bell-Kaplan  
Vern Bengtson  
Suzanne M. Bianchi  
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Frank Carrillo  
P. Lindsay Chase-Lansdale  
Casey Copen  
Sarah Edgington  
V. Jeffery Evans  
Robin Fontaine  
Claudia Goldin  
John Hobcraft  
Sarah Hayford  
Sharon Hays  
V. Joseph Hotz

Jennifer Johnson-Hanks  
Ariel Kalil  
Kathleen Kiernan  
Celine Le Bourdais  
Rosalind Berkowitz King  
Paul Kitchen  
Hans-Peter Kohler  
Dan Lichter  
Shelly Lundberg  
Kathleen McGarry  
Mignon Moore  
S. Philip Morgan  
Kelly Musick  
Edson Rodriguez  
Sarah Ruiz  
Judith A. Seltzer  
Merril Silverstein  
Lowell Taylor  
Duncan Thomas  
M. Belinda Tucker  
Jane Waldfogel

## APPENDIX 5.A

### **Generations Group's Approach to the NICHD Explaining Family Change and Variation Project**

Suzanne M. Bianchi, V. Jeffery Evans, V. Joseph Hotz,  
Kathleen McGarry, Judith A. Seltzer

The Generations group synthesized existing literature across disciplines, evaluated existing data sources, and identified gaps in both theory and evidence. To accomplish these goals we used four strategies: (1) in person and telephone interviews with a broad array of scholars as well as the solicitation of written memos from some; (2) an interdisciplinary Family Symposium at Pennsylvania State University organized in collaboration with Alan Booth and Nan Crouter and followed by a workshop with a selected group of leading family scholars; (3) completion of a paper that begins to integrate economic and sociological perspectives on intergenerational relationships; (4) an extensive survey and assessment of existing survey data augmented with feedback from Principal Investigators about data needs and challenges relating to research on inter- and intragenerational relationships.

#### **Interviews with Population Scholars**

We began our efforts by following the old dictum: "When in doubt, ask." We thought it crucial that our work represent not just the opinions and efforts of our small group but that we draw on the vast amount of knowledge existing in the various disciplines examining these issues. We thus interviewed a number of scholars and attempted to publicize our efforts through informal networks as well as more formal media such as in article published on the project as a whole in *Journal of Marriage and Family* (Seltzer et al. 2005) and in project sessions at the annual meeting of the Population Association of America. We sought input from well-established population scholars who could provide us with a broad perspective on their own fields and an understanding of how research on these topics has evolved over time as well as indicate areas in which researchers have been limited either due to data availability, methodological constraints, or omissions from the theoretical literatures. When focusing on senior scholars we made a concerted effort to include those who were involved in major data collections, some with funding from the NIA-NICHD collaboration on intergenerational family resource allocation, or who had unique disciplinary perspectives or international focus on intergenerational family relationships. We also reviewed recent PAA papers and papers from the HRS family conference that one of our members, Kathleen McGarry helped to organize.

We drew upon the enthusiasm and fresh ideas of junior scholars and those in mid career as well. To better assess the views of more junior scholars, we hosted a dinner at the 2005 PAA meetings which was attended by members of our Generations Group, Lindsay Chase-Lansdale from the larger EFC project, and a small group of productive early-to-mid career scholars in the fields of anthropology, developmental psychology, economics, and sociology. The dinner discussion was extraordinarily useful and we incorporate much of the feedback into our final report.

In all cases we sought to learn more about how researchers defined their fields, their views on what the key questions are that research on intra- and intergenerational relationships should address, and the theoretical and methodological needs that must be addressed to answer these questions. Interviews were informal discussions, sometimes involving several members of the Generations Group, sometimes a single member, and sometimes multiple interviewees at the same time. Some scholars sent us memoranda as follow-ups to our discussions or if we were unable to meet in person. Appendix 5.B presents a complete list of the scholars whom we

interviewed. We made no effort to be comprehensive in our selection of scholars, but instead sought a range of opinions, sometimes following a snowball sampling method in which we interviewed scholars whose names we obtained from another interviewee.

As background for our conversations, we provided scholars with material describing the goals of our project. These included our original proposal (in particular the section on relationships between parents and children in adulthood ([www.soc.duke.edu/~efc/proposals.php](http://www.soc.duke.edu/~efc/proposals.php)), our *JMF* article about the Explaining Family Change and Variation (EFC) project (usually the pre-publication versions of the manuscript), and occasionally internal project memos presenting our interim assessments of key questions and challenges for new research on generational topics. Some of those whom we interviewed were already familiar with the broader EFC project and some were not. Conversations were wide ranging and included valuable insights about the field and advice on steps the Generations Group should take to meet EFC project goals. We summarize the insights about generational issues in the report for which this is an appendix.

A common theme in our conversations with colleagues was that we would learn by doing; by working through some of the issues and questions we posed ourselves, we might be better able to identify wherein the largest obstacles might lie. We consistently followed this advice in mapping out our strategies and undertook a large amount of work on our own. Robert Pollak's advice on this issue was most direct. He recommended that the Generations Group write a paper that integrated what economists and sociologists "know" about intergenerational relationships and identify commonalities and conflicts between the two disciplines. He described the process of ironing out differences between economic and sociological approaches to fertility that led to his article with sociologist Susan Cotts Watkins, "Cultural and Economic Approaches to Fertility" (*PDR*, 1993). Pollak's description compelled us to adopt this approach in an integrative paper described below. Our other strategies also followed the "learn by doing" motto.

### **Caring and Exchange within and across Generations, Family Symposium, Pennsylvania State University**

Following up on the suggestion of Pollak and envisioning a paper synthesizing work in economics and sociologists, we sought an appropriate outlet for such a project. We decided that such a paper, supplemented by papers by others providing insights into recent advances or new ideas in intergenerational relationships from a multi-disciplinary perspective, would provide an important contribution. Our efforts in this dimension were assisted immeasurably by the opportunity to collaborate with Alan Booth and Nan Crouter in organizing a Family Symposium in their renowned annual Pennsylvania State University Series. Professors Booth and Crouter were similarly interested in our approach and our collaboration resulted in a two-day conference in October of 2006 entitled Caring and Exchange Within and Across Generations. To take advantage of the prominent scholars in attendance at the symposium, the Generations Group hosted a small workshop for about 25 participants following the symposium. This workshop was structured to allow in-depth discussion of themes that emerged in the more formal Symposium and to give participants the opportunity to follow-up these sorts of topics in a relaxed, interdisciplinary setting. Workshop participants included symposium program participants, a few other scholars from an array of disciplines, and other EFC Project members who attended the symposium and workshop.

### **The Symposium**

The symposium challenged scholars from different disciplines to consider the factors that account for variation and change within and among generations, to evaluate the strengths and weaknesses of existing information in understanding change and variation in these relationships, and to

address the implications of family change for public policy. The symposium followed the Pennsylvania State Family Symposium convention by structuring discussion around four sessions, each with a lead paper and three discussants from different disciplines or methodological approaches. Each session included discussion from the floor as well. The symposium papers were being published by the Urban Institute Press as *Intergenerational Caregiving*. Appendix 5.F is a table of contents for the volume.

The Generations Group outlined the topics for each session in collaboration with Professors Booth and Crouter. Because other EFC working groups are focusing on the topics of becoming a parent and intimate unions, both aspects of adult family life, we chose to focus the conference on intra- and intergenerational relationships in adulthood. We recognize the importance of placing these relationships in a lifetime context and highlighted this vision by inviting discussants such as Susan McHale and Marsha Seltzer who study intra- and intergenerational relationships in childhood. The inclusion of alternative periods of the life course had the added advantage of illustrating that researchers face many of the same conceptual challenges whether they focus on childhood or adulthood, and we shared these insights with our colleagues in the Parenthood and Unions working groups some of whom participated in the Family Symposium at Pennsylvania State.

The four lead papers at the symposium were designed to cover a broad range of topics currently being addressed by scholars of intra- and intergenerational relationships and to cover empirical, theoretical, and methodological issues on the frontiers of science in these areas. Specifically the chapters provided, in order: 1) an overview of what we know about intergenerational care and exchange, including a review of theoretical perspectives and the context of such ties with parallels drawn across the economic and sociological disciplines; 2) a discussion of evolutionary perspectives on intergenerational ties; 3) an exploration of intragenerational ties, including sibling relationships and how within-family differences in the connections between mothers and each of their children affect intergenerational caregiving; and 4) a consideration of individuals' beliefs about the appropriate allocation of responsibility among needy individuals, the public sector, and private, family assistance.

All told, more than 170 registrants participated in the two-day conference. Each of the sessions was organized to maximize disciplinary perspectives by matching lead authors with discussants from other disciplines (e.g., a lead paper by a sociologist was complemented by discussants drawn from human development, economics, and social psychology). Several authors drew on their applied work to illustrate the importance of their findings for developing effective social policies. The discussants added further to the breadth of the symposium by bringing an international perspective to the table and highlighting the diversity of patterns of generational exchange within subpopulations of U.S. society (e.g., generational caregiving in families with a disabled child).

### **Workshop**

These presentations, and the subsequent discussions from the floor, provided us with important insights into generational relationships that we could not have obtained elsewhere. To build on the ideas raised during the symposium, the Generations Group hosted a small workshop for about 25 participants, which began with dinner after the symposium and continued through the morning of the next day. Workshop participants included symposium program participants as well as other scholars and EFC Project members who had attended the symposium and workshop.

To make the most of the available time, we circulated in advance to participants a document with "Key Questions." (The Key Questions are included in Appendix 5.D and a list of workshop participants appears in Appendix 5.E). At the workshop, we reminded participants that the EFC project was concerned with developing recommendations about new theories, or ways of using existing theories, and new data, analytic approaches and measures for assessing intra-and

intergenerational family change and variation. We then focused the discussion on five questions that had come up repeatedly in the previous two days. 1) How should we conceptualize what we mean by intra- and intergenerational ties/relationships and how do we measure them? What are the dimensions that are most important? 2) How do we account for group differences in intra- and intergenerational family ties? How do we measure and assess the (relative) importance of race, ethnicity, gender, culture, class, economic status in explaining intra- and intergenerational family ties? 3) What do we need to know about sibling interactions and their role in the family and how do we go about knowing it? 4) What dynamic dimensions of generational ties/relationships do we need to focus on (e.g., life course variation, secular changes in the environment) and what models and data do we need to address dynamic dimensions of generational relationships? 5) Finally, how should we confront biology, (including evolutionary theory, behavioral genetics, gene-environment interactions) in studying intra- and intergenerational family ties/relationships? This discussion informed our subsequent work and the recommendations that stem from our efforts.

### **Integrative Paper on Economic and Sociological Perspectives on Intergenerational Relationships**

We undertook the task of writing a chapter for the Pennsylvania State Family Symposium, as we have already noted. Our goal was to provide an overview of how the literature has thought about intergenerational transfers with an emphasis on comparing the ideas and frameworks used by the various disciplines, particularly economics and sociology. We also sought to summarize what is known about patterns of transfers and where there are gaps in knowledge. Throughout the project we sought to delve behind the discipline-specific jargon and to identify the ideas that are common across fields. For concreteness and tractability we focused on relationships between parents and adult children although we recognize explicitly that these relationships cannot be understood without considering what happens earlier in life. Thus, although developmental and attachment processes are central to intergenerational relationships they lie beyond the scope of the chapter.

Our chapter has four main sections. In the first section of the paper, we discuss theories about the motivation for generational exchanges. Although the emphasis of each discipline is somewhat different, there are clear camps into which many of the explanations can be placed. The first is the idea that intergenerational relationships are based on self-interested behavior with transfers made with the expectation of some form of reciprocity or exchange. The second posits that behavior is based on caring or altruistic preferences on the part of the individual making the transfer. Economists refer to these competing ideas as exchange and altruism, although terms like reciprocity and caring appear frequently in other disciplines. Within these broad categories there are several related models which we briefly note.

In section 2 of the paper, we discuss the empirical patterns documented in previous work with a focus on three main forms of assistance to kin: co-residence, time assistance, and financial transfers. In section 3, we discuss the changing demographic and policy contexts, considering how each interacts with familial behavior. We conclude, in section 4, with a discussion of the theoretical, statistical, and data collection issues and challenges to improving our understanding of generational ties. The pre-print paper is posted at [www.soc.duke.edu/~efc/Docs/pubs/IntergenerationalTies\\_tocirulate17March2007.pdf](http://www.soc.duke.edu/~efc/Docs/pubs/IntergenerationalTies_tocirulate17March2007.pdf).

### **Survey of Existing Data Sources and PI Feedback**

As noted above, we also undertook a systematic assessment of existing data sources and future data needs for assessing important unanswered questions about intragenerational and intergenerational relationships. Given our interest in understanding how these dimensions of the family have changed over time and vary across various subgroups in the population, a key issue is the adequacy of existing data to address these questions and ways to enhance and improve these



data in the future. Accordingly, we sought to: (a) conduct an informed assessment of the strengths and weaknesses of existing data sources for conducting research on family change and variation across subgroups in the population; (b) identify key data needs, both in terms of samples, data content, etc. for the future for such research; and (c) identify innovative and new data gathering strategies to sustain research in this area, including the use of new methods for developing and following sampling frames and combining modes of data collection, collecting new and different variables.

Our assessment was based on two sources of information. First, we examined the content of over twenty existing data sets that collect some data related to inter- and intragenerational relationships or have the potential to generate such data. Second, we asked for feedback from the directors and/or principal investigators of these data sets about the strengths and weaknesses of their existing studies with respect to supporting research on inter- and intragenerational relationships and innovations that might enhance their data collection efforts to support such research in the future. The full report on this assessment and our findings is provided as Appendix 5.G and at [www.ccpr.ucla.edu/docs/publications/CCPR20-07.pdf](http://www.ccpr.ucla.edu/docs/publications/CCPR20-07.pdf). The findings from this assessment informed many of the recommendations we make concerning the future directions of research on inter- and intragenerational family relationships, which we discuss in the Generations Group report.

## **APPENDIX 5.B**

### **Generations Group's Consultations Early in Project**

#### **PAA 2005 Dinner**

Rachel Dunifon, Cornell  
Jennifer Glick, Arizona State U  
Ariel Kalil, U of Chicago  
I-Fen Lin, Bowling Green State U  
Nicholas Townsend, Brown  
Marcos Rangel, U of Chicago  
Julie Zissimopoulos, Rand (Not attending. Sent memo)

#### **Other Informants**

Vern Bengtson, USC  
Larry Bumpass, Wisconsin  
Elizabeth Frankenberg, UCLA  
Andrew Fuligni, UCLA  
Robert Hauser, Wisconsin  
John Hobcraft, U of York  
Kathleen Kiernan, U of York  
Alberto Palloni, Wisconsin  
Bob Pollak, Washington U  
Bob Schoeni, Michigan  
Glenna Spitze, SUNY-Albany  
Arland Thornton, Michigan  
Robert Willis, Michigan

## APPENDIX 5.C

### Penn State Symposium Program and Participants

#### 2006 National Symposium on Family Issues Caring and Exchange Within and Across Generations

October 5 - 6, 2006

Nittany Lion Inn, Penn State

#### *Thursday, October 5*

**8:45 - 9:00 a.m.** Opening Remarks

#### **9:00 – noon Intergenerational ties: What are contemporary trends and contexts?**

The goal of this session is to review what is known about intergenerational relationships (affective ties, caregiving, exchanges) and explain social, economic, demographic, and institutional contexts that impinge on those relationships. The session will include a discussion of key questions that remain to be answered.

**Lead Speakers:** Kathleen McGarry, Department of Economics, University of California, Los Angeles, Suzanne Bianchi, Department of Sociology, University of Maryland, V. Joseph Hotz, Department of Economics, Judith A. Seltzer, Department of Sociology, University of California, Los Angeles

#### **Discussants:**

Rebeca Wong, Maryland Population Research Center, University of Maryland  
Francesco Billari, Institute of Quantitative Methods, Bocconi University, Milan, Italy  
Melissa Hardy, Gerontology Center, Penn State

#### **1:30 - 4:30 p.m. What factors explain change and variation in intergenerational caregiving and exchanges?**

The focus of this session will be on theoretical frameworks and models that have been proposed in economics and other fields to explain caregiving and exchanges. The session will also include emphasis on biological and evolutionary perspectives that inform theories of intergenerational exchange in the social sciences.

**Lead Speaker:** Donald Cox, Department of Economics, Boston College

#### **Discussants:**

Merril Silverstein, Depts. of Sociology and Gerontology, Univ. of Southern Calif.  
Jeremy Freese, Dept. of Sociology, Univ. of Wisconsin, currently Robert Wood Johnson Scholar at Harvard University  
Steve Zarit, Department of Human Development and Family Studies, Penn State

#### *Friday, October 6*

#### **8:30 - 11:30 What is the nature of negotiations within generations?**

There is much less research on within-generation relationships than on intergenerational exchanges. The purpose of this session is to focus on innovative new investigations of adult sibling caregiving ties and the ways in which they are leading to new models of sibling interactions.

**Lead Speaker:** Karl Pillemer, Institute for Translational Research on Aging, Cornell University

**Discussants:**

Marsha Mailick Seltzer, Waisman Center and School of Social Work, University of Wisconsin

Susan McHale, Department of Human Development and Family Studies, Penn State

Robert Pollak, Department of Economics, Washington University

**1:00 - 4:00 p.m. Private and public provision in care of kin: Who feels an obligation for whom?**

This session will focus on the types of kin ties that elicit feelings of private responsibility (exploring "degrees of removal" - biological ties, step-ties, in-laws, siblings, etc.) and how this varies across socioeconomic and racial groups. The implications for public support of within- and across-generation family caregiving will also be explored.

**Lead Speaker:** Steven Nock, Department of Sociology, University of Virginia

**Discussants:**

James Jackson, Institute for Social Research, University of Michigan

Adam Davey, Temple University

Robert Willis, Department of Economics, University of Michigan

The **National Symposium on Family Issues** is organized by **Alan Booth**, Distinguished Professor of Sociology, Human Development and Demography and **Ann C. Crouter**, Professor of Human Development and Director, **Center for Work and Family Research**. The 2006 symposium is in collaboration with the Generations Working Group of the NICHD Project on Explaining Family Change and Variation: Suzanne M. Bianchi, V. Jeffery Evans, V. Joseph Hotz, Kathleen McGarry, and Judith A. Seltzer.

### **Symposium Participants**

Benta Abuya, Phd Student, Penn State, EDTHP  
David Almeida, Associate Professor, Penn State, HDFS  
Stephanie Anzman, Graduate Student, Penn State, Human Development and Family Studies  
Christine Bachrach, Chief, Demographic and Behavioral Sciences Branch, NICHD  
Kiet Bang, Library Assistant, Penn State  
Jason Bedford, graduate student, Penn State, Rural Sociology  
Kevin Bennett, Instructor of Psychology, Penn State  
Latrica Best, Graduate Student, Penn State, Sociology  
Suzanne Bianchi, Professor of Sociology, University of Maryland, Department of Sociology  
Francesco Billari, Professor, Institute of Quantitative Methods, Bocconi University, Milan  
Joanna Bissell, Graduate Student, Penn State, HDFS  
Michelle Blocklin, Penn State, HDFS  
Alan Booth, Distinguished Professor of Sociology, Penn State  
Michelle Bragg, Research Associate, Penn State, HHD  
Chalandra Bryant, Associate Professor, Penn State, HDFS  
Jennifer Buher-Kane, Graduate Student, Penn State, Sociology  
Kristin Burnett, Graduate Student & Research Assistant, Penn State, Sociology  
Marissa Campbell, Vice President of PSU Beaver Psychological Association, Penn State,  
Lenora Campbell, Professor of Nursing, Winston-Salem State University,  
Andrea Casher, Penn State  
Lynne Casper, Professor of Sociology, University of Southern California  
John Casterline, Professor of Sociology and Demography, Penn State  
Sativika Chalasani, Penn State Sociology  
Wen-Chun Chen, Penn State, EDTHP  
Yen-hsin Cheng, Graduate Student, Penn State, Sociology  
Mitsuko Chikasada, Penn State Agricultural Economics and Demography  
Kelly Cichy Graduate Student, Penn State, HDFS  
Alisha Coleman, Graduate Assistant, Penn State Rural Sociology and Demography  
Gretchen Cornwell, Research Affiliate, Penn State, PRI  
Donald Cox, Professor of Economics Boston College  
Ann Crouter, Director Social Science Research Institute, Penn State, SSRI  
Jill Curley, Intergenerational Devotee/Infant-Toddler teacher, Penn State  
Kim Daniels, Sociology Graduate Student, Penn State  
Adam Davey Associate Professor, College of Health Professions, Temple University  
Gordon De Jong, Professor of Sociology and Demography, Penn State  
Allison De Marco, Postdoctoral Fellow Penn State, HDFS  
Mary Ann Demi, Graduate Research Assistant, Penn State, Rural Sociology/Demography  
Natalie DePalma, Doctoral Student, Penn State, Counseling Psychology  
Jeffrey Dew, Penn State, HDFS/Demography  
Heidi Dobish, Psychology Professor, Shepherd University  
Cass Dorius, Graduate Student of Sociology and Demography, Penn State  
Emily Doyle, Penn State, HDFS  
Melissa Eaton, Assistant Professor of Psychology, Penn State  
David Eggebeen, Associate Professor of Human Development, Penn State  
Vincent Evans, Director of Intergenerational Research, NICHD DBSB  
Diane Farley, Staff Assistant Penn State, HPA (CHCPR)  
Andrea Finlay Penn State, HDFS

Carla Fisher, PhD Candidate in Communication Arts & Sciences, NIA Trainee, Penn State  
 Jasmine Fledder Johann, Graduate Student, Penn State, Sociology  
 David Fleming, Penn State, AEREC  
 Jeremy Freese, Robert Wood Johnson Scholar at Harvard, University of Wisconsin  
 Ashley Frost, Graduate Student, Penn State, Sociology  
 Nadine Fruehauf, Penn State, Human Development and Family Studies  
 Marie Ellen Galasso, Caregiver Program Coordinator of Services Now for Adult Persons, Inc.,  
 Jochebed Gayles, Penn State, HDFS  
 Christie Ghetian, Penn State, CAS  
 Amanda Goodwin Instructor, Penn State, Communication Arts and Sciences  
 Nicole Goodwine, Graduate Student, Anthropology and Demography, Penn State  
 Deborah Graefe, Research Associate, Penn State Population Research Institute  
 Elizabeth Grisa, HDFS, Doctoral Student, Penn State  
 Allison Groenendyk, Graduate Student, Penn State, Human Development and Family Studies  
 Angelika Gulbis, Graduate Student, Bowling Green State University, Sociology  
 Matthew Hall, Graduate Student, Penn State, Sociology  
 Gyounghae Han, Professor of Family Studies, Seoul National University  
 Melissa Hardy, Director, Gerontology Center, Penn State  
 E. C. Hedberg, Graduate Student, Department of Sociology, University of Chicago  
 Brigitt Heier Penn State, Health Policy and Administration  
 Daphne Hennessey, Care Team Coordinator, Interfaith Care Partners  
 Jacob Hibel, Graduate Student, Penn State Sociology  
 Mira Hidajat, PhD Candidate, Penn State Sociology  
 Andrew High, Graduate Student, Penn State, Communication Arts and Sciences  
 Jeong Hwa Ho, Graduate Student of Sociology, University of Wisconsin-Madison  
 Bryndl Hohmann-Marriott, Postdoctoral Fellow, Penn State, Population Research Institute  
 Jennifer Hook, Assistant Professor, Sociology, Penn State  
 V. Joseph Hotz, Professor of Economics, UCLA  
 Jason Houle, Graduate Student, Penn State, Sociology  
 Pamela Hufnagel, Assistant Professor of Education, Penn State  
 Tamera Humbert, Senior Lecturer, Penn State  
 Shelley Irving, Ph.D Candidate, Penn State, Sociology  
 Rukmalie Jayakody, Associate Professor of HDFS, Penn State  
 Julia Jennings, Penn State, Anthropology  
 Eric Jensen, Graduate Student, Penn State, Rural Sociology  
 Katie Johnson, Graduate Student, Penn State, Sociology  
 Jennifer Kam, Doctoral Student, Penn State, Communication Arts & Sciences  
 Claire Kamp Dush, Postdoctoral Fellow, Cornell University Institute for the Social Sciences  
 Aramide Kazeem, Graduate Student Penn State, Rural Sociology and Demography  
 Peter Kemper, Professor of Health Policy and Administration, Penn State  
 Kathryn Kietzman, Doctoral Candidate, UCLA, Social Welfare  
 Ji-Yeon Kim, Penn State  
 Kyungmin Kim, Graduate Student Penn State, Human Development & Family Studies  
 Valarie King, Associate Professor of Sociology, Demography, and Human Development &  
 Family Studies, Penn State  
 Heather King, Graduate Student in Human Development and Family Studies, Penn State  
 Amy Kocher, Student Government at Penn State  
 Sarah Kolla, Ph.D. Candidate, Developmental Psychology, Penn State  
 Mary Lai, HDFS Doctoral Student, Penn State  
 Nancy Landale, Professor of Sociology and Demography, Penn State  
 I-Fen Lin, Associate Professor of Sociology, Bowling Green State University

Melissa Lippold, Doctoral Student, Penn State, HDFS  
 Siwei Liu, Penn State, HDFS  
 Bobbi Low, Professor of Resource Ecology, University of Michigan, School of Natural Resources & Environment  
 Alysa Lucas, Doctoral Candidate, Penn State Communication Arts & Sciences  
 Marsha Mailick Seltzer, Director, Waisman Center, University of Wisconsin-Madison  
 Matthew Marlay, Graduate Student, Penn State Sociology  
 Peter Mateyka, Penn State, Sociology  
 Gail Mayer, Graduate Student, Penn State, Human Development Family Studies  
 Maria McCarthy, Parent Education Specialist, ARIN IU 28 School & Community Services  
 Kathleen McGarry, UCLA, Economics  
 Susan McHale, Professor of Human Development and Family Studies, Penn State  
 Douglas McKee, Post-Doctoral Fellow, Economics, U. Penn., Population Studies Center  
 Rachel McLaren, PhD Candidate, Penn State Communication Arts & Sciences  
 Tara McManus, student, Penn State Communication Arts and Sciences  
 Mary Merriman, Social Worker, Penn State, Adult Education  
 Michelle Miller-Day, Associate Professor of Communication Arts & Sciences, Penn State  
 Lauren Molloy, Penn State Human Development and Family Studies  
 Martin Moreno, Graduate Student, Penn State Sociology  
 S. Philip Morgan, Professor of Sociology, Duke University  
 Tara Murray, Information Core Director, Penn State PRI  
 Claudia Nau, Penn State, Sociology  
 Judith Newman, Associate Professor Penn State, HDFS  
 Steve Nock, Professor of Sociology University of Virginia  
 Jon Nussbaum, Professor of Communication Arts & Sciences, Penn State  
 Tom Owuor Penn State  
 B. C. Ben Park, Assistant Professor of Sociology, Penn State  
 Elizabeth Peters, Professor of Public Policy, Cornell University  
 Liliana Pezzin, Associate Professor, Health Policy Institute, PCOR and Department of Medicine, Medical College of Wisconsin, Center for Patient Care and Outcomes Research  
 Phuong Phamphuong, Penn State, HDFS  
 Karl Pillemer Professor of Human Development, Cornell University Institute for Translational Research on Aging  
 Robert Pollak, Professor of Economics, Washington University  
 Rajeshwari Punekar, Penn State, Health Policy and Administration  
 Sara Raley, University of Maryland, Sociology  
 Nilam Ram, Asst Professor, Human Development & Family Studies, Penn State  
 Emily Riggs Student, Penn State  
 Elizabeth Riina, Graduate Student, Penn State, Human Development & Family Studies  
 Stacy Rogers, Associate Professor of Sociology, Penn State  
 Brandi Rollins, Graduate Student in Human Development and Family Studies, Penn State  
 Beth Rustenbach, Graduate Student in Sociology, Penn State  
 Andrea Ryan, Doctoral Candidate Penn State, Agricultural Economics and Rural Sociology  
 Sturgeon Samuel, Penn State, HDFS  
 Jyoti Savla, NIMH Post-doctoral Fellow, Gerontology Center, Penn State  
 Robert Schoen, Professor of Sociology, Penn State  
 Barbara Schone, Senior Economist AHRQ and Georgetown University  
 Daniel Schoonover, Member of Penn State Beaver Psychological Society, Penn State Psychology Club  
 Judith Seltzer, Professor, UCLA Dept. of Sociology, and California Center for Population Research

Andrew Selzer, Penn State  
Monika Setia, Ph.D. Student and Graduate Assistant, Penn State, Health Policy & Administration  
Luis Sevilla, Penn State, AEREC  
David Shapiro, Professor of Economics, Penn State  
Theda Shaw, Student, Masters in Nursing, Penn State  
Srijana Shrestha, Graduate Student, Penn State Psychology  
Merril Silverstein, Professor of Gerontology, USC, Andrus Gerontology Center  
Richard Simon, Penn State Sociology  
Timothy Smith, Penn State  
Anna Soli, Penn State, Human Development and Family Studies  
Jeremy Staff, Assistant Professor, Penn State, Sociology  
Katherine Stamps, Graduate Student, Penn State Sociology, Demography  
Keli Steuber, Doctoral Candidate in Communication Arts and Sciences, Penn State  
Winston Tripp, Penn State  
Annevan Putten, PhD-candidate, Netherlands Interdisciplinary Demographic Institute  
Sara, Vasilenk, Penn State, HDFS  
Julie Volkman, Doctoral Candidate, Penn State Communication Arts & Science  
Xiao zhou Wang, Student, Penn State Sociology  
Nisaporn Wattanasupt, Penn State, Population Research Institute  
France Weaver, Post-Doctoral Scholar, Penn State, CHCPR  
Vanessa Wight, University of Maryland, Sociology  
Robert Willis, Professor of Economics, University of Michigan, Health & Retirement Study  
Rebeca Wong, Associate Director, Maryland Population Research Center, University of  
Maryland  
Jen Wong, Graduate Student, Penn State, Human Development and Family Studies  
Laura Wray, Doctoral Candidate, Penn State, HDFS  
Loriena Yancura, Assistant Professor, University of Hawaii at Manoa, Family and Consumer  
Sciences  
Tse-ChuanYang, Penn State  
Johanna Yngvason, Penn State, Anthropology  
Steve Zarit, Professor of Human Development and Family Studies, Penn State  
Kristina Zeiser, Graduate Student of Sociology, Penn State



**APPENDIX 5.D**  
**Key Questions for Explaining Change and Variation in**  
**Intra- and Intergenerational Relationships (3/21/06)**

**I. Changes in five broad areas alter the context for intra- and inter-generational relationships. These provide the context for the overarching question: Why do families behave as they do and what motivates their behavior?**

1. Mortality – Population aging, longer life expectancies
2. Fertility – smaller family sizes, births timed later in life, births increasingly outside marriage
3. Union formation/dissolution – later marriage, more cohabitation, high levels of dissolution/repartnering
4. Immigration and high rates of geographic mobility
5. Changes in the gender division of labor in the market and in the family.

**II. What are “the facts” about *change* and subgroup *variation* in intra- and intergenerational relationships?**

- A. What have been the major changes/trends over the last 50-100 years in the following dimensions of intra- and inter-generational relationships in the family? What is the variation in these relationships across groups?
- 1) How is the *structure* of extended families changing and how does it vary across groups, in terms of the numbers in generations (affected by birth and/or death rates), the incidence and nature of “blood” versus “blended” family ties (affected by changes in unions), native vs. foreign-born generations in the U.S. (immigration)?
  - 2) How strongly *correlated* are outcomes (e.g., health or education) within families? Have intra- and intergenerational correlations in outcomes changed over time and do they vary in strength across groups?

Here, we are interested in the “facts” on the intra- and intergenerational correlations on a broad set of *outcomes, attainments, family behaviors* of members of (extended) families, such as health, income/wealth/poverty/consumption, labor force participation, occupational attainment, values, religion, educational attainment, cognitive and other dimensions of development, other indicators of well-being, timing and incidence of marriages, fertility (number, timing and within vs. outside marriage), morbidity and mortality, etc.

- 3) What are the “facts” about *interactions, exchanges* and *contacts* among (extended) family members? How do *interactions, exchanges* and *contacts* between family members vary across groups? Here, the focus is on:
  - (a) financial transfers,
  - (b) time/caregiving,
  - (c) co-residence, proximity, social contact,
  - (d) positive and negative affective ties, feelings of obligation, and solidarity.

- 4) Do “the facts” differ from the perspective of women and men? Do women and men differ in the structure of their families? What role does gender play in intra- and inter-generational correlations and interactions?

**III. What are the *theoretical frameworks* for understanding and explaining the nature, changes and variations in inter- and intra-generational structures, outcomes and relationships?**

- a. What disciplines offer theories that help us understand intra- and intergenerational ties? What are the most valuable theoretical insights and can they be reconciled or combined in useful ways?
- b. What theoretical motivations help us understand and differentiate inter- and intra-generational interactions and outcomes from those of other collections of individuals, (e.g., neighborhoods, clubs or other communities, markets, etc.)? Attention will be paid to:

- Altruism
- Exchange
- Insurance
- Common genetics
- Social networks and the benefits derived from them
- Family “cultures” and/or “norms”

**IV. What the major forces that are likely to account for the changes and variations in inter- and intra-generational structures, outcomes and relationships and what do we know about their importance?**

- a. *Institutional change and differences*, such as development of credit and insurance markets, (national) health care systems, pension and social security systems, changes in family-related laws, etc.
- b. *Technological change*, such as advances in communication, medical advances that allow women to have children at much later ages, affect the length of life, allow for independent living among the elderly.
- c. *Cultural change and differences*.
- d. *Biological and genetic factors* that may equip parents and children with matched genes that are designed to evoke beneficial responses, help transmit health and development over generations through gene/environment interactions, etc.
- e. *Gender specialization*.

**V. What are *key hypotheses* derived from existing theories and/or frameworks used to study intra- and intergenerational relationships? What is the extent of our knowledge base on these hypotheses? How credible is the evidence on them?**

- a. What has been tested and possibly represents “settled” science?

- i. Provide examples of how some of these hypotheses have been tested and critically evaluate the data, measurement and methods and approach underlying those tests.
- b. What are some key hypotheses for which there is little convincing evidence on their validity?
  - i. Why are these “key” or important hypotheses to test?
  - ii. Why have tests have not been convincing when they have been performed?
  - iii. What have been the key obstacles to adequate testing these of hypotheses? For example, which of the following impediments and why?
    - 1. Gathering data on relevant populations
    - 2. Measuring key phenomena and constructs
    - 3. Having compelling sources of exogenous variation with which to identify implications of hypotheses
    - 4. Being able to combine appropriate sources of information.

**VI. What other methodological issues does one face in trying to assess and isolate the causes of change and variation in intra- and inter-generational interactions, outcomes, etc.?**

- a. Do we need to think about different “units of analysis” that move us beyond the traditional focus on couples or individuals, such as extended families, blended families, or households?
- b. Do we need to focus on longer versus shorter time horizons?
- c. Do we need to pay more attention to differentiating between gathering information about family members who differ in the “strength” of their “ties” to other members?

**VII. What data sources are available for analyzing intra- and intergenerational interactions, outcomes, what are their strengths and weaknesses and what is needed?**

- a. What are some of the most exciting innovations in data, measurement and methods that could be used to test either established or newly emerging hypotheses related to intra- and inter-generational relationships and behaviors?
  - i. How might they be used to get at various key questions or hypotheses?
- b. What enhancements can be made to existing data, at what cost and with what benefit?
  - i. How might they be used to get at various key questions or hypotheses?
- c. What new data collection should be undertaken?

- i. How would this differ from existing data collection efforts and why is it important to undertake such innovations, given existing data sources?

**VIII. What are the key policy-related issues in this area?**

- a. For example, what are the key issues about intra- and inter-generational issues as they relate to retirement, Social Security, health care, welfare reform, others?
- b. What role does the extended family play in these domains and does existing public policy promote or inhibit intra- and inter-generational relationships?
- c. Can and should we focus on policy development or refinements that draw on or improve relationships of the extended family?

## APPENDIX 5.E

### Penn State Family Symposium and Generations Workshop Participants

October 2006

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Christine Bachrach* Demographic and Behavioral Sciences Branch, NICHD	Bobbi Low School of Natural Resources and Environment University of Michigan
Suzanne M. Bianchi* Department of Sociology University of Maryland	Kathleen McGarry* Department of Economics UCLA
Francesco Billari Centre for Research on Social Dynamics and Innocenzo Gasparini Institute for Economic Research Università Bocconi, Milan, Italy	Susan McHale Department of Human Development and Family Studies Pennsylvania State University
Alan Booth Department of Sociology Pennsylvania State University	S. Philip Morgan* Department of Sociology Duke University
Lynne Casper* Department of Sociology USC	Steven Nock Department of Sociology University of Virginia
Donald Cox Department of Economics Boston College	H. Elizabeth Peters Department of Policy Analysis and Management Cornell University
Nan Crouter Department of Human Development and Family Studies Pennsylvania State University	Karl Pillemer Department of Human Development and Department of Geriatrics Cornell University
Adam Davey Department of Therapeutic Recreation Temple University	Robert Pollak Department of Economics Washington University
V. Jeffery Evans* Demographic and Behavioral Sciences Branch, NICHD	Judith A. Seltzer* Department of Sociology UCLA
Jeremy Freese Department of Sociology, University of Wisconsin and RWJ Scholar, Harvard University	Marsha Mailick Seltzer Waisman Center University of Wisconsin

Melissa Hardy  
Gerontology Center  
Pennsylvania State University

Merril Silverstein  
Andrus Gerontology Center  
and Department of Sociology  
USC

V. Joseph Hotz\*  
Department of Economics  
UCLA

Robert Willis  
Department of Economics  
and Survey Research Center  
University of Michigan

James Jackson  
Institute for Social Research  
University of Michigan

Rebeca Wong  
Maryland Population Research Center  
University of Maryland

Steve Zarit  
Dept of Human Development & Family  
Studies  
Pennsylvania State University

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\* Explaining Family Change Project

## APPENDIX 5.F

**Volume from  
Penn State University 2006 Symposium on Family Issues**  
(<http://www.pop.psu.edu/events/symposium/2006.htm>)

*The chapters in this volume are based on the presentations and discussions from the 14<sup>th</sup> annual [National Symposium on Family Issues](#), held at the Pennsylvania State University, October 5-6, 2006.*

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Dramatic changes in American families over the past half-century have transformed the nature of intergenerational relationships. Nuclear families have become smaller as fertility has declined, but extended families have become larger with gains in life expectancy leading to more multi-generational families. Divorce and non-marital childbearing, remarriage and cohabitation, all more common now than a half century ago, add further complexity to intergenerational relationships. They weaken ties to biological fathers while at the same time reinforcing some grandparent-grandchild ties. Step-children and step-grandchildren, increase the number of family members on whom an elderly person can potentially rely for help, but the strength of these familial ties may be insufficient to generate the desired care. These changing family ties also increase the importance of understanding how adult siblings, including step-siblings, negotiate intergenerational caregiving roles. Finally, women's greater employment also alters the "caregiving reserve" that families have and drives up the costs to women who forego employment to care for family members. In dual-earner families, the demands of two jobs create their own tensions, with men and women often having to negotiate, and renegotiate, how to divide housework, paid work and dependent care.

At the 2006 symposium, scholars drawn from different disciplines considered factors that account for variation and change in relationships within and among generations, the strengths and weaknesses of existing information that can be used to understand change in inter- and intra-generational relationships, as well as implications for social policies.

### ***Caring and Exchange Within and Across Generations***

#### Section I. Intergenerational Ties: Contemporary Trends and Contexts?

The goal of this section is to review what is known about intergenerational relationships (affective ties, caregiving, exchanges) and explain social, economic, demographic, and institutional contexts that impinge on those relationships. There is also a discussion of key questions that remain to be answered.

1. *Intergenerational Ties: Alternative Theories, Empirical Findings and Trends, and Remaining Challenges*, Suzanne M. Bianchi, V. Joseph Hotz, Kathleen McGarry, Judith A. Seltzer,
2. *Are We Asking the Right Questions on Intergenerational Ties?* Rebeca Wong
3. *Intergenerational Ties: What Can Be Gained from an International Comparative Perspective?* Francesco C. Billari, Aart C. Liefbroer
4. *Developing Interdisciplinary Approaches to Study Intergenerational Relationships*, Melissa Hardy

## Section II. Explaining Change and Variation in Intergenerational Caregiving and Exchanges

The focus of this section is on theoretical frameworks and models that have been proposed in economics and other fields to explain caregiving and exchanges. The section also includes emphasis on biological and evolutionary perspectives that inform theories of intergenerational exchange in the social sciences.

5. *Intergenerational Caregiving and Exchange: Economic and Evolutionary Approaches*, Donald Cox
6. *Do Bioevolutionary Forces Shape Intergenerational Transfers? Detecting Evidence in Contemporary Survey Data*, Merril Silverstein
7. *The Problem of Predictive Promiscuity in Deductive Applications of Evolutionary Reasoning to Intergenerational Transfers: Three Cautionary Tales*, Jeremy Freese
8. *Beyond Theory: Individual Differences in Exchanges Between Older Parents and Their Children*, Steven H. Zarit

## III. The Nature of Negotiations within Generations

There is much less research on within-generation relationships than on intergenerational exchanges. Chapters in this section focus on innovative new investigations of adult sibling caregiving ties and the ways in which they are leading to new models of sibling interactions.

9. *Intergenerational Support, Care and Relationship Quality in Later Life: Exploring Within-Family Differences*, Karl Pillemer, J. Jill Sutor
10. *Unanticipated Lives: Inter- and Intragenerational Relationships in Families with Children with Disabilities*, Marsha Mailick Seltzer, Jan S. Greenberg, Gael I. Orsmond, Julie Lounds, Matthew J. Smith
11. *Families as Non-shared Environments for Siblings*, Susan M. McHale, Ann C. Crouter,
12. *Family Bargaining and Long-Term Care of the Disabled Elderly*, Liliana E. Pezzin, Robert A. Pollak, Barbara S. Schone

## Section IV. Private and Public Provision in Care of Kin: Who Feels an Obligation for Whom?

The chapters in this section focus on the types of kin ties that elicit feelings of private responsibility (exploring “degrees of removal” – biological ties, step-ties, in-laws, siblings, etc.) and how this varies across socioeconomic and racial groups. The implications for public support of within- and across-generation family caring and exchange will also be explored.

13. *The Distribution of Obligations*, Steven L. Nock, Paul W. Kingston, Laura M. Holian
14. *Race and Ethnic Influences on Normative Beliefs and Attitudes toward Provision of Family Care*, James Jackson, Toni C. Antonucci, Edna E. Brown, Ssvein Olav Daatland, Besangie Sellars
15. *Between the Motion and the Act: Psychological Perspectives on the Distribution of Obligations*, Adam Davey
16. *Interpreting Norms of Obligation as Planner’s Preferences for Distributional Justice: A Formal Economic Model*, Robert J. Willis



## APPENDIX 5.G

### **An Assessment of Available Data and Data Needs for Studying Intra- and Inter-Generational Family Relationships and Behavior**

Suzanne Bianchi  
University of Maryland

V. Jeffery Evans  
National Institute of Child Health and Human Development

V. Joseph Hotz  
UCLA and NBER

Kathleen McGarry  
UCLA and NBER

Judith A. Seltzer  
UCLA

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The work undertaken for this report is part of the *Explaining Family Change and Variation* project funded by NICHD. We wish to thank Kate Choi for her able research assistance in helping to compile the summaries of the existing data collection studies analyzed in this study and Bijou Hunt for her able assistance in coordinating our efforts to gather information from the directors and principal investigators of these data collection studies. We benefited from comments from Duncan Thomas, Kate Choi and Bijou Hunt on an earlier draft.

## Introduction

In this report we present results from a systematic assessment of the available data and future data needs for assessing important unanswered questions about intra-generational and intergenerational relationships. We are especially interested in understanding how these dimensions of families have changed over time and vary across various subgroups in the population. The area of intra- and intergenerational relationships is fast transforming into a field in which the social, behavioral and health sciences must be combined in new ways to make scientific progress. A key issue concerns the adequacy of existing data to address these questions and ways to enhance and improve existing or future data collection efforts. This assessment is part of the NICHD Project on Explaining Family Change and Variation. One of the goals of this Project is to provide NICHD, other funding agencies, and the demographic research community with: (a) an informed assessment of the strengths and weaknesses of existing data sources for conducting research on family change and variation across subgroups in the population; (b) a summary of key data needs, in terms of samples, data content, and other elements for the future for such research; and (c) a set of new and innovative data gathering strategies to sustain research in this area, including new methods for developing and following sampling frames, combining modes of data collection, and collecting new types of information. The report addresses these questions for research on the changes and differences in how the “extended” family, both across and within generations, is structured, how it functions, and how families affect the welfare of individual members. Our findings also provide a basis for some of the recommendations about data collection that are contained in the Final Report of the Explaining Family Change and Variation Project.

Our assessment derives from a two-pronged information collection effort that we undertook as part of the Explaining Family change and Variation Project. First, we examined the content and sampling methodology of 22 existing data sets, each of which collects some data related to inter- and intra- generational relationships (or which has the potential to generate such data). Second, we surveyed the directors and/or principal investigators of these datasets concerning the strengths and weaknesses of their existing studies with respect to supporting research on inter- and intra-generational relationships and innovations that might enhance their data collection efforts to support such research in the future. We then summarized their responses. In what follows we discuss the results from both components of our inquiry and the conclusions to which these results lead.

### The Structure and Content of Existing Data Collection Studies

We begin with the discussion of our investigation into existing surveys. The names of the 22 data collection efforts on which we focused are listed in Table 1 below.<sup>1</sup> Our choice of these particular data sets was based on the following considerations. First, we excluded official government data collection studies, such as the Current Population Surveys (CPS) and the Survey of Income and Program Participation (SIPP), and focused on data collected by non-governmental survey organizations (e.g., Institute for Survey Research at the University of Michigan or NORC at the University of Chicago) and designed and conducted by non-governmental organizations and/or

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<sup>1</sup> For each of these data sets, we used publicly-accessible documentation to develop comparable information on the each of the following features of the study: target population, sample design, dates of data collection, the degree to which the study represents multiple generations of the same family by self and/or proxy reports, coverage of biological and nonbiological kin, coverage of co-resident and non-co-resident kin, mode(s) of data collection, content (primarily with respect to inter- and intra-generational relationships), supplemental files (administrative records, bio-medical information), and funding sources. We describe these dimensions in more detail below. Appendix 5.G.1 to this report includes the standardized, detailed descriptions for each data set.

investigators. Second, we did not review any propriety or semi-propriety data sets, including data sets that were not yet in the public domain.<sup>2</sup> Third, with a few exceptions, we analyzed studies that were or have the potential to be ongoing, rather than those that have been completed.<sup>3</sup> Fourth, although our emphasis was on studies that gather data on the U.S. population, we also include some studies of foreign populations. Fifth, almost all of the studies we selected were longitudinal, rather than cross-sectional in design.

Finally, we sought to include data sets that are exemplars or illustrative of different data collection strategies. The list of studies in Table 1 is obviously far from comprehensive as it is impossible to summarize adequately the entire universe of survey collection efforts. In addition to the factors noted above, however, we endeavored to choose studies that differed in the degree to which they emphasized younger or older families because the salience of different dimensions of intergenerational and intragenerational relationships varies across the life course. We also sought to target individual studies within larger comparative projects (with the exceptions of the Luxembourg Income Study and the Survey of Health, Ageing and Retirement in Europe). Thus, the Comparative Study of Aging and Health in Asia is represented by the Indonesian Family Life Survey rather than all four of the data sets in the project (<http://aha.psc.isr.umich.edu/>).

In addition to the data sets listed in Table 1 we reviewed other data sources, including the completed National Longitudinal Surveys of Mature Women and Young Women and community studies, such as the Los Angeles Family and Neighborhood Study (LA FANS). We also consulted with scholars in the United States, Canada and Germany about existing and planned studies in those countries, and we reviewed the Generations and Gender Programme comparative project (<http://www.unece.org/pau/ggp/Welcome.html>). Although the results of our investigations of these studies are not reported here in the detail in which we discuss other surveys, they helped to inform our recommendations and we draw on insights obtained from these efforts throughout the report.<sup>4</sup>

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<sup>2</sup> The first wave of the Mexican American Study Project (MASP), conducted by Leo Grebler in 1976-77 is available from the UCLA Institute for Social Science Research Data Archives <http://www.sscnet.ucla.edu/issr/da/index/techinfo/M5431.HTM>.

<sup>3</sup> Of the studies listed in Table 1, the National Survey of Families and Households (NSFH) and the Intergenerational Panel Study of Parents and Children are complete but have the potential to be re-initiated. The National Survey of Black Americans (NSBA) is complete, but it has become incorporated in a new study, the Family Connections Across Generations and Nations.

<sup>4</sup> For a more comprehensive summary of electronic data on aging see the *Data Collections from the National Archive of Computerized Data on Aging* (ICPSR, 2002; <http://www.icpsr.umich.edu/NACDA/publications/nacda02.pdf>). We build on the report of the 2005 NIA-NICHD sponsored workshop, "Intergenerational Family Resource Allocation," Thornton's (2001) *The Well-being of Children and Families: Research and Data Needs*, the PAA Ad Hoc Committee report by Hayward et al. (2006) on data collection at NIA, and the compendium of data sources on population and health in developing countries prepared by Duncan Thomas ([http://chd.ucla.edu/dev\\_data/index.html](http://chd.ucla.edu/dev_data/index.html)).

**TABLE 1: DATA COLLECTION STUDIES EXAMINED**

<b>Study</b>	<b>Provided Responses to Questions?</b>
Early Childhood Longitudinal Study (ECLS)	Yes
English Longitudinal Survey of Ageing (ELSA)	Yes
Fragile Families and Child Well Being Study (Fragile Families)	Yes
Health and Retirement Study (HRS)	Yes
Indonesian Family Life Survey (IFLS)	Yes
Intergenerational Panel Study of Parents and Children (Intergen. Panel)	Yes
Longitudinal Study of Generations (LSOG)	Yes
Luxembourg Income Study (LIS)	Yes
Mexican American Study Project (MASP)	No
Mexican Family Life Survey (MxFLS)	Yes
Mexican Health and Aging Survey (MHAS)	No <sup>a</sup>
National Child Development Study (NCDS)	No
National Longitudinal Study of Adolescent Health (Add Health)	Yes
National Longitudinal Survey of Youth 1979 (NLSY79)	Yes
National Longitudinal Survey of Youth 1997 (NLSY97)	No
National Survey of Black Americans (NSBA) <sup>b</sup>	Yes
National Survey of Families and Households (NSFH)	Yes
National Survey of Midlife Development in the US (MIDUS)	Yes
New Immigrant Survey (NIS)	Yes
Panel Study of Income Dynamics (PSID)	Yes
Survey of Health, Ageing and Retirement in Europe (SHARE)	Yes
Wisconsin Longitudinal Study (WLS)	Yes

<sup>a</sup>Professor Rebecca Wong, a former co-PI of this study, reviewed the spreadsheet for this study and provided us with corrections, but we did not receive responses from the PIs to the questions about the strengths and weaknesses of the design.

<sup>b</sup>This study has developed into a component of the Family Connections Within and Across Generations study.

**We organize our summary of each data set around the following categories:**

- Design features, including the sampling strategy; characteristics of targeted respondents; modes of data collection; the “generational structure” of individuals represented in the data (e.g., parents, children, and/or siblings); the marital or union (partnership) status of individuals; whether or not individuals in specific roles (parent, child, sibling, spouse) are represented by their own reports or proxy reports provided by someone else in the family or household; whether or not family members were restricted to those in the same household as the primary respondent; and whether family members studied consisted of only blood relatives or also included “step” relatives and in-laws.
- General Content of Surveys and/or Data Collected, including the types of demographic, economic, social, psychological and biomarker data gathered on respondents and, as relevant, family members represented by proxy reports; whether or not cognitive, achievement, and personality assessments were conducted; unusual features of the study, such as matching to administrative records.
- Inter- and Intra-Generational Information Gathered, including information on financial transfers among family members, the incidence and nature of time transfers, caregiving

and social ties, the proximity of family members and assessments of the quality of ties among family members.

- Transfers to/from Non-Relatives and/or Organization.
- Measures of General Attitudes on Families, including attitudes about parenting, division of labor within the family, family-related norms and/or culture, etc.

Where possible, we asked the data collection organizations or Principal Investigators to verify the accuracy of the information we entered for these various dimensions of their data sets and to identify other features of their data sets that were relevant for the study of generational relationships among family members.

The summaries of information we compiled on these studies are contained in Appendix 5.G.1, with comparable information provided for each of the 22 data sets listed in Table 1. We shall not try to summarize the structure and content of these studies here, other than several features that are particularly relevant for the study of inter- and intra-generational relationships with surveys.

### ***Generational Coverage***

The studies listed in Table 1 differ with respect to which generations of a family are considered and whether individuals from the various generations are respondents to the survey. Almost all of the studies, as well as many others that we did not examine in as much detail, ask respondents questions about their parents, their children and, in the case of older respondents, about their grandchildren. Thus, much of the information about various family members is typically provided “by proxy” and is not verified by the family members themselves. We therefore highlight those surveys with multigenerational interview designs.

Half of the studies listed in Table 1, however, involved direct data collection from more than one family member, other than the primary respondent’s spouse. For example, there are a number of 2-generation, Parent(s)-Child studies (ECLS, Fragile Families, Intergen. Panel, NCDS, Add Health, NLSY79, PSID) that collect information on the behavior, health status, etc. of children, who are interviewed or given cognitive assessments. This information is combined with data from interviews with parents to learn about the home and childrearing environments of children and/or to obtain information about the child that the child may not be able to provide either because the child is too young<sup>5</sup> or because the child him/herself is not a respondent in the survey. All of these studies involve longitudinal designs that follow the children (and sometimes the parents as well) to gather information on the child’s development. Several of the surveys (Intergen. Panel, NLSY79, PSID, WLS) follow the children into adulthood to support analysis of the links between early childhood experiences, the transition to adulthood, and well-being in mid-life.

Finally, for several of the studies in Table 1, three or more generations in the same family are interviewed, observed by proxy reports, or are represented by combining the survey data with data from other sources (e.g., administrative records). These include the IFLS, Intergen. Panel, LSOG, MxFLS, NLSY79, NSFH, PSID, and WLS. With the exception of the LSOG, which recruited three generations of family members (parents, their adult children and their grandchildren) at the outset, most of the other studies observed a second and third generation through a combination of proxy reports about a second generation (parent reports about children; child reports about parents) and interviews with all children or a randomly selected child or parent. For example, the sampled adult in the NSFH reports information about his or her own

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<sup>5</sup> For example, parents in the ECLS serve as a proxy for their infant children, providing basic information that the child is not yet able to provide, e.g., the child’s birth date, weight, height, etc.

parents and children at the baseline, but at the first follow-up, a parent and a randomly selected child were also interviewed. Similarly, early waves of the NLSY79 have reports from the sampled youth about the characteristics of their parents. As these youths age, reach adulthood, and have children of their own, the mothers began to report information about their children. The study was then extended to include direct assessments of children's cognitive skills. Studies with three or more generations differ in whether self-reports from a second or third family member are predicated upon co-residence with the original sample person or alternatively require that the family members live in different households. The NLSY79, for example, obtains child assessments and interviews only for children who live with their mother, the original NLSY79 youth respondent. These children are now followed into adulthood whether or not they live with their mother as part of the Young Adults supplement (NLSY79-YA), which interviews the adult (15 years or older) children of the female respondents to the NLSY79. The PSID, on the other hand, has proxy information for children living in the household, but does not treat children as respondents until the child has established an independent household.<sup>6</sup>

The most "extended" 3+ Generation study is the PSID, which has continued to follow the generations of PSID respondents since 1968. This strategy has the potential to produce an extremely rich set of data on multiple generations of families, with, in principle, comparable data on various phenomena on the same stage of the life cycle for family members from different generations. Data such as these can play a crucial role in the study of, and testing of models of, intergenerational mobility, the transmission of values, and intergenerational exchange. Note that several variants of these 3+ Generation studies also produce information on multiple members of a single generation within a family, i.e., of siblings, data that we later note are often not obtained. The WLS includes interviews with a randomly selected sibling of the original respondent. Both siblings then report on their parents and each sibling reports on all of their own children with detailed reports about one of their children chosen at random. As noted above, such within-generation data allows one to assess various behaviors and phenomena based on a within-family, cross-sibling, cross-cousin design. Finally, some studies have "following rules" for subsequent generations that are not necessarily restricted to biological offspring. For example, the IFLS, MxFLS, NSFH, and WLS have followed, or will follow, step as well as biological children, thus providing data on a broader and increasingly relevant generational form of families in which individuals are linked through divorce/widowhood and remarriage, cohabitation, and out-of-wedlock childbearing.

Aspects of intergenerational and intragenerational relationships vary across cohorts. For example, the ages at which individuals become parents and grandparents have changed substantially over the course of the twentieth century in the United States as have the likelihoods that a mother of young children worked outside the home or that parents divorced. Similarly, the number of siblings and their age distributions reflect cohort differences in fertility. We purposely reviewed studies that varied in their coverage of multiple cohorts and single birth cohorts. Multi-cohort designs allow researchers to take account of variation in the economic, social, and policy environments that affect individual and family decisions about the timing of marriage, childbearing, employment, and other dimensions of life that are important for individual health and well-being. Examples of multi-cohort designs include several of the studies focused on midlife and aging (ELSA, HRS, MHAS, SHARE) as well as those that were targeted toward young as well as older adults (e.g., IFLS, MIDUS, MxFLS, NIS, NSBA, NSFH, PSID). The single cohort studies, on the other hand, have more detailed information about all stages of individuals' lives because they typically began observing individuals earlier in life than the multi-

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<sup>6</sup> The Child Development Supplement (CDS) to the PSID is an exception. The PSID conducted child assessments with co-resident children under age 13 in 1997, with a follow-up in 2002 and, for a subset of children who had reached young adulthood, another follow-up in 2005. For most of the PSID's history, however, children did not become respondents until they were living independently in "split off" households.

cohort studies. About half of our selected cohort studies began observing the sample at birth (ECLS, Fragile Families, Intergen. Parents, NCDS), and the remainder began during the cohort's teenage years (AddHealth, NLSY79, NLSY97, WLS). Thus, there is a trade-off in practice, if not in principle, between covering multiple cohorts and observing more years of an individual's life. A single cohort study can obviously be combined with other single cohort studies to investigate the causes of cohort variation in generational aspects of family life, but this requires comparable measurement across the single cohort studies. The NLS studies and the British birth cohort studies, which include the NCDS, have been used for such comparisons.

### ***Content Relevant for Inter- and Intra-Generational Analysis***

In addition to the structure of data collection studies listed in Table 1, we also assessed the portion of each survey's content that is most relevant to understanding the interactions and relationships between family members. In particular, we examined whether the survey included questions concerning the following phenomena: (i) financial transfers, exchanges and/or bequests from one family member to another; (ii) the incidence and nature of time spent and/or caregiving among family members; (iii) the incidence and nature of social contact among family members; (iv) assessments and indicators of the quality of ties among family members; (v) whether family members co-reside and the proximity of non-co-resident family members; and (vi) information about the sense of obligations family members have for their kin and what expectations family members have with respect to providing or receiving care from their offspring in old age and providing or receiving bequests, inheritances, and other material or financial transfers from family members. Summaries of what information is gathered with respect to these interactions and relationships between family members are provided for each of the studies presented in Appendix 5.G.1.

We offer several observations about the information gathered in the existing surveys concerning inter- and intra-generational relationships and interactions. First, in many of the studies, the questions asked of respondents about the types of interactions and/or relationships among family members do not have a specific family member as the referent. That is, many studies ask general questions about transfers given or received from individuals outside the household. Even those surveys that ask about transfers to or from specific types of relatives, such as questions asked of older parents about whether they gave or received transfers from their children, do not include follow-up questions to determine which child gave or received the transfer. Similarly, adult children may be asked if they gave or received a transfer from their parents, but there is typically no distinction made between transfers to/from the mother and father. These distinctions are becoming increasingly important as divorce and nonmarital childbearing become more common. Exceptions to this practice include the MHAS, HRS, and NSFH, which ask respondents to specify which child provided and/or received a transfer.

Despite the lack of a specific referent in questions about interactions and relationships, the responses to these questions do provide insight into an individual's overall welfare by summarizing the individual's net receipts. These more general questions may also be easier to administer and less burdensome to respondents than a series of questions about transfers to and from specific children (or parents). Conversely, questions referring to specific individuals may facilitate recall. Data about transfers to and from specific children (or parents) are necessary to explore hypotheses about the motivations for transfers because the existing models of behavior predict variation in transfers with variation in the characteristics of the donors and recipients. Very few surveys obtain information about transfers to/from all of the children in a family,<sup>7</sup> but instead contain information for a single randomly selected child. Although incomplete from a

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<sup>7</sup> The NSFH attempted this in the second wave by asking about transfers from any child and then including a follow-up asking which children provided or received the transfer.

family point of view, these data for a randomly selected child do enable researchers to investigate differences in interactions by gender, birth order, and other characteristics of a respondent's family members.

A second observation on the breadth of family data collection efforts concerns the sources of information about familial ties. As noted above, approximately one-half of the studies we analyzed interviewed only one family member (the respondent) and asked this person to report on the incidence and nature of their interactions with other family members. In essence, researchers obtain information from only one member of a dyad. In the other half of studies, researchers obtain information about relationships from both members of a particular dyad although the reference period about which each individual reports typically differs due to the timing of interviews. Obtaining information from both sides of a dyad is more costly than relying on a single respondent but there have been few efforts to measure its worth. Even for reasonably objective aspects of interactions, such as whether or not a transfer occurred and the amount of the transfer, the studies we reviewed had not attempted to assess whether parents or children (or donors or recipients) provide more accurate reports. Methodological studies do, however, generally find that donors are more likely to report transfers than are recipients.

Finally, very few of the studies we reviewed gave "equal treatment" to couple and generational relationships in the designation of respondents and in the coverage of questions about relationships. Most of the studies emphasized either couple relationships (division of labor, conflict and emotional quality of the bond, union stability) or parent-child relationships (quality of the relationship, transfers of time and money). Exceptions are surveys that focus on younger children and the transition to adulthood because of the potential impact on children's well-being of instability in the parent couple's relationship (e.g., Fragile Families, NCDS, NLSY79, NLSY97, NSFH, and PSID Child Development Supplement). The NSFH is the only one of these studies that obtains moderately parallel information about the spouse/partner and adult child-parent relationships. It does so both in the designation of respondents (spouse/partner, parent, child) and in the content of the survey questions about the nature and quality of the different relationships. The wording of many of the questions and responses, however, differ by type of relationship. These differences are due, in part, to the conceptual and practical problems of asking about relationships between co-resident family members using the same response categories as for relationships between non-co-resident family members (Bianchi et al., forthcoming). Another small subset of surveys provides comparable coverage of parent-child and sibling relationships: IFLS, LSOG, MxFLS, NSFH, and WLS. The NLSY79, AddHealth, and MIDUS include siblings in their samples, but they have very limited coverage on relationships between siblings. The limited information available on different types of family relationships from a single data set constrains researchers' ability to investigate which relationships are more beneficial or salient to individuals and why. The incomplete coverage of relationships also limits efforts to learn more about how the family as a whole operates and how the nature of conjugal and generational bonds interacts.<sup>8</sup>

### ***Findings from Data-Collector Assessments of Strengths, Weaknesses and Possible Future Directions of Data Sets for Studying Generational Relationships of Families***

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<sup>8</sup> Two recent studies attempt to provide more complete coverage of generational and couple relationships: The Netherlands Kinship Panel Study (NKPS <http://www.nkps.nl/NKPSEN/nkps.htm>) and the German PAIRFAM (<http://www.pairfam.uni-bremen.de/index.php?id=8&L=1>). The NKPS tried to interview the spouse/partner, parent, sibling and up to two children of the primary respondent (ego) – whether or not these others (alters) lived with the primary respondent. The PAIRFAM pilot panel study tried to interview partners and children (or parents, depending on the respondent's age). The design of these projects is consistent with the Generations and Gender Programme (GGP) effort, of which NKPS is part, to provide more complete coverage of the types of relationships within families. The standardized GGP design, in contrast to the NKPS study, includes only a single respondent per family.



We asked a series of questions of the directors or principal investigators of the 22 studies listed in Table 1 to obtain their own assessments of the strengths and weaknesses of their data sets. We asked them to evaluate the strengths and weaknesses in the context of studying inter- and intra-generational family structure and relationships and to identify future needs and potential innovations in data collection that could enhance such research. The set of questions that we posed to the directors or data collectors is reported in Appendix 5.G.2. We sent the questions to the investigators (along with the spreadsheets containing the information on the structure and content of their data discussed in the previous section) in the middle of December 2006 and we requested responses by the end of January 2007. Despite the tightness of the deadline, as of March 25, 2007, we received responses to these questions from the 18 data collection studies noted in Table 1. The discussion that follows is based on these responses. We organize our findings under three headings: Sampling and Coverage Issues; Content Issues; and Potential Innovations and Challenges in Future Data Collection Efforts.

### *Sampling and Coverage Issues*

Principal Investigators and data providers identified a range of issues related to sampling frame and coverage for studies of intragenerational and intergenerational relationships.

- A common theme in the comments we received was the importance of sampling families, not households to improve our understanding of changes in what families do and why families and their interactions differ by race, ethnicity, economic and social class, and other statuses.
  - “Population aging, caused by declining fertility and mortality, is in the present or future of the vast majority of the world’s societies. This changing age structure has crucial implications for the intergenerational allocation of resources via both public and family mechanisms for the well-being of children, adults and the elderly. ... We need data capable of following different cohorts over their life cycles, using designs such as the HRS steady state design or the PSID genealogical design in order to deal with changes in marriage and divorce and their implications for investments in children, the care of disabled elderly and many other key demographic, social and economic problems.” HRS
  - [It would be desirable to] “... reach beyond traditional household-based samples and explore alternatives for developing fuller understanding of the interplay between individual, household, family and broader networks.” IFLS
- There are alternative strategies for obtaining a sample of families, especially those containing multiple generations that are not co-resident. One strategy is to recruit a sample of family members when at least two of the generations have reached adulthood regardless of whether they co-reside. This was the strategy followed in the LSOG, and, to some extent, the NSFH. As the researchers heading the LSOG study noted, gaining the cooperation and participation of family members who are adult and not-coresident “is a difficult undertaking.”
- A second strategy is to “accumulate” a sample of families by interviewing an initial sample of individuals in households and then following the offspring of the original family household as they form their own households and families. This strategy has been followed by the PSID, NLSY79, IFLS, MxFLS, Intergen. Panel, Add Health, and the NSFH.

- “The PSID genealogical sampling frame remains the most beautiful and powerful frame for studying intergenerational relations ... it is a sampling frame that will support additional data collection into the indefinite future. Supplementing the PSID questionnaire, [and] adding sub-studies to enrich the content relevant to intra- and inter-generational study would capitalize on this investment. [T]here are similar studies in other countries (e.g. Britain, Germany, Australia, Korea) which employ the same approach and thus can support comparative research.” HRS
- “Moving away from a household-based sample but using the baseline respondents to develop a sample of families by following-up and interviewing non co-resident family members would yield a dataset that is very well-suited for testing some of the models of inter- and intra-generational relationships. This would quickly become expensive; however, sampling from the baseline respondents using well-chosen sampling weights can achieve high levels of sample efficiency at arguably reasonable cost.” MxFLS
- Unfortunately, building multi-generational family data by this second strategy takes time. More important, this approach must confront the problem that the sample becomes less “representative” of the population over time due to sample attrition and underlying changes in population demographics through processes such as immigration (or emigration).
- Several data providers noted the importance of not limiting sampling of families to members who are biologically-linked, but should also include individuals who are (or have been) members of blended families as a result of divorce and cohabitation.
  - The PSID noted that their “sample design does not follow contemporary family-types, including: step-relatives; some biological parents of sample children may be non-sample and not followed if non-custodial.” PSID
  - “The embedded genetic design of Add Health (which oversampled twins, half sibs, and non-biologically related adolescents who live in the same household, with full sibs occurring in the sample in large numbers) makes it possible to examine both within- and between-family variation in both intra- and inter-generational processes.” Add Health
- There is a related and challenging issue for designing new studies of inter- and intra-generational relationships and that is: Who is a member of the family? Forty years ago cohabiting partners were not an important relationship to include in a family survey. Today, cohabiting partners rear biological and step children, for at least part of childhood. Older adults will increasingly have cohabiting or Living-Apart-Together relationships as a result of cohort replacement and high period rates of cohabitation. Researchers will need to think creatively about how to obtain high quality information about relationships that some respondents think of as family relationships and others do not, without burdening respondents. This information is essential for studying change over individuals’ lives as some people become incorporated into the family as well as change over historical time as cultural notions of family are modified. Time series analyses always face the difficulty of finding a common definition of family for each time period, but broad coverage of quasi-kin relationships provides more opportunity for studying historical change.
- It is important not only to interview and follow family members from different generations but also to follow family members within the same generation.

- “Relationships among siblings are likely a very important part of the dynamic process of decision-making and providing care. The relevant matrix of relationships includes the emotional tone and ability to cooperate among siblings and of each with the parents in question. It is important to note here that our usual measures of frequency of contact may be useful, but that they may not provide the most essential information. Siblings who have rather little contact on a regular basis may, or may not, be able to cooperate in decisions about, for example, when a parent can no longer live alone and what to do about it. Further, relationships among siblings are a potentially important component of intra-generational emotional and/or instrumental support.” NSFH
- To fully appreciate the role of sibling relationships with each other and their parents over the life course requires the collection of parallel information about siblings in a longitudinal design. This point was brought home to us in a conversation with members of the Generations Group had with researchers involved in the WLS. The WLS provides this for a specific cohort and allows researchers to investigate how sibling and parent-child relationships unfold from late adolescence through old age. The WLS is more useful for studying the relationships between biological siblings than it would be for studying how step and half siblings relate to each other, because the WLS cohort experienced lower rates of divorce, remarriage and post-marital cohabitation than those experienced by more recent cohorts.
- “There are few studies that contain data on siblings and their relationships over the life course. Siblings are certainly important during childhood and adolescence, and there is anecdotal information that they are important among the elderly. But, what happens in between, and how do siblings reconnect in old age, if indeed it is a reconnection? Siblings are an interesting frame within which to study intragenerational relations because with such designs it is possible to separate out (or just control for) genetic from environmental influence. The various roles of genetic and environmental influence also should change over the life course. Theory suggests that as we age and experience fewer different environments, genetic influence play a larger role in behavioral choices and outcomes.”
- Interviewing family members from multiple, as well as the same, generations eliminates “proxy” reporting which can be inaccurate and misleading for a range of phenomena.
  - “There are many important dimensions that cannot be reported by proxy, such as how parents and children view their relationships with each other, and the more general psychological wellbeing and family-related attitudes that they bring to these relationships. Further, dyadic data from married/cohabiting (or divorced/separated) partners provided a much richer representation of the family context in which inter-generational relationships occur. An important feature of this has been the attempt to ask parallel questions from both sides of a dyad.” NSFH
  - An extreme version of this is failure to get information about and, more important from, absent parents and/or estranged family members. Efforts by Fragile Families to include fathers of children born in nonmarital relationships illustrate the importance and difficulty of learning about “absent” fathers’ involvement and interactions with their biological children, what resources, if any, they provide and with what frequency they provide these resources. Even

with a sample of children whose fathers were contacted at the time of the child's birth, it has been difficult to keep disengaged fathers in the study. More work and thought needs to be devoted to how to include estranged family members in studies. This involves confronting both methodological and ethical challenges.

- The MxFLS individually assesses every household member with each adult completing a face-to-face interview. This provides a substantially richer picture of household and family dynamics than would be the case if one person reported for all household members. It also achieves higher quality data. MxFLS
- But having the family as the sampling frame, rather than households, and focusing on the behavior and interactions of family members, especially noncoresident ones, poses some important challenges.
  - “The advantage of having multiple respondents for studying intergenerational relationships is hampered by the implications of this approach for joint response rates. At its most complex, this is illustrated by our samples of main respondents, time 1 spouse/partners, and focal children. We [NSFH] have many more respondents of each type than we have cases with responses from all three respondent types. The problem is even more problematic when cases with all desired respondents are sought across all three waves: any member of the set may be absent from one or more waves. These problems are inherent in multiple-respondent and longitudinal designs, and are compounded when these are combined.

NSFH response rates are generally not out of line with what would be expected in annual surveys with high inter-annual response rates for comparisons between waves separated by NSFH intervals. Nonetheless, the long duration between waves clearly exacerbated problems of sample attrition. While education differences in response rates are routine in sample surveys, representation of high-school dropouts was particularly problematic in the third wave of NSFH.

We had particular problems in following focal children when we were unable to interview the main respondent at the third wave. Others may already have good solutions to this, but with no parent to tell us that Susie Smith is now Susie Jones we were up a stump about how to find her. This wasn't much easier for male focal children. We did very well in cases in which the main R was interviewed at wave 3.

The length of time between interviews ... is also a serious limitation for many substantive analyses. For example, the relationship between changes in family contexts and changes in intergenerational relationships between waves are conditional on a great deal else that may have changed over this period. At the same time, with resources for only a limited number of waves, the longer intervals provided a better window for observing life-course transitions as, for example, focal children had more time to cohabit, marry, and have children.”  
NSFH

- The most serious problem of joint response rates is nonparticipation bias. Families represented by multiple reports have higher quality relationships than those represented by a single respondent. In the first wave of the NKPS, for example, there is a high correlation between the primary respondent's evaluation of the quality of a dyadic relationship and the participation of the other member of the dyad in the survey (Dykstra et al., 2004). Nonparticipation bias of this

type highlights the difficulty of studying how families operate and the effects on individual well-being when some family members do not get along or are estranged.

- Data on families and family members would be significantly enhanced by combining them with data on the contexts in which families reside, work, go to school, and seek health care. Recent efforts to gather data of this type, such as Add Health and the LA FANS indicate the importance of gathering data on families' contexts and the effort that this requires.
  - “To understand the role of social context on intra- and inter-generational relationships, a sampling frame that samples the contexts in which families are embedded would be needed. This could include institutional settings, like schools or religious institutions, neighborhoods (which is more common), or political organizations. To study change over time, families within such settings would need to be followed, as would data on how contexts change, both the origin context and any new context to which an original family moves. This design is fairly high cost and maintenance.” Add Health
- Some general design issues.
  - “Broad inclusive surveys such as NSFH need to be repeated as fresh cross-sections at regular intervals. Researchers will not be able to resist the temptation and opportunity to improve at successive surveys, but they must also be able to track changes in the nature of family relationships over time. When there are no interactions with time, surveys can be pooled for larger samples as has been done for some work with NSFG.”<sup>9</sup> NSFH
  - There also is the inevitable problem of the tradeoff between breadth and depth of coverage on any given survey.
  - “At the same time, the limitations of ‘depth’ in many areas in NSFH only point to the obvious need for surveys that are more limited in scope but more intensive in coverage. The power of such studies will be greatly increased to the extent that they can be coordinated.” NSFH

### ***Content Issues***

In this section we summarize the assessments provided by PIs and data directors on issues related to the content of their studies, that is, the types of information that have been gathered about inter- and intra-generational relationships and behavior and what types of information should be gathered in the future to sustain research on the structure and content of generational relationships. As noted in Section 2, a number of these studies have already developed questions about the nature of relationships between family members in the area of transfers, social contact, and the quality of ties. Some, either by virtue of their designs or through survey questions, gain

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<sup>9</sup> Pooling surveys that are repeated cross-sections requires that at each time the survey define the population at risk in the same way. The National Surveys of Family Growth (NSFG) and their earlier incarnations, the National Fertility Surveys (1965, 1970) and the Growth of American Families Studies (GAF 1955, 1960) illustrate the importance of balancing forward-looking data collection with designs that are sensitive to what potential respondents think are appropriate questions. Earlier versions of the NSFG did not include never-married women unless they had already had a child. Only since 1982 has the NSFG target population included all women, regardless of marital status, prior fertility, and race-ethnicity. Change in the target population to include never-married women regardless of whether they had a child reflects change in the acceptability and incidence of nonmarital fertility.

information on the geographical proximity of non-co-resident family members. Here, we focus on what data gatherers told us about what additional information should be gathered about these relationships, what phenomena and constructs we should try to measure in these studies, and how we might gather such information to support research on families.

- As noted above, an important benefit of surveying multiple members of a family is the ability to ascertain differences in perspectives about interactions and exchanges between these family members.
  - “From a modeling perspective we need to better link inter- and intra-generational processes, for instance how marital conflict and instability affects parent-child relationships, how grandparents intervene after divorce, how transitions among older parents (health crisis, widowhood) affect sibling relations.” LSOG
  - “The PSID sample includes many family members from both sides of relationship dyads – e.g., parent and adult child, brother and sister, etc. We have considered asking questions of both sides of the dyad about transfers and relationships between the two. The PSID is uniquely designed to allow this to occur. Some background analysis on the representativeness of the sample should be conducted prior to fielding these questions.” PSID
- It is important to ask more about the motivations or reasons why transfers/exchanges were made (or not made) as well as to measure the incidence and types of financial and time transfers.
  - “[The PSID] Intergenerational transfer module in 2007 asks respondents to rate: importance of leaving estate to children, religious institutions, charities; importance of paying for children’s education; expectation of children’s future earnings; whether provided support for elderly parents: financial support and co-residence of one year +.” PSID
- More attention also needs to be placed on interactions that do not occur between some family members and why they don’t. For example:
  - “One issue that just never made it to the drawing table [of the NSFH] concerns the penumbra of concern over parents that is not captured in measures of actual interaction or provision of care. This is particularly relevant to the period during which elder parents approach not being able to live alone. Uncertainty about these issues can be an important factor affecting adult children’s well-being, and decision making about their own life plans and resources.” NSFH
- While a number of surveys ask about financial and time transfers across generations, fewer ask questions about such transfers and exchanges within generations.
  - “The [NLSY79 survey] instruments currently have no questions that deal with exchanges or transfers within the same generation between and among siblings. Given the investment already made in data for siblings, this addition would be fairly easy to make. ... The potential here is substantial given the extensive data in place. Because we know a lot about siblings in the NLSY79 (demographics, location, economic position), we are in an excellent position to put transfers between that generation and their parents into context. For women in the NLSY79 and their children the situation is even better with a full roster of her children and extensive detail on the situations of her children. Modules on exchanges and transfers of time, goods and money could be added to the surveys.” NLSY79

- Siblings might have a division of labor to provide for older parents when they have acute or chronic health problems. Or there might be a designated caregiver. In either case, a sibling who provides less care to parents may compensate another sibling who provides more by helping the caregiving sibling directly or helping that sibling's child, perhaps by contributing to that child's schooling or daycare expenses. Studies like the WLS and NSFH include information on whether a parent lives with any of the children in the family and some information on help siblings provide each other. Similarly, MIDUS asks parallel questions about family relationships of respondents and a sub-sample of respondents' siblings. The survey questions posed, however, are typically too general to investigate these kinds of cooperative caregiving arrangements (e.g., transfers to/from specific siblings are uncommon).<sup>10</sup> Most studies, including those like MIDUS, that include a sibling sample, lack information on the characteristics of all siblings, let alone relationships among siblings or between all siblings and their parents.
- A difficulty in designing survey questions to obtain information about parent-child and sibling relationships in the same study is making sure that the parents and set of siblings to whom respondents refer are the same parents and siblings about whom designated "sibling respondents" are reporting. We learned from the WLS researchers that this problem comes up even in the WLS cohort for whom divorce and remarriage in the parents' generation were relatively uncommon. It is important to design questions that make clear whether the referent is biological parents or biological and stepparents, and similarly biological, half, and stepsiblings. Because members of the same family may define "their family" differently, studies of more recent cohorts and even the children of the WLS respondents would benefit from closer attention to this issue.
- There also is an important set of issues concerning improving the measurement of the timing of transfers and exchanges between family members.
  - "More attention needs to be given to the timeframe of questions regarding some types of transfers. Many needs may be episodic but extremely important, and a substantial proportion of related transfers are missed when questions focus on a recent period. Our [NSFH] questions about whether a parent has ever lived with the respondent, or about whether a parent or family member helped them with their first home purchase are good examples. In each case, if I remember correctly, about a quarter answered "yes" Few of these would have been seen if the question were about "the last year" or even "last 5 years." NSFH
- A related point concerns gathering information about family responses surrounding specific life course events, such as the death of a family member.
  - Researchers directing the WLS note that the death of a spouse is a time when the surviving parent is most likely to need help from children. Timing data collection to interview surviving spouses and children at this critical transition will provide much needed insight into families' responses to crises and how they reach a new equilibrium after their loss. Crisis-timed interviewing cannot take the place of routine data collection in panel surveys, but neither can we expect routinely timed interviews to capture the process of responding to crises.

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<sup>10</sup> See our discussion above about targeting questions about transfers.

- Several data collectors noted that surveys that contain multiple generations and/or multiple members of the same generation in their designs need to gather bio-marker data and more direct measures of health status:
  - “We [NLSY79] feel the large kinship networks in the data would be a real advantage for any effort to collect genetic data. This reduces the genetic variation and allows one to focus on those factors that vary within the kinship network. This raises difficult confidentiality issues. ... [The] administrative obstacles at the Bureau of Labor Statistics are great.” NLSY79
  - “Collection of biological data is new and innovative, with payoffs unknown at this point (but potentially very high in terms of scientific discovery), and should be relatively less expensive in the future. For example, collection of saliva DNA (and saliva for other tests) is easy via mail, and blood spots can also be self-collected by the respondent and mailed to a lab. The technology in this area is developing rapidly and should revolutionize the bridge between social and biological sciences. Such data would provide new insights into intra- and inter-generational studies of health and behavior (i.e., genetic analyses, consequences of risky behavior).” Add Health
  - “IFLS collects detailed health data, both biomarkers and self-reported data on all household members. This can be very useful to understand inter-generational household transfers.” IFLS.
  - The MxFLS “explored collecting a broader array of indicators of health status including markers for inflammation, diabetes risk, risk of heart disease but did not have resources to implement these plans. Have collected dry blood spots to enable measurement of some of these markers as we raise additional resources.” MxFLS
- Several data collectors mentioned that they are gathering or would find it useful to obtain measures of such preferences as aversion to risk, altruism, time preferences, etc. and to get more information about family member’s perceptions of obligations or norms with respect to what is expected in terms of relationships between family members at different stages of their inter- and intra-generational relationships.
  - The MxFLX is “exploring the possibility of including measures of preferences in the next wave of MxFLS. Work on a separate project is attempting to develop and validate methods for eliciting attitudes towards risk, time preferences and pro-social attitudes in a population-based survey. A broader array of indicators of preferences including pro-social preferences such as reciprocity, trust and trustworthiness would significantly enhance the potential contributions of these data.” MxFLS
  - “For questions on attitudes, values and preferences.... In terms of content, a coordinated effort to study intergenerational transfers using the NLSY79 and Young Adult surveys offers the ability to look at transfers from the point of view of both giver and recipient, and to account for the detailed circumstances of all siblings – contextual information that is most frequently missing.” NLSY79
  - “Family members’ perceptions of their obligations to each other can change over time as they grow older, acquire new responsibilities, or experience losses. Longitudinal data are essential for studying this process. Individuals may also experience cognitive or personality changes as they age because of illness or the effects of medication. This implies the need for repeated cognitive assessments



and survey reports about obligations.” Conversation between WLS Researchers and Generations Group

- “[The vignette approach] has been used [in a study in] China, where obtaining variation in the expression of filial norms remains problematic. A fictional situation is presented in which an individual faces a family dilemma that requires a forced choice. The ideal solution chosen by the respondent gives insight into their underlying values. Vignettes hold much promise in the measurement of preferences and I hope to expand their use in our study. LSOG
- An important issue in “collective” models of the family developed in economics concerns the extent to which resources are in the control of individuals. While many surveys ask individuals about their own labor market earnings, most surveys do not ask about a person’s own assets versus assets that are held jointly by spouses in a marriage. The IFLS and MxFLS have attempted to overcome this problem in their respective studies.
  - “For intrahousehold family issues, a major strength of IFLS is that information is collected on income of all household members, plus assets, not just owned at the household level, but assets owned by individuals within households. Further, we get information on assets brought to marriage by each spouse. All of these data can be very useful in modeling intrahousehold allocations. ... IFLS has modules that quantify shocks of various types that have occurred both at the household and individual levels. This, too, is essential in helping us understand intergenerational transfers.” IFLS
  - “Information [in the MxFLS] is obtained from each adult respondent about control over resources, decision-making about family affairs and economic choices and attitudes towards risk and inter-temporal preferences. With these data it is possible to test a series of hypotheses about the role that resources and preferences play in family dynamics.” MxFLS
- Use diary methods to collect detailed information on time allocation and resource allocation. Collect data on a broad array of expectations, attitudes and values. These might include expectations about self, household members, parents, siblings and children as well as relationship-specific attitudes and preferences. MxFLS
  - Other investigators also identified diary methods as a way to learn more about deference and closeness in family relationships as well as linguistic skills.
  - “Tu-vous patterns would be extremely useful to address systematically. These are rich with implications for future attachment to democracy and, of course, for the extent of English acquisition. ... The NIS staff continues to think hard about many possible measures, including a time diary of tu-vous patterns....” NIS
- We note that certain resources available in the community may eliminate the need for families to provide inter-generational or intra-generational transfers. These include information about the receipt of transfers from outside of the family, such as government programs, charities, and/or church. Many of the surveys we analyzed gather information from respondents about their receipt of such forms of support/transfers. Some surveys, such as the IFLS and MXFLS, address this by collecting information, with supplemental community surveys, on the availability of support services available in communities or regions in which households reside.

### ***Potential Innovations and Challenges in Future Data Collection Efforts***

Data directors and PIs offered a number of suggestions on possible innovations in their own and other surveys to help foster research on family generational structure and relationships. We summarize their suggestions and identify some of the challenges (not already discussed) that must be addressed to implement the innovations they propose and for data gathering on generational relationships. The following represent examples of such innovations, some of which have been tried and others which are being contemplated by some of the data directors and PIs from whom we solicited advice.

- The Internet, for example, might be an inexpensive way to establish contact with relatives of a sample person who could provide contact information (i.e., address, email address, etc.). HRS
- Creating networks of respondents via the Internet is another potentially promising approach. HRS
- A number of surveys supplement telephone and face-to-face interviews with self-administered questionnaires, for instance the HRS uses a “Psycho-social leave behind” questionnaire, the NSFH, and the WLS also combine survey modes to increase respondent’s comfort in addressing sensitive questions and reduce social desirability bias. The internet or web-based methods are an alternative to mail back surveys. Audio CASI methods also provide more privacy than more conventional modes for administering confidential questions.
- Administrative data requires the respondent’s informed consent (usually written), as well as the cooperation of the administrative unit providing the data. “The HRS has obtained these consents from Social Security and Medicare for husbands and wives. Extending such consents to non-coresidential relatives and obtaining cooperation from SSA or CMS strikes me as highly problematic. Linkage of state-level administrative data is still more problematic in the context of a national survey. In a few countries – mainly Scandinavian – administrative data holds considerable potential for intra- and intergenerational studies, but I know little in detail about the potential designs or obstacles in these countries.” HRS
- Combining qualitative interviewing with traditional survey methods offers considerable promise as is evident from the Fragile Families study. The Welfare, Children and Families: A Three-City Study project has also made valuable use of this combination of methods to learn more about the meanings and motivations of lower income parents. “This approach could be used to supplement the PSID and Child Supplement data” (HRS) or other standardized surveys.
- Embedded experiments are another valuable innovation. “For example, Ernst Fehr has run the ‘trust game’ on respondents to the German Socioeconomic Panel and several investigators (Duncan Thomas, Orazio Attanasio, Rebecca Thornton and others) have embedded experiments in surveys in developing countries. These can be (and in the case of Thomas, have been) used to investigate intergenerational issues.... We have considered briefly using embedded experiments (i.e., the trust game) in the HRS but have not done so, in part, because of fear that participation in the game might alienate respondents and, in part, because the co-PI group was not convinced of the value of experimental data for the purposes of the HRS. My own guess is that the HRS will do experiments in the future, but that development of appropriate experiments with goals relevant to the HRS will be done in smaller supplementary projects using other sample before being fielded on the HRS.” HRS

## Conclusions

This investigation into a number of data sets has left us impressed about the magnitude of information available on generational ties as well as the diversity of formats and designs used to collect these data. We have, however, also come upon several areas in which improvements can be made both in the quantity and quality of data. Our own analyses and the input of the survey directors and principal investigators lead to specific conclusions as to how best to construct future data collection efforts and how existing surveys might be modified to create even richer analytic files. Fortunately, in those cases where improvements can be made, many of the ideas offered are easily implemented.

Specifically, we recommend:

1. That existing panel surveys that include incomparable longitudinal data be continued, as it is impossible to replicate the decades' worth of information anytime in the near future. Data sources, such as the PSID, which has nearly 40 years of data on many respondents, the NLS79, nearing 30 years, the HRS with 14 years, and the WLS with 50 years, among others, afford researchers the opportunity to observe family relationships evolve over time as well as to observe individuals at different points in their lives and in different familial roles.
2. That where possible, these existing data sources be augmented to include additional information on family relationships that was not considered at the time of the initial survey development. For example, stepfamilies have grown more common and yet stepchildren and parents are not followed in the PSID.
3. The most suitable means of augmenting existing surveys will depend on the content and structure of the existing survey. Some broad themes that have emerged however, include a recognized need for
  - a. Information on step families and cohabitation
  - b. Greater effort to contact and interview hard-to-find and potentially estranged family members, such as non-custodial parents
  - c. More information on the relationships between adult siblings
  - d. Effort to interview both parties in a particular dyadic relationship, a mother and children for example.

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### *Appendix 5.G.1*

#### **Structure and Content of Existing Data Collection Studies for Research on Generational Family Structure and Relationships**

The initial information in the tables below was compiled using information obtained from data user guides and codebooks for the study. The project relied on these sources and other information posted on the Web (when available), with occasional supplementation by material in published books or articles.<sup>1</sup> We provided the information for a particular study to its principal investigator(s) and/or director(s), requesting that they or their staff examine the information for its accuracy. In cases where we had made factual errors in the entries below, we corrected them, based on the information provided to us by the study's personnel. In some cases, the personnel provided us with additional information about the content/structure of their study, which we have included at the end of each table, under the heading "Additional Information Provided by the Principal Investigators."

The data sets described in this appendix are listed in Table 1 of the text for the report *An Assessment of Available Data and Data Needs for Studying Intra- and Intergenerational Family Relationships and Behavior*. That table is reproduced here for convenience.

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<sup>1</sup> Kate Choi ably compiled this information with the collaboration of Kristen Hunt and Vanessa Wight.

**TABLE 1: DATA COLLECTION STUDIES EXAMINED**

<b>Study</b>	<b>Provided Responses to Questions?</b>
Early Childhood Longitudinal Study (ECLS)	Yes
English Longitudinal Survey of Ageing (ELSA)	Yes
Fragile Families and Child Well Being Study (Fragile Families)	Yes
Health and Retirement Study (HRS)	Yes
Indonesian Family Life Survey (IFLS)	Yes
Intergenerational Panel Study of Parents and Children (Intergen. Panel)	Yes
Longitudinal Study of Generations (LSOG)	Yes
Luxembourg Income Study (LIS)	Yes
Mexican American Study Project (MASP)	No
Mexican Family Life Survey (MxFLS)	Yes
Mexican Health and Aging Survey (MHAS)	No <sup>a</sup>
National Child Development Study (NCDS)	No
National Longitudinal Study of Adolescent Health (Add Health)	Yes
National Longitudinal Survey of Youth 1979 (NLSY79)	Yes
National Longitudinal Survey of Youth 1997 (NLSY97)	No
National Survey of Black Americans (NSBA) <sup>b</sup>	Yes
National Survey of Families and Households (NSFH)	Yes
National Survey of Midlife Development in the US (MIDUS)	Yes
New Immigrant Survey (NIS)	Yes
Panel Study of Income Dynamics (PSID)	Yes
Survey of Health, Ageing and Retirement in Europe (SHARE)	Yes
Wisconsin Longitudinal Study (WLS)	Yes

<sup>a</sup> Professor Rebecca Wong, a former co-PI of this study, reviewed the spreadsheet for this study and provided us with corrections, but we did not receive responses from the PIs to the questions about the strengths and weaknesses of the design.

<sup>b</sup>This study has developed into a component of the Family Connections Within and Across Generations study.

## EARLY CHILDHOOD LONGITUDINAL STUDY (ECLS)

- WEBSITE** : <http://nces.ed.gov/ecls/>
- I. DESIGN**
- Data type : Longitudinal Survey on U.S. Populations
  - Dates collected : Birth cohort: 9 months (2001), 2 years (2003), pre-school (2005), and kindergarten (2006 and 2007)  
Kindergarten cohort: kindergarten (1998-1999), 1st grade (1999-2000), 3rd grade (2002), 5th grade (2004), 8th grade (2007)
  - # of waves : 3 waves completed, 4th wave in progress, and 5th wave scheduled
- A Sample**
- Target population : Birth : A nationally representative sample of children born in 2001  
Kindergarten: A nationally representative sample of children who were enrolled in kindergarten programs in 1998-1999
  - Sample design : Multi-stage stratified probability design collected from U.S. birth certificates
  - Primary sampling unit : Counties or groups of contiguous counties
  - Achieved N : Birth: 10,688 children  
Kindergarten: 21,260 children
  - Respondents : Children, parents, childcare providers, teachers, school administrators
  - Geographic scope : Contiguous states in the U.S.
  - Mode of data collection : In-home child assessments, parent interviews, father interviews, early-care and education providers questionnaire, teacher interviews, etc. and face-to-face interviews for parents, interviews for school administrators
  - Over-sampled populations : Asian and Pacific Islander children, American Indian and Alaska Native children, Chinese children, twins, and low birth-weight children
  - Retrospective histories : Retrospective histories on parent's marriage, child's living arrangements
  - Response rates : Response rates are calculated as the weighted number of children with completed parent interviews divided by the weighted number of children eligible to participate in the 9-month interview  
Baseline: 74% of the 1,277 sampled schools that agreed to participate, 76% for resident fathers and 50% for non-resident fathers in the 9 month interview. Cumulative response rates are 69% until the 2nd year surveys
  - Source : [http://nces.ed.gov/ecls/pdf/9mo\\_samplesize.pdf](http://nces.ed.gov/ecls/pdf/9mo_samplesize.pdf)  
[http://nces.ed.gov/ecls/pdf/2yr\\_Sample\\_Sizes.pdf](http://nces.ed.gov/ecls/pdf/2yr_Sample_Sizes.pdf)
- B Type of information gathered for inter/intragenerational relationships**
- Multi-generational : Proxy reports on grandparents and reports on quality of child's relationship as reported by the sampled child
  - Co-residential & biological orientation : Sample based on co-residential relationships, but also includes information on biological relationships such as information about non-resident parents
- II. CONTENT**
- A Main focus** : Child in kindergarten or birth cohort
- Mode of reporting : Child in-school assessments, proxy reports from parents, caregivers and teachers
  - Socio-demographic data : Race/ethnicity, sex, age, date of birth
  - Education : Child's grade of enrollment
  - Cognitive ability : Direct child cognitive tests, physical and socio-emotional assessments over time
  - Family structure : Household roster information on family structure, partial history on child's living arrangement and parent's marital, cohabitation, and relationship histories

- Health : Birth weight, prematurity, activity level after birth, diagnosis of illness/disabilities, parent rated child's health
- B Secondary focus** : Parent - usually the mother of the child, but it could also be the child's father
- Mode of reporting : Self reports
- Socio-demographic data : Race/ethnicity, sex, age
- Education : Educational attainment and current enrollment in school
- Marital history : Current marital status, marital histories
- Fertility history : Maternal age at birth, number of births
- Labor force participation/ employment/occupation : Current employment status, characteristics of current job, current occupation
- Assets/earnings : Household income over the past year
- Health : Self-rated health, mother's prenatal behaviors, weight prior to pregnancy, smoking, alcohol use, emotional well-being, disability status
- C Other focus** : Spouse of child's parent
- Participant in survey : Proxy reports by child's parent
- Race : Race/ethnicity
- Gender : Gender
- Age : Age
- Education : Highest level of education completed
- Marital history : Marital status, union formation/dissolution information is available if the spouse of the child's parent is also the child's biological father
- Labor force participation/ employment/occupation : Labor market activities, type of job, hours worked
- Assets/earnings : Earnings information
- D Other focus** : (1) Includes grandparents' socio-demographic information, such as educational attainment  
: (2) Includes information on teachers' assessment of child's academic proficiency, their description of the classroom environment, socio-demographic information specific to teacher such as their race/ethnicity and highest level of education completed by the teacher

### III. INFORMATION ON INTER/INTRA-GENERATIONAL RELATIONSHIPS

#### A Intergenerational transfers

- Financial transfers :
- Time/caregiving : Whether grandparent provided childcare
- Frequency of social contact : Frequency of child's social contact with non-resident biological parents
- Quality of ties : Closeness between child and any grandparent

#### B General questions on transfers

- Financial transfers : Financial transfers from relatives
- Time/caregiving : Extensive information on childcare from relatives and non-relatives, head start
- Co-residence : Living arrangement of mother with other relatives
- Social contact : Type of activities performed with family member, such as doing homework together, eating breakfast, after-school care and asks parents to identify the family members with whom the child performs each activity
- Quality of ties : Closeness with some relatives

#### C Transfers with other individuals/organizations

##### Government support

- Financial transfers : Asks whether parent or child are recipients of welfare and other types of public transfers, financial assistance from government agencies to pay for childcare

### IV. GENERAL ATTITUDES ABOUT FAMILY

- Division of labor within family :
- Parenting : Parents' attitude on childrearing



- Family function :
- Norms/culture :

**V. SPECIAL SUPPLEMENTAL INFORMATION**

List of supplemental files :

**VI. FUNDING AGENCIES** : National Center of Educational Statistics, Department of Education

**VII. ADDITIONAL INFORMATION PROVIDED BY THE PRINCIPAL INVESTIGATORS**

- Response rates : 90% anticipated for kindergarten cohort of 2006
  - Mode of data collection : Videotape data of children and mothers were also collected
  - Prospective histories : Collected prospective histories on child's living arrangements
  - Cognitive ability of the child : Direct child cognitive, physical and socio-emotional assessments over time beginning at 9-months. Revised Bayleys used at 9-month and 2-year waves. At preschool and kindergarten assessments were guided by established measures and those used in the ECLS-K (to facilitate comparison across cohort studies). These include proficiencies in language, literacy, mathematics, and color knowledge, and fine and gross motor skills.
  - Time/caregiving : Parents were asked about the quality and nature of the care provided by grandparents
  - Parenting : Beliefs and practices on childrearing were measured specifically by KIDI
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## ENGLISH LONGITUDINAL STUDY OF AGEING (ELSA)\*

- WEBSITE** : <http://www.ifs.org.uk/elsa/>
- I. DESIGN**
- Data type : Longitudinal Survey on Foreign Elderly Populations
  - Dates collected : Wave 1: 2002  
Wave 2: 2004  
Wave 3: 2006 (in progress since May)  
Wave 4: planned for 2008
  - # of waves : 2 waves and 2 in progress
- A SAMPLE**
- Target population : For wave 1, individuals ages 50 years and older and their younger spouse/partner living in non-institutionalized households if the sampled individual had a spouse/partner who was younger than 50
  - Sample design : Respondents in the 1998, 1999, 2001 Health Survey of England (HSE)
  - Achieved N : Wave 1: 11,392 individuals 50 and over and their 708 younger or new spouses/cohabiting partners in 7,935 households  
Wave 2: 8,680 core members (of the 11,392 in wave 1) and their 652 partners who were not core members
  - Respondents : Core sample: individuals born before Feb. 29, 1952 who had taken part in HSE  
Young partner sample: cohabiting spouses or wives who were born after Feb. 29, 1952  
New partner sample: cohabiting spouses or wives who joined the sampled households between the HSE sample collection and ELSA interviews
  - Geographic scope : England
  - Mode of data collection : Wave 1: Face-to-face interviews, self-administered questionnaires  
Wave 2: Face-to-face interviews, self-administered questionnaire, nurse's visit
  - Over-sampled populations :
  - Retrospective histories : Partial retrospective history on employment and complete retrospective history on marriage
  - Response rates : Wave 1: 94% HSE households were contacted. 70% of these contacted households had at least one member who responded to the survey. The cumulative response rate was 66%.
  - Source : [http://www.ifs.org.uk/elsa/docs\\_w1/user\\_guide\\_6.pdf](http://www.ifs.org.uk/elsa/docs_w1/user_guide_6.pdf)
- B Type of information gathered for inter/intragenerational relationships**
- Multi-generational : Collects information on the respondent and their children. Very little information is available on their parents
  - Co-residential & biological orientation : ELSA was sampled at the household level, however, it also collects information on biological relationships
- II. CONTENT**
- A Main focus** : Individuals in core, young partner, and new partner samples
- Mode of reporting : Self reports, collection of biological specimens, proxy reports by household members
  - Socio-demographic data : Race/Ethnicity (White, Mixed, Black, Black British, Asian, Asian British), cultural background (Scottish, English, Irish), age, date of birth, sex, year of migration to England
  - Education : Enrollment in educational programs in the last 12 months, highest degree obtained, age when respondent completed his/her schooling
  - Family background : Whether respondent lived with biological or other types of parents for most of his/her

- Marital history : childhood, whether respondent lived with biological parents at the age of 16
- Fertility history : Current marital status, complete marital histories
- Labor force participation/employment/occupation : Number of biological, adopted, step children, age and sex of each child, complete fertility histories for men and women
- Assets/earnings : Current labor force and employment status, number of weeks employed in the past 12 months, partial employment history including start and end date of last job
- Health : Homeownership, savings, total family earnings in the past 12 months, income, pension plans, lump sum payment after retirement
- Health : Self-rated health, illness, disability, activity test (quarter mile walking test), emotional well-being, health behaviors, health insurance coverage, saliva tests, nurse assessments of respondent's health
- B Secondary focus** : Parent of main respondent
- Mode of reporting : Proxy report by main respondent
- Socio-demographic data : Whether biological mother/father is still alive, age, date when biological mother died, date when biological father died
- Labor force participation/employment/occupation : Parent's occupation when respondent was 14
- Health : Cause of parent's death if deceased
- C Other focus** : Collects information on respondent's children including information on each child's sex and age and whether co-resident. Also number of grandchildren and great grandchildren

### III. INFORMATION ON INTER/INTRA-GENERATIONAL RELATIONSHIPS

#### A Intergenerational transfers

- Co-residence between adult children and parent : Whether respondent lives with their parent, biological children, step children, or adopted children, and grandchildren
- Social contact : Number of times per month respondent contacts children in person, by phone, or e-mail
- Quality of ties : Whether respondent is close with his/her children (very close, quite close, not close), whether respondent feels understood by his/her children
- Expectations/obligations : Respondent rates the likelihood of receiving inheritances of 10,000 pounds or more in the next 10 years, respondent rates the likelihood that he/she or his/her spouse will leave an inheritance of 50,000 pounds or more

#### B General questions on transfers

- Financial transfers : Whether respondent currently owes money to friends, relatives, or other parties; amount of money owed to friends, relatives, or other parties
- Time/caregiving : Whether respondent took care of his/her spouse/partner, child, friend in the previous week
- Social contact : Frequency of social contact via phone, meeting, etc.
- Quality of ties : Respondent rates closeness to partner (very close, quite close, not close), whether respondent feels understood by his/her partner

#### C Transfers with other individuals/organizations

##### Friends

- Social contact : Number of times respondent contacts friends in person, by phone, or by e-mail
- Quality of ties : Number of friends who are close to respondent

##### Government

- Financial transfer : State pension received by respondent/spouse, amount received for state pension, state pensions

##### Charity

- Time/caregiving : Whether respondent's daily routine includes spending time volunteering, being part of

### IV. SPECIAL SUPPLEMENTAL FILES

- List of supplemental files :

### V. FUNDING AGENCIES

- : UK government departments:

Department of Health  
 Department for Work and Pensions  
 Office for National Statistics  
 Department for Transport  
 Department for the Environment, Food, and Rural Affairs  
 Department for Communities and Local Government  
 HM Revenue and Customs  
 National Institute of Aging

**VI. ADDITIONAL INFORMATION PROVIDED BY THE PRINCIPAL INVESTIGATORS**

- Respondents : Wave 3 includes a supplementary sample of people born between March 1, 1952 and February 29, 1956 who had taken part in HSE 2001-4, partners of these people who were outside this birth date range but were included as part of the HSE sample, new partners
- Mode of data collection : Wave 2 also collected physical measurements obtained by a nurse's visit
- Retrospective histories : Future waves will collect life histories starting in 2007
- Response rates : Wave 1: When allowing for estimated number of eligible people in households with no contact, the cumulative response rate was 61%  
Wave 2: 82% of core members who took part in Wave 1
- Socio-demographic characteristics : Race/ethnicity and cultural background may not be appropriate for group level analyses since the N's are extremely small  
Also includes information on number of books in the household when respondent was 10
- Fertility history : Histories include information on adoption
- Health or main focus : Anthropometry, blood pressures, various blood analyses, balance tests, grip strength
- Quality of ties : Whether respondent feels that partner, children, and friends understands him/her
- Transfers to charity : Whether volunteered last week, number of hours respondent volunteered

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\*The information in this summary was compiled using the Wave 1 questionnaires, Wave 1 User's Guide, Wave 2 questionnaires, and a list of biomarker data collected in Wave 2.

## FRAGILE FAMILIES AND CHILD WELL-BEING STUDY (FF)

**WEBSITE** : [www.fragilefamilies.princeton.edu](http://www.fragilefamilies.princeton.edu)

### I. DESIGN

- Data type : Longitudinal Survey on U.S. Populations
  - Dates collected : Baseline: February 1998-September 2000  
One year: June 1999- March 2002  
Three year: April 2001 to Dec. 2003  
Five year: July 2003-January 2006
  - # of waves : 4 waves completed, 5th wave (9 year) into the field in May 2007
- A Sample**
- Target population : A cohort of children born between 1998 and 2000 living in cities with more than 200,000 people and the children's parents
  - Sample design : Multi-stage stratified probability design
  - Primary sampling unit : U.S. cities with 200,000 or more people
  - Achieved N : 4,898 children (1,186 marital and 3,712 non-marital births) in 75 hospitals in 20 cities across the U.S.
  - Respondents : Parents of children born between 1998 and 2000
  - Geographic scope : U.S. cities with 200,000 or more
  - Mode of data collection : Telephone interviews, face-to-face interviews, and child assessments
  - Over-sampled populations : Non-marital births
  - Retrospective histories : Partial histories on fertility, marriage, cohabitation, and romantic relationships, maternal employment histories, childcare histories
  - Response rates : Wave 1: 82% married mothers, 87% unmarried mothers, 89% married fathers, 75% unmarried fathers  
Wave 2: 91% married mothers, 90% unmarried mothers, 82% married fathers, 70% unmarried fathers  
Wave 3: 89% married mothers, 88% unmarried mothers, 82% married fathers, 68% unmarried fathers

**B Type of information gathered for inter/intragegenerational relationships**

- Multi-generational : Parents report on transfers from child's grandparents that indirectly benefit the child
- Co-residential and biological orientation : Biological relationships are sampled including non-resident biological fathers, but survey includes questions on co-residential relationships

### II. CONTENT

- A Main focus** : Child born between 1998 and 2000
- Mode of reporting : Proxy reports from biological mother and biological father
  - Socio-demographic data : Race/ethnicity, nationality, sex, date of birth, age
  - Cognitive skills : Series of tests of child development outcomes, such as Woodcock-Johnson Letter Word Identification, Peabody Picture Vocabulary Tests- Revised
  - Family background : Biological parent reports whether they reside with the child's other biological parent; they also report whether they expect to marry the child's other biological parent; amount of time child spends living with each parent, number of times child was separated from mother, and reasons for separation
  - Health : Parent-rated child health, physical disabilities, number of doctor's visits since birth due to illness or injury
- B Secondary focus** : Biological mother and biological father of child born between 1998 and 2000

- Mode of reporting : Self reports and proxy reports from the other parent
- Socio-demographic data : Race/ethnicity, nationality, sex
- Education : Educational attainment
- Family background : Family background at age 15
- Marital history : Current marital status, detailed marital, cohabitation, and relationship history with child's biological father
- Fertility history : Number of biological children, partial fertility histories
- Labor force participation/employment/occupation : Last employment place, employment status since birth of the child, current occupation, maternal employment histories
- Assets/earnings : Earnings, income
- Health : Self-rated health, health limitations, health behaviors, injuries caused by domestic violence, medical and dental checkup histories, alcohol and drug use
- C Other focus** : Grandparents of child born between 1998 and 2000
- Mode of reporting : Proxy report on maternal grandparents provided by biological mother and paternal grandparents provided by biological father
- Socio-demographic data : Nationality, sex
- Education : Highest level of schooling completed by paternal and maternal grandfather
- Health : Parent reports whether grandparents have a history of mental health problems
- D Other focus** : Parents' current spouse/partner
- Mode of reporting : Proxy reports by biological mother/father if their current spouse is not child's biological father/mother
- Socio-demographic data : Race/ethnicity, nationality, sex
- Education : Educational attainment
- Family background : Family background at age 15
- Marital history : Current marital and cohabitation status, date of marriage with child's biological parent, start date of current relationship, duration of current relationship
- Fertility history : Number of biological children
- Labor force participation/employment/occupation : Work-related activities performed during previous week, such as attending school, working at a regular job, looking for work, date current partner worked at a full-time job for more than 2 consecutive weeks
- Assets/earnings : Earnings, income
- Health : Self-rated health, health limitations, health behaviors, injuries caused by domestic violence
- E Other focus** : Includes information on the age and sex of child's siblings

### III. INFORMATION ON INTER/INTRA-GENERATIONAL RELATIONSHIPS

#### A Intergenerational transfers

- Financial transfers : Reports whether biological parent makes/receives child support payments to/from other biological parent
- Time/caregiving : Amount of time spent with child
- Co-residence between adult children and parents : Household roster information available to determine whether biological parent resides with adult child, biological mother reports whether they lived with their parents/in-laws during pregnancy
- Social contact : Type and frequency of activities that biological parent and their partners perform with the child, frequency of visits with child's grandparents
- Quality of ties : Biological parent reports on current partner's suitability to be child's parent figure, parent's ties to child's grandparents, quality of relationship with father while growing up
- Expectations/obligations : Biological mother reports whether they expect to live with parents/in-laws after the birth of the child

#### B General questions on transfers

- Financial transfers : Financial support during pregnancy from family members or friends
- Time/caregiving : Childcare history lists whether care was provided by mother, father, other relatives, baby's father's relatives, government, friends
- Co-residence : Biological parents report with whom biological mother lived during pregnancy,
- Quality of ties : Quality of parent's relationship with his/her current partner
- Expectations/obligations : Expectations of financial assistance from family, relatives, friends, and others

**C Transfers with other individuals/organizations**

**Government**

- Financial transfers : Biological parent reports whether parents or child are recipients of vouchers for government sponsored childcare and/or Head Start for childcare, parents report whether they receive TANF, welfare, SSI, food stamps, and the monetary value of each assistance, Medicare coverage

**Charities**

- Financial transfers : Biological parent reports whether child received scholarship money from childcare independent of government assistance

**IV. GENERAL ATTITUDES ON FAMILY**

- Division of labor within family :
- Parenting : Attitudes about fatherhood
- Family function : Attitudes about marriage
- Norms/culture :

**V. SPECIAL SUPPLEMENTAL FILES**

- List of supplemental files : Biological specimens, geocode data, medical records

**VI. FUNDING AGENCIES**

- : NICHD, NSF, U.S. Department of Health and Human Services (ASPE and ACF), California Healthcare Foundation, The Center for Research on Religion and Urban Civil Society at the University of Pennsylvania, Commonwealth Fund, Ford Foundation, Foundation for Child Development, Fund for New Jersey, William T. Grant Foundation, Healthcare Foundation of New Jersey, William and Flora Hewlett Foundation, Hogg Foundation, Christina A. Johnson Endeavor Foundation, Kronkosal Charitable Foundation, Leon Lowenstein Foundation, John D. and Catherine T. MacArthur Foundation, A.L. Mailman Family Foundation, Charles Stewart Mott Foundation, David and Lucile Packard Foundation, Public Policy Institute of California, Robert Wood Johnson Foundation, St. David's Hospital Foundation, St. Vincent Hospital and Health Services

**VII. ADDITIONAL INFORMATION PROVIDED BY THE PRINCIPAL INVESTIGATORS**

- Education of main focus : Collects monthly retrospective histories on school attendance for children
- Health of main focus : In the 9-year-old data, respondents also collect information on the mental health of the child. The survey also collects saliva samples from mothers and children.
- Intergenerational financial transfers : Information on transfers from grandparents list whether the intention of the transfer was to benefit the child

## HEALTH AND RETIREMENT STUDY (HRS)

**WEBSITE** : <http://hrsonline.isr.umich.edu/intro/index.html>

### I. DESIGN

- Data type : Longitudinal Survey on Elderly Populations in the U.S.
- Background : HRS is currently comprised of 5 subsamples: the Health and Retirement Study (HRS), the Asset and Health Dynamics Among the Oldest Old (AHEAD), War Baby (WB), Children of Depression Era (CODA), and Early Baby Boomer (EBB)
- Dates collected : **HRS:** 1992, 1994, 1996, merged with AHEAD in 1998, 2000, 2002, 2004, 2006 in progress, 2008 and 2010 planned  
**AHEAD:** 1993, 1995, merged with HRS in 1998  
**WB:** 1998, 2000, 2002, 2004, 2006 in progress, 2008 and 2010 planned  
**CODA:** 1998, 2000, 2002, 2004, 2006 in progress, 2008 and 2010 planned  
**EBB:** 2004, 2006 in progress, 2008 and 2010 planned
- # of waves : 7 waves, Wave 8 in progress, Waves 9 and 10 are being planned

#### A Sample

- Target population : **HRS:** All individuals who were born between 1931 and 1941, who were household residents in the coterminous U.S. in the spring of 1992, and their current/former spouse or partner were first interviewed in 1992 and every two years thereafter  
**AHEAD:** All individuals who were born in 1923 or earlier, who were household residents of the coterminous U.S. in the spring of 1992, and were still residents at the time of their first interview in 1993 or 1994, and their current/former spouse or partner were interviewed in 1993-1994, 1995-1996, 1998, and every two years thereafter  
**WB:** All individuals born between 1942 and 1947, who were household residents in the coterminous U.S. in the spring of 1992 and did not have a current spouse/partner born before 1942 or between 1931 and 1941, and were still household residents in the coterminous U.S. when they were first interviewed in 1998 and their current/former spouse or partner were first interviewed in 1998 and every two years thereafter  
**CODA:** All individuals born between 1924 and 1930, who were household residents in the coterminous U.S. when they were first interviewed in 1998, and their current/former spouse or partner were first interviewed in 1998 and every two years thereafter  
**EBB:** All individuals born between 1948 and 1953, who were household residents in the coterminous U.S. in 2004 and did not have a current spouse or partner born before 1948, and their current/former spouse or partner were interviewed in 2004 and every two years thereafter  
(Servais, 2004: p. 22)  
In the beginning, all HRS, AHEAD, CODA, EBB, and WB samples are non-institutionalized individuals, but these individuals are followed into institutions
- Sample design : Multistage area probability sample
- Primary sampling unit : U.S. metropolitan statistical areas (MSAs) and non-MSAs counties
- Achieved N : Although HRS and AHEAD were merged in 1998, documentation collects information on number of interviews, attrition with follow-up separately. This summary document follows the format of the documentation



- Respondents : Individuals over 50 who met the eligibility for the 5 subsamples and their spouse or partner regardless of their relationship status
- Geographic scope : Representative of the coterminous U.S.
- Mode of data collection :
  - HRS:** Face-to-face interview at Wave 1 and telephone interviews at Wave 2
  - AHEAD:** Telephone interviews for respondents younger than 80 and face-to-face interviews for respondents 80 years and older for every wave
  - CODA:** Face-to-face interviews at Wave 1 and telephone interviews at Wave 2
  - WB:** Face-to-face interviews at Wave 1 and telephone interviews at Wave 2
  - EBB:** Telephone interview

Telephone interviews will be used in the collection of biomarker data
- Special modules : Several experimental modules were collected on a wide range of topics including modules on risk aversion, asset ownership, and transfers
- Over-sampled populations : Individuals living in areas with high representations of blacks and Hispanics and the state of Florida
- Retrospective histories : Retrospective histories available on employment, marriage, and fertility
- Response rates : Response rate for Wave 1 is defined as the number of interviews completed over the number of sampled members identified as eligible in the household screener or sampling frame. Response rate for follow-up surveys is defined as the number of interviews completed over the number of individuals who completed a survey in Wave 1 or had a spouse who completed a survey in Wave 1
  - HRS - Wave 1:** 12,654 individuals interviewed out of 15,497 eligible individuals
  - HRS - Wave 2:** 11,597 individuals interviewed out of 13,010 eligible individuals
  - HRS - Wave 3:** 11,199 individuals interviewed out of 12,974 eligible individuals
  - HRS - Wave 4:** 10,856 individuals interviewed out of 12,788 eligible individuals
  - HRS - Wave 5:** 10,377 individuals interviewed out of 12,351 eligible individuals
  - HRS - Wave 6:** 10,142 individuals interviewed out of 11,942 eligible individuals
  - HRS - Wave 7:** 9,759 individuals interviewed out of 11,315 eligible individuals
  - AHEAD - Wave 1:** 8,222 individuals interviewed out of 10,229 eligible individuals
  - AHEAD - Wave 2:** 7,802 individuals interviewed out of 8,405 eligible individuals
  - AHEAD - Wave 3:** 6,935 individuals interviewed out of 7,675 eligible individuals
  - AHEAD - Wave 4:** 5,909 individuals interviewed out of 6,681 eligible individuals
  - AHEAD - Wave 5:** 5,004 individuals interviewed out of 5,690 eligible individuals
  - AHEAD - Wave 6:** 4,438 individuals interviewed out of 4,912 eligible individuals
  - CODA - Wave 1:** 2,320 individuals interviewed out of 3,200 eligible individuals
  - CODA - Wave 2:** 2,214 individuals interviewed out of 2,404 eligible individuals
  - CODA - Wave 3:** 2,106 individuals interviewed out of 2,327 eligible individuals
  - CODA - Wave 4:** 1,970 individuals interviewed out of 2,176 eligible individuals
  - WB - Wave 1:** 2,529 individuals interviewed out of 3,619 eligible individuals
  - WB - Wave 2:** 2,432 individuals interviewed out of 2,680 eligible individuals
  - WB - Wave 3:** 2,419 individuals interviewed out of 2,690 eligible individuals
  - WB - Wave 4:** 2,324 individuals interviewed out of 2,654 eligible individuals
  - EBB - Wave 1:** 3,340 individuals interviewed out of 4,420 eligible individuals

**AHEAD - Wave 2:** 92.8%  
**AHEAD - Wave 3:** 90.4%  
**AHEAD - Wave 4:** 88.4%  
**AHEAD - Wave 5:** 87.9%  
**AHEAD - Wave 6:** 90.4%  
**CODA - Wave 1:** 72.5%  
**CODA - Wave 2:** 92.1%  
**CODA - Wave 3:** 90.5%  
**CODA - Wave 4:** 90.5%  
**WB - Wave 1:** 69.9%  
**WB - Wave 2:** 90.7%  
**WB - Wave 3:** 89.9%  
**WB - Wave 4:** 87.6%  
**EBB - Wave 1:** 75.6%

**B Type of information gathered for inter/intragenerational relationships**

- Multi-generational : Collects information on respondent, respondent's children, and respondent's grand-children
- Co-residential & biological orientation : Sampled at the household level with an orientation toward co-residential relationships, however, it also collects information on biological relationships including non-resident children

**II. CONTENT**

- A Main focus** : Individuals eligible in the HRS, AHEAD, WB, CODA, or EBB subsamples (respondent)
- Mode of reporting : Self report and proxy reports if deceased
  - Socio-demographic data : Race/ethnicity, age, date of birth, sex, sexual orientation (same sex couple flag), country of birth, religious preference
  - Education : Highest level of education completed, whether respondent received a high school diploma and/or college degree, on-the-job training
  - Family background : Whether respondent's parents have always lived together
  - Marital history : Marital status at each wave, marital history includes information on start and end date of current marriage, number of times married
  - Fertility history : Number of biological, step, and adopted children
  - Labor force participation/employment/occupation : Employment status at each wave, employment history includes information on start and end date of job, job characteristics such as industry and job title, retirement status, date of retirement
  - Assets/earnings : Self-rated financial situation, homeownership, value of home, value of other assets, amount of debt, individual retirement accounts, total family income in the past 12 months
  - Health : Self-rated health, health at each wave compared to health two years prior to the interview, self-rated emotional health, health problems such as hypertension, high blood sugar, diabetes, and cancer, hospitalization, smoking, alcohol use, vital capacity measured by health professional
- B Secondary focus** : Respondent's child
- Mode of reporting : Proxy reports by respondent
  - Socio-demographic data : Sex, age, year of death if deceased
  - Education : Enrollment in school at select waves, highest level of education completed
  - Marital history : Current marital status if the child is over 18
  - Fertility history : Whether respondent's child has any children, number of children who are under 18 living with respondent's child at each wave
  - Labor force participation/employment/occupation : Employment status at each wave, full-time or part-time status at each wave

- employment/occupation
- Assets/earnings : Homeownership, annual family income at each wave
- C Other focus** : Respondent's parent
- Mode of reporting : Proxy reports by respondent
- Socio-demographic data : Whether mother/father is still living, age, age at death if deceased, year of death if deceased
- Marital history : Marital status at each wave, whether parent is married to respondent's other parent at the time of the interview
- Assets/earnings : Respondent rates the financial health of his/her parents, homeownership
- Health : Whether parent was afflicted with illness for 3 months or more in the previous year or during the year prior to their death, whether parent is living in a nursing home, disability in performing daily activities, whether respondent's parent can be left alone for more than an hour
- D Other focus** : Respondent's sibling
- Participant in survey : Proxy reports by respondent
- Socio-demographic data : Sex
- Education : Highest level of education completed
- Marital history : Marital status at each wave
- Labor force participation/employment/occupation : Employment status at each wave, full-time or part-time status at each wave
- Assets/earnings : Homeownership, respondent rated financial situation

### III. INFORMATION ON INTER/INTRA-GENERATIONAL RELATIONSHIPS

#### A Intergenerational transfers

- Financial transfers : Whether respondent or respondent's sibling gave/received financial assistance to/from parents in the past 12 months, amount of financial assistance that respondent or sibling gave to/received from parent in the past 12 months, whether respondent gave/received financial assistance to/from child in the past 12 months, amount of financial assistance received/given
- Time/caregiving : Whether respondent spent a total of 50 hours or more in the past 12 months helping his/her parent with basic personal activities like dressing, eating, bathing, and chores, number of hours respondent spent giving assistance to their parents in the past 12 months, whether respondent spent a total of 100 hours or more in the past 12 months taking care of grandchildren, amount of time spent taking care of grandchildren in the past 12 months
- Co-residence between adult children and parent : Whether respondent or respondent's sibling is living with his/her parents at each wave, whether respondent is living with his/her child at each wave, year and month respondent's parent/child moved in with respondent
- Proximity : Whether respondent's parent/child lives within 10 miles of respondent at each wave, state where parent/child lives at each wave
- Social contact : Frequency of contact between respondent and his/her parent/child in the past 12 months either in person, via phone, or e-mail (more than once, once a week, once a month, almost never)

#### B General questions on transfers

- Financial transfers : Whether respondent or respondent gave/received financial assistance to/from friends or relatives other than parents or children in the past 12 months, amount of assistance given/received
- Proximity : Number of relatives that live in the same neighborhood as respondent at each wave
- Social contact : Frequency of contact between respondent and his/her family or friends in the past 12 months either in person, via phone, or e-mail (more than once, once a week, once a month, almost never)

- Quality of ties : Respondent rates the quality of their ties with their current spouse or partner, frequency of criticism from respondent's spouse or partner, number of close friends, number of close co-workers in the Social Support Experimental Module
- Expectations/obligations : Number of people respondent can count on for help or advice, identification of people respondent can resort to for help or advice in the Social Support Experimental Module

**C Transfers to/from organizations**

**Charitable organizations**

- Time/caregiving : Whether respondent volunteered in religious or charitable organizations in the past 12 months, amount of time spent volunteering in these charitable organizations

**IV. GENERAL ATTITUDES ON FAMILY**

- Parenting : Respondent rates the importance of providing financial support to their children when they start their own financial households, leave an estate for their children, make sure that their children have a good education
- Norms/culture :

**V. SPECIAL SUPPLEMENTAL FILES**

- List of supplemental files : Possible linkage with files from Social Security Administration  
Biomarker data will be collected in the future

**VI. FUNDING AGENCIES**

- : National Institute of Aging, with supplemental funding from the Social Security Administration, the Department of Labor's Pension and Welfare Benefits Administration, the Department of Health and Human Services Assistant Secretary for Planning and Evaluation, and the State of Florida
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## INDONESIAN FAMILY LIFE SURVEY (IFLS)

**WEBSITE** : <http://www.rand.org/labor/FLS/IFLS/>

### I. DESIGN

- Data type : Longitudinal Survey on Foreign Populations
- Dates collected : Wave 1: August -November 1993  
Wave 2: August 1997-January 1998  
Wave 2+: August - November 1998  
Wave 3: 2000  
Wave 4 planned for November 2007-May 2008
- # of waves : 4 waves, 5th wave planned for 2007

#### A Sample

- Target population : Randomly selected households in 321 enumeration areas in 13 Indonesian provinces at time of baseline in 1993. Representative of 83% of population.
- Sample design : Includes a household sample and a community/facility sample. The baseline household sample is a stratified random sample of 7,731 households in 13 Indonesian provinces. The community/facility sample is based on the availability of public and private health facilities and schools that respondents identify as being available to them.
- Primary sampling unit : Wave 1, 2, 3: 13 Indonesian provinces  
Wave 2+ : 25% of baseline enumeration areas selected from 7 Indonesian provinces
- Achieved N : Wave 1: 7,224 households and 22,000 individuals within these households; 6,385 schools and health facilities  
Wave 2: 7224 original households x 94% = 6,791 and 878 "split off" households in which an IFLS1 household member moved to a new location and approximately 33,000 individuals within these households  
Wave 2+: 2,068 households and 10,000 individuals within these households  
Wave 3: 10,400 households and 39,000 individuals within these households
- Source : <http://www.rand.org/labor/FLS/IFLS/ifls3.html>
- Special feature : Multiple respondents per household
- Respondents : Wave 1: Household head, household head's spouse, up to 2 children of household head, and a sample of other adult household members (15-49 year olds and individuals over 50)  
Wave 2: All members of all households interviewed. All IFLS1 respondents who split off from the IFLS1 household are tracked and, if found, interviewed along with their new household members. In addition, all members of IFLS1 households born before 1967 are tracked and interviewed. Respondents who leave Indonesia or reside outside the 13 IFLS provinces are not followed.  
Wave 2+: All members of all households who were interviewed at baseline in the 80 enumeration areas selected for the 25% subsample. All household members interviewed. All split-offs followed as long as remained in an IFLS province.  
Wave 3: All members of all households interviewed. Same tracking rules as IFLS2 except randomly selected sample of IFLS1 household members born after 1967 who were not individually interviewed in 1993 also tracked.  
"Split off" households are households formed by respondents who left the households in which they were living in 1993.  
Source: <http://www.rand.org/labor/FLS/IFLS/ifls3.html>

- Geographic scope : 13 Indonesian provinces
- Mode of data collection : Face-to-face interviews, physical assessments
- Over-sampled populations : Individuals between 15 and 49 and individuals over 50
- Retrospective histories : Retrospective histories on education, marriage, migration, employment, fertility and contraceptive use
- Response rates : Wave 1: 93% of those sampled  
Wave 2: 94% of Wave 1 respondents  
Wave 2+: 96% of all Wave 1 and Wave 2 households who were resident in selected enumeration areas at baseline  
Wave 3: 95% of households interviewed in Wave 1; 91% interviewed in all 3 waves

**B Type of information gathered for inter/intragenerational relationships**

- Multi-generational : Sample includes household head, spouse of head, head's children; and seniors are largely the parents of household head or their in-laws
- Co-residential & biological orientation : Original sample was at the household level; and therefore, focused on co-residential relationships; however, information was extensively gathered on non-resident parents and children. Also, follow-up surveys track individuals who have left the household of their family of origin and formed "split-off" families

**II. CONTENT**

**A Main focus**

- Mode of reporting : Self reports, proxy reports, and physical health assessments
- Socio-demographic data : Age, sex
- Education : Ever attended school, current enrollment in school, highest grade completed/attended, educational histories, standardized test scores
- Cognitive ability : Cognitive assessments
- Family background : Whether respondent lived with his biological mother/father prior to the age of 15
- Marital history : Current marital status, marital history includes information on the start and end date of each marriage up to the 7th marriage
- Fertility history : Pregnancy history includes information on number of biological children, sex of each child, number of miscarriages for women less than 50, date of birth, date of miscarriage, prenatal care, birthweight, size at birth for recent pregnancies
- Labor force participation/employment/occupation : Employment status in the last 12 months, description of last job, description of current job, partial employment history for the past 5 years, current occupation. (See below)
- Assets/earnings : List of assets, total value of assets, ownership of assets within households, earnings in the last 12 months
- Health : Lung capacity, blood pressure, height, weight, frequency of hospital visits, medical access, health insurance coverage, smoking. (See below.)

**B Secondary focus**

- Mode of reporting : Child 14 years and younger
- Socio-demographic data : Proxy reports from parent or caregiver and physical health assessments
- Education : Age, sex
- Labor force participation/employment/occupation : Current school enrollment, highest grade level completed, type of school (Public non-religious, Public religious, Private Islam, Private Catholic), number of grades repeated, age when child quit school, grades on standardized tests
- Family background : Whether child was employed
- Family background : Household roster available, fertility and marital history of heads and their spouses
- Health : General health status, height, weight, head circumference, illness in the past 4 weeks, use of outpatient and inpatient services, blood pressure, hemoglobin levels, nurse assessments

**C Other focus**

- Mode of reporting : Parents/parents-in-law of each adult respondent
- Mode of reporting : Self report by senior respondent or proxy reports by head or head's spouse

- Socio-demographic data : Whether they are still alive, age, month and year when father/mother died
- Education : Highest level of education completed by mother/father
- Marital history : Whether biological mother and biological father are still married to each other
- Labor force participation/employment/occupation : Current employment status, employment status prior to death if deceased, current occupation, occupation prior to death if deceased
- Assets/earnings : Homeownership, farm or business ownership
- Health : Whether parent had a chronic disease in general terms
- D Other focus** : Siblings of each adult respondent
- Mode of reporting : Proxy data by respondent if siblings are non-resident; self report if siblings are members of the interviewed household and older than 50 or between 15 and 49 in some households
  
- Socio-demographic data : Whether still alive, age, age at death if deceased, sex
- Education : Current school enrollment, enrollment in school prior to death, highest level of education completed
- Labor force participation/employment/occupation : Current employment status, employment status prior to death if deceased, current occupation, occupation prior to death if deceased
- Assets/earnings : Homeownership, farm or business ownership
- Health : Whether the sibling had a chronic disease in general terms
- E Other focus** : Non co-resident children of each adult respondent
- Mode of reporting : Proxy reports by respondent
- Socio-demographic data : Whether still alive, age, age at death if deceased, sex
- Education : Current school enrollment, enrollment in school prior to death, highest level of education completed
- Family background : Whether child is from respondent's current marriage, age when child left respondent's household
- Labor force participation/employment/occupation : Current employment status, employment status prior to death if deceased, current occupation, occupation prior to death if deceased
- Health : Whether the child had a chronic disease
- F Other focus** : Village leaders
- Mode of reporting : Self reports
- Socio-demographic data : Age, sex
- Education : Highest level of education completed
- Labor force participation/employment/occupation : Formal/informal position in the village

### III. INFORMATION ON INTER/INTRA-GENERATIONAL RELATIONSHIPS

#### A Intergenerational transfers

- Financial transfers : Type of financial assistance provided to/received from parents and children in the past 12 months, amount of financial assistance given to/ received from parents and children in the past 12 months, whether parent bequeathed inheritance to respondent, type of inheritance bequeathed, total value of inheritances bequeathed by parent
- Time/caregiving : Whether respondent helps parents/non-resident child with chores/childcare
- Co-residence between adult children and parent : Household roster available
- Social contact : Frequency of social contact with parents in the past year or year prior to their deaths

#### B Intragenerational transfers

- Financial transfers : Type of financial assistance provided to/received from siblings (money or loan, tuition, health care cost) in the past 12 months, amount of assistance provided to/received from siblings by type of assistance in the past 12 months
- Time/caregiving : Whether siblings provided assistance with childcare, physical care, household chores

- Co-residence between respondent and sibling : Household roster available
- Proximity : Distance between respondent's place of residence and respondent's siblings place of residence (same village, same province, same country)
- Social contact : Number of times respondent visited sibling in the previous year or the year prior to the sibling's death

**C General questions on transfers**

- Financial transfers : Financial assistance provided to family members, friends or neighbors, employers in the past 12 months, amount of financial assistance
- Time/caregiving :
- Co-residence : Household roster available

**IV. GENERAL ATTITUDES ON THE FAMILY**

- Division of labor within family :
- Parenting :
- Family function :
- Norms on fertility : Ideal number of children
- Norms/culture : Expert in tradition law (Adat) fills out extensive questionnaires about traditional laws on family norms

**V. SPECIAL SUPPLEMENTAL FILES**

- List of supplemental files : Physical health assessments collected by nurses to measure lung capacity, blood pressure, hemoglobin levels, mobility, and anthropomorphy, community survey includes information on community level characteristics and facilities in the communities such as schools or health facilities

**VI. FUNDING AGENCIES**

- : National Institute on Aging (NIA)
- : National Institute for Child Health and Human Development (NICHD)
- : United States Agency for International Development (USAID)
- : World Health Organization (WHO)
- : John Snow (OMNI project)
- : Hewlett Foundation
- : Futures Group (the POLICY project)
- : International Food Policy Research Institute
- : United Nations Population Fund
- : World Bank
- : Ford Foundation

**VII. ADDITIONAL INFORMATION PROVIDED BY THE PRINCIPAL INVESTIGATORS**

- Health of main focus : Morbidities suffered in the last month, price of services, types of services, activities of daily living, psycho-social health
- Labor force participation/employment/occupation : Retrospective history of occupations
- Assets/earnings : Earnings from each secondary job, benefits
- Economic shocks : Whether there were any economic/demographic "shocks" such as loss of crops, householder's death, unemployment, drop in prices, amount of money necessary to overcome the shock
- Dowry : Value of assets brought to marriage, dowry/bride price, relative social standing of husbands and wives at marriage
- Consumption : Consumption and expenditure on roughly 35 items
- Migration : Birthplace; complete migration history from age 12
- Time/caregiving : Advice on birth control from a family member or friend
- Decision making processes : Decision making process on things like parenting and household functions



## INTERGENERATIONAL PANEL STUDY OF PARENTS AND CHILDREN

- WEBSITE** : [http://nichd.nih.gov/cpr/dbs/res\\_intergen.htm#socio](http://nichd.nih.gov/cpr/dbs/res_intergen.htm#socio)
- I. DESIGN**
- Data type : Longitudinal Survey on US Populations
  - Dates collected : Mother only - Wave 1: Winter 1962, Wave 2: Fall 1962, Wave 3: 1963, Wave 4: 1966, Wave 5: 1977  
Mother and child - Wave 6: 1980, Wave 7: 1985, Wave 8: 1993
  - # of waves : 8 waves
- A Sample**
- Target population : Detroit-area Caucasian families who had given birth to their first, second, or fourth child in 1961
  - Sample design : Probability sample
  - Primary sampling unit : Detroit based area
  - Achieved N : Wave 1: 1,304 mothers  
Wave 6: 916 mother-child pairs
  - Respondents : Children born in 1961 and their mothers
  - Geographic scope : Detroit area
  - Mode of data collection : Wave 1: In-person interviews with mothers  
Wave 2 to Wave 8: Telephone interviews
  - Retrospective histories : Retrospective histories on marriage, cohabitation, separation, divorce, childbearing, living arrangements, paid employment, education, and military service
  - Response rates : Response rate is defined as the % of base-year mothers that remained eligible (i.e., mothers who did not die or become permanently ill)  
Response rate is 85.9%  
(Thornton & Freedman, 1998: Table A.1)
- B Type of information gathered for inter/intragenerational relationships**
- Multi-generational : Mother-child pairs
  - Co-residential & biological orientation : Sampled on biological relationship. It includes information on co-residential relationships such as adopted children, step children
- II. CONTENT**
- A Main focus** : Children born in 1961 (Target child)
- Mode of reporting : Proxy reports by mothers until 1980 and self reports starting in 1980
  - Socio-demographic data : Sex, age
  - Education : School enrollment at each wave, high school diploma, college diploma, educational attainment summaries, monthly retrospective school attendance histories from ages 15-31
  - Family background : Asks whether target child's mother and father are living together at the time of the survey, asks whether target child lived with both parents at 15, monthly retrospective living arrangement histories from ages 15-31
  - Marital history : Current marital status, current cohabitation status, monthly retrospective marital and cohabiting relationship histories from ages 15-31
  - Fertility history : Fertility histories including information on age at first intercourse, number of pregnancies, number of wanted pregnancies, number of unwanted pregnancies, fetal deaths; gender and dates of all births that occurred for all target children (regardless of their gender) between the ages of 15 and 31
  - Labor force participation/ : Employment and occupational status at each interview, job characteristics including

employment/occupation	information on whether target child performs supervisory duties, monthly retrospective work hour histories from ages 15-31, monthly retrospective military service histories from ages 15-31
- Assets/earnings	: Assets, income
- Health	: Self rated health, illness, health complication at birth as reported by mother, congenital diseases, mental illness, tests on emotional well being
<b>B Secondary focus</b>	: Mother of target child
- Mode of reporting	: Self reports by mothers and proxy reports by target child after 1980
- Socio-demographic data	: Age, date of birth, date of mother's death if mother is deceased
- Education	: Highest level of education completed
- Marital history	: Marital status at each wave, asks whether mothers were ever married, retrospective marital and cohabitation histories at Wave 8
- Fertility history	: Fertility histories including date of birth of each child, number of children, timing, wantedness of target child, future child-bearing intentions and preferences
- Labor force participation/employment/occupation	: Current employment, current occupation, last occupation, work histories between births, future work plans
- Assets/earnings	: Total family income, home ownership, automobile ownership, other types of assets held
- Health	: Self rated health
<b>C Other focus</b>	: Mother's spouse (possibly father of target child) at the time of interview
- Mode of reporting	: Proxy report by mother on co-resident husbands
- Socio-demographic data	: Age
- Education	: Highest level of education completed
- Marital history	: Marital status at each wave
- Fertility history	: Number of children including children born with a partner other than mother
- Labor force participation/employment/occupation	: Current employment status, main occupation
- Assets/earnings	: Relative size of mother's and spouse's income
- Health	:
<b>D Other focus</b>	: Siblings of target child
- Mode of reporting	: Proxy reports by mother
- Socio-demographic data	: Sex, date of birth
- Education	: School enrollment at each wave, high school diploma, college diploma
- Marital history	: Marital status at each wave, asks whether sibling of target child has ever been married, widowed, divorced, or separated, date of 1st marriage, widowhood, separation, cohabitation
- Fertility history	: Asks whether sibling of target child has ever had children, number of children, date of birth of first child
- Labor force participation/employment/occupation	: Employment status at later waves

### III. INFORMATION ON INTER/INTRA-GENERATIONAL RELATIONSHIPS

#### A Intergenerational transfers

- Financial transfers	: Asks whether mother contributed financially to child when they were living in target child's home. Asks whether children contributed financially to mother when target child was living in mother's home, retrospective target child reported yearly parental financial assistance. Asks target child to report the amount of financial assistance that they provided their parents between the ages of 15 and 23. Retrospective mother reported total financial help given to child. Asks mothers to report the amount of financial assistance that they gave the target child when the target child was between the ages of 23 and 31. Asks target child to report whether they gave parents financial help between 1985 and 1993
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- Time/caregiving : Asks target child to list whether they received/gave non-financial help from/to parents in past year in interview conducted in 1993
- Co-residence between adult children and parent : Reports whether target child lives with his/her parents or in-laws, monthly co-residence histories from ages 15-31
- Proximity : Reports whether parents live in the same neighborhood as target child  
Reports whether parents live within a 30-minute ride from target child
- Social contact : Frequency of contact between parent and target child including number of visits, contact by phone
- Expectations/obligations : Target child rates his/her parent's desire for target child to have children, marry, go to college; Mother rates her desire for target child to have children, marry, go to college

**B Intra-generational transfers**

- Social contact :

**C General questions on transfers**

- Financial transfers : Mother and child report whether they received/gave financial assistance from/to relatives, amount of money received/given
- Time/caregiving : Mother and child report which relative helped out with childcare
- Co-residence : Household roster information allows one to ascertain who is in residence  
Reports on whether target child's children are living with relatives

**IV. GENERAL ATTITUDES ON THE FAMILY**

- Division of labor within family : Mother reports whether target child views being a parent and working as conflictive roles, target child reports whether he/she views being a parent and working as conflictive, mother and target child sex-role attitudes
- Parenting :
- Family function : Asks questions on the importance of family structure, asks whether grown children should live with their aging parents
- Norms on fertility : Asks whether married couples ought to have children, attitudes about ideal family size
- Norms/culture :

**V. SPECIAL SUPPLEMENTAL FILES**

- List of supplemental files :

**VI. FUNDING AGENCIES** : National Institute of Child Health and Human Development (NICHD)

**VII. ADDITIONAL INFORMATION PROVIDED BY THE PRINCIPAL INVESTIGATORS**

- Cognitive ability : Intelligence
- List of supplemental files : Mother's gregariousness in 1962, 1977; extent of target child's social life in 1980 and 1985

## LONGITUDINAL STUDY OF GENERATIONS (LSOG)

- WEBSITE** : <http://www.usc.edu/dept/gero/research/4gen/index.htm>
- I. DESIGN**
- Data type : Longitudinal Survey on the US Elderly Population
  - Dates collected : 1971, 1985, 1988, 1991, 1994, 1997, 2001
  - Source : <http://www.usc.edu/dept/gero/research/4gen/index.htm>
  - # of Waves : 7 waves
- A Sample**
- Target population : 349 three- and four-generation California families: grandparents, parents, adolescents and post-adolescent grandchildren (16+), and great-grandchildren in 1991
  - Sample design : Random sample of families in which a grandfather over 60 was a member of an HMO
  - Sampling frame : List of members of a California health maintenance organization with 840,000 subscribers  
From this list, researchers identified men over 60. They mailed self-administered surveys to determine whether the men had grandchildren between 16 and 26 and determined their eligibility for the sample
  - Achieved N : Baseline: 516 grandparents, 701 parents, 827 grandchildren
  - Respondents : Grandparents, middle aged parents, and grandchildren between the ages of 16 and 26 in 1971. In 1991, great-grandchildren aged 16 and older were added
  - Geographic scope : Five county region of southern California, including greater Los Angeles
  - Mode of data collection : Predominantly self-administered questionnaires, but also personal interviews and telephone interviews
  - Over-sampled populations : None
  - Retrospective histories : Partial retrospective history on marriage, employment, and fertility
  - Response rates : Baseline: 65% of sampled individuals participated, Wave 2: 65%, Wave 3: 73%, Wave 4: 74%, Wave 5: 74%, Wave 6: 74% (Bengtson, Biblarz, & Roberts, 2002)  
Response rates for the follow-ups only included those that did not die and did not become mentally or physically incapacitated
- B Type of information gathered for inter/intragenerational relationships**
- Multi-generational : LSOG was sampled to include grandparents, parents, adolescent grandchildren, and subsequently great-grandchildren
  - Co-residential & biological orientation : Originally sampled with an orientation toward biological relationships. Participation did not depend on co-residential relationships. Select waves also sampled stepchildren and step parents and questions ask about step relations.
- II. CONTENT**
- A Main focus** : Relationships among great-grandparents, grandparents, parents, grandchildren, and great-grandchildren
- Mode of reporting : Self reports
  - Socio-demographic data : Race/ethnicity, sex, age, date of birth
  - Education : Enrollment in school at the time of the interview, highest level of education completed
  - Family background : Respondent's age when parents divorced, identification of parent who had custody of the respondent, whether the custody arrangements changed over time
  - Marital history : Current marital status, partial marital history includes start and end date of first marriage, date of separation
  - Fertility history : Number of biological, adopted, step children
  - Labor force participation/ : Employment at the time of the interview, full-time and part-time status, number of years

employment/occupation	one worked in the same job, employment history includes information on date of retirement, occupation at the time of interview and SEI of occupation at the time of the interview
- Assets/earnings	: Self rated financial health, personal and total household income in the past 12 months
- Health	: Self rated health, whether respondent needs medical care, chronic illness, emotional illness, health problems in last few years, mental health; functional health (older generations only)
<b>B Secondary focus</b>	: Parent
- Mode of reporting	: Proxy reports from middle generation and adolescent grandchildren on their own parents
- Age	: Whether their parents are alive, age, age at death if deceased
- Education	: Highest level of education completed by parents and parents in-law
- Marital history	: Whether respondent's parents are living together, whether they are legally married to each other, marital history including date of parental divorce
- Labor force participation/employment/occupation	: Father's employment status at the time of interview, father's occupation when respondent was 16
- Health	: Whether parent has chronic illness
<b>C Other focus</b>	: Child
- Mode of reporting	: Grandparent provides proxy reports on middle generation, parent provides proxy reports on children in the generation of adolescent children
- Socio-demographic data	: Sex, age at death, date of birth
- Marital history	: Whether child is currently married
<b>D Other focus</b>	: Spouse
- Mode of reporting on siblings	: Proxy report by respondent
- Socio-demographic data	: Date of birth
- Education	: Whether respondent was enrolled in school, highest level of education completed
- Labor force participation/employment/occupation	: Employment status, type of occupation at the time of the interview, number of hours worked in this job
- Asset/earnings	:
- Health	: Chronic illness experienced by spouse

### III. INFORMATION ON INTER/INTRA-GENERATIONAL RELATIONSHIPS

#### A Intergenerational transfers

- Financial transfers	: Whether respondent received inheritance from parents, financial help provided to/received from parents
- Time/caregiving	: Whether respondent ever raised grandchildren, date when respondent raised grandchildren, age of grandchildren when respondent provided help, whether respondent provided care for their mother/father, duration of their caregiving activities, type and amount of caregiving
- Co-residence between adult children and parent	: Date when respondent moved out of his/her parents home, whether they provided housing to parents, identification of individuals that reside in the same household as respondent
- Proximity	Distance between respondent's place of residence and parent's/children's/grand children's place of residence (less than 5 miles, 5-50 miles, 51-150 miles)
- Social contact	: Frequency of contact between respondents and great-grandparent/grandparent/parent/child/grandchild in the past year either in person, via mail, and via telephone (daily or more often, once a week, not at all)
- Quality of ties	: Respondent rates the closeness they feel towards their parent (very close, not too close), respondent is asked how much conflict, tension, and disagreement respondent feels towards great-grandparent/grandparent/parent/child (none at all, some, pretty much, quite a bit, a great deal), whether relationship with mother/father has changed

substantially over time

**B Intra-generational transfers**

- Financial transfers : Whether respondent gave/received financial assistance to/from siblings
- Time/caregiving : Whether respondent gave/received personal care assistance to/from siblings, whether respondent gave/received help with childcare or household chores to/from siblings
- Co-residence between adult siblings : Asks individuals to identify the individual who resides with respondent (sibling)
- Proximity : Distance between respondent's place of residence and sibling's place of residence (less than 5 miles, 5-50 miles, 51-150 miles)
- Social contact : Frequency of social contact with siblings in the past year either in person, via e-mail, via telephone
- Quality of ties : Respondent rates the closeness s/he feel towards his/her sibling (very close, not too close)

**C General questions on transfers**

- Financial transfers : Whether respondent received/gave financial assistance from/to relatives or friends
- Time/caregiving : Whether respondent received/gave help with childcare from/to relatives or friends, whether respondent received/gave assistance with personal care/household chores from/to friends/relatives, identification of relative who gave/received help
- Co-residence : Household roster available to provide information on who resides with respondent
- Proximity : Proximity of respondent's place of residence to relatives or friends in the past year
- Social contact : Whether respondent received emotional support from relatives or friends either in person, via telephone, or via mail

**D Transfers to individuals/organizations**

**Charities**

- Time/caregiving : Whether respondent volunteered in charitable organizations, number of hours spent doing volunteer work, type of organizations where respondent performed volunteer work

**IV. GENERAL ATTITUDES ON THE FAMILY**

- Division of labor within family : Attitudes on equality among wife and husband, division of labor within family
- Parenting : Asks whether children should be allowed to talk back to parents, punishment, children's activities
- Family function : Importance of family life, asks whether marriage should be viewed as an extension of extended families, women and work, asks whether respondent feels that adult children have the responsibility to take care of their elderly parents
- Norms/culture : Women and work

**V. SPECIAL SUPPLEMENTAL FILES**

- List of supplemental files

**VI. FUNDING AGENCIES**

: National Institute of Aging (Waves 2-8), NIMH (Wave 1)

**VII. ADDITIONAL INFORMATION PROVIDED BY THE PRINCIPAL INVESTIGATORS**

- Dates collected : 2005
  - Number of waves : 8 waves
  - List of supplemental files : Qualitative data on caregiving families
  - Marital ties : Marital closeness, satisfaction, and conflict
  - Salience : Values rankings of collectivism, individualism, humanitarianism
-

## LUXEMBOURG INCOME SURVEY (LIS)

### WEBSITE

<http://www.lisproject.org/>

### I. DESIGN

- Data type : Cross-sectional Survey on Foreign Populations
- Dates collected : Australia: 1981, 1985, 1989, 1994, 1995, 2001/2003  
Austria : 1987, 1994, 1995, 1997, 2000  
Belgium : 1985, 1988, 1992, 1995, 1997, 2000  
Canada : 1971, 1975, 1981, 1987, 1991, 1994, 1997, 1998, 2000  
Czech Republic: 1992, 1996  
Denmark: 1987, 1992, 1995, 2000, 2004  
Estonia: 2000, 2005  
Finland: 1987, 1991, 1995, 2000, 2005  
France: 1979, 1981, 1984, 1989, 1994, 2000  
Germany: 1973, 1978, 1981, 1983, 1984, 1989, 1994, 2000, 2005  
Greece : 1995, 2000  
Hungary: 1991, 1994, 1999, 2005  
Ireland: 1984, 1994, 1995, 1996, 2000  
Israel: 1979, 1986, 1992, 1997, 2001  
Italy: 1986, 1987, 1989, 1991, 1993, 1995, 1998, 2000, 2002, 2004  
Luxembourg: 1985, 1991, 1994, 1997, 2000  
Mexico: 1984, 1989, 1992, 1994, 1996, 1998, 2000, 2002, 2004  
Netherlands: 1983, 1986, 1987, 1991, 1994, 1999  
Norway: 1979, 1986, 1991, 1995, 2000, 2004  
Poland: 1986, 1992, 1996, 1999  
Romania: 1995, 1997  
Russia: 1992, 1995, 2000  
Slovak: 1992, 1996, 2005  
Slovenia: 1997, 1999  
Spain: 1980, 1990, 1995, 2000, 2005  
Sweden: 1967, 1975, 1981, 1987, 1992, 1995, 2000  
Switzerland: 1982, 1992, 2000, 2002, 2004  
Taiwan: 1981, 1986, 1991, 1995, 1997, 2000  
United Kingdom: 1969, 1974, 1979, 1986, 1991, 1994, 1995, 1999, 2005  
United States: 1969, 1974, 1979, 1986, 1991, 1994, 1997, 2000
- # of waves : 5 cross-sections, 6th cross-section in progress  
Cross-sectional surveys collected around 1980 in various countries are pooled together to create the Wave 1 survey. Cross-sectional surveys collected around 1985 in various countries are pooled together to create the Wave 2 survey. Cross-sectional surveys collected around 1990 are pooled together to create the Wave 3 survey. Cross-sectional surveys collected around 1995 in various countries are pooled to create the Wave 4 survey. Cross sectional surveys collected around 2000 in various countries are pooled together to create the Wave 5 survey.
- A Sample** : The different datasets pooled in the Luxembourg Income Study are collected by the Central Statistical Offices of the countries listed above. Each dataset has a different mode of data collection and a different sampling scheme.

- Target population : National population
- Sample design : Varies by dataset
- Primary sampling unit :
- Achieved N :
- Respondents :
- Geographic scope :
- Mode of data collection :
- Over-sampled populations :
- Retrospective histories :
- Response rates :

**B Type of information gathered for inter/intragenerational relationships**

- Multi-generational : Collects information on household head, head's spouse, and head's children
- Orientation toward : Collects information at the household and individual level. The survey focuses on co-residential & biological relationships

**II. CONTENT**

**A Main focus**

- Household head : Household head
- Mode of reporting : Varies by dataset
- Socio-demographic data : Ethnicity, nationality, age, sex, immigrant status
- Education : Education level, occupational training
- Family background :
- Marital history : Current marital status
- Fertility history : Number of children under 18, age of youngest child
- Labor force participation/employment/occupation : Current labor force and employment status, current occupation, job characteristics such as industry, type of worker, weeks worked full time, weeks worked part time, weeks unemployed, hours worked per week
- Assets/earnings : Market value of residence, total household income, extensive information on amount of income by source such as salary, interests, dividends, rental income, royalties. A separate project (Luxembourg Wealth Study) has rich information on assets but less on demographics.
- Health : Disability status

**B Secondary focus**

- Household head's spouse or cohabiting partner, including in some countries same sex partners
- Mode of reporting : Varies by dataset
- Socio-demographic data : Ethnicity, nationality, age, sex, immigrant status
- Education : Education level, occupational training
- Family background :
- Marital history : Current marital status
- Fertility history :
- Labor force participation/employment/occupation : Current labor force and employment status, current occupation, job characteristics such as industry, type of worker, weeks worked full time, weeks worked part time, weeks unemployed, hours worked per week
- Assets/earnings : Market value of residence, total household income, extensive information on amount of income by source such as salary, interests, dividends, rental income, royalties
- Health : Disability status

**C Other focus**

- Children present in household
- Socio-demographic data : Age, sex
- Family background : Relationship to household head, family structure as reported by household head, number of children in the household who are under 18 years of age

**III. INFORMATION ON INTER/INTRA-GENERATIONAL RELATIONSHIPS**



**A Intergenerational transfers**

- Financial transfers : Whether respondent pays/receives child support, amount of child support given/received
- Time/caregiving :
- Co-residence between adult children and parent : Is included in most cases or can be deduced from person-level files.
- Social contact :

**B Intragenerational transfers**

- Financial transfers :
- Time/caregiving :
- Co-residence between siblings :
- Social contact :

**C General questions on transfers**

- Financial transfers : Amount of transfers received from/given to relatives
- Time/caregiving :
- Co-residence :
- Proximity :

**D Government**

- Financial transfers : Amount of cash transfers received from government programs such as social retirement benefits, child and family allowances, unemployment compensation, maternity/nursing allowances, single parent allowances, near cash benefits for food, housing, heating, and medical expenditures, old age assistance, social security income, invalid care premium

**IV. GENERAL ATTITUDES ON THE FAMILY**

- Division of labor within family :
- Parenting :
- Family function :
- Norms on fertility :

**V. FUNDING AGENCIES**

- : National Science Foundations of member countries
  - : Social Science Foundations of member countries
-

## MEXICAN AMERICAN STUDY PROJECT (MASP)\*

- WEBSITE** : <http://www.sscnet.ucla.edu/issr/masp/>
- I. DESIGN**
- Data type : Longitudinal Survey on U.S. Populations
  - Dates collected : Wave 1: 1965-1966, Wave 2: 1997-2000
  - # of waves : 2 waves
- A Sample**
- Target population : Mexican Americans in Los Angeles and San Antonio
  - Sample design : Multistage stratified sampling of individuals that self identified as Mexican American/ Spanish or had a Spanish surname
  - Primary sampling unit : Census tracts in 1960
  - Achieved N : 973 households in Los Angeles and 603 households in San Antonio
  - Respondents : In Wave 1, household heads or spouses of household head who identified either as Mexican American or Spanish  
In Wave 2, the original respondents who were between 18 to 50 years of age and 2 randomly selected adult children of original respondents who were 0 to 18 in 1965
  - Geographic scope : Los Angeles and San Antonio
  - Mode of data collection : Face-to-face interviews
  - Over-sampled populations :
  - Retrospective histories : Includes partial retrospective histories on employment
  - Response rates : In the follow-up survey, 79% of the original respondents were tracked
- B Type of information gathered for inter/intragenerational relationships**
- Multi-generational : In the Wave 1 survey, respondent provided proxy reports on their children and parents. In Wave 2, self reports are available for the original respondent and two biological children.
  - Co-residential & biological orientation : Interviews were conducted with the household head or the spouse of the household head. The respondent provided proxy reports on all household members and all children including non-resident children. In Wave 2, in addition to the original respondent who was 50 years and younger in Wave 1, two biological children were also sampled in the survey. The survey has an orientation toward co-residential and biological relationships.
- II. CONTENT**
- A Main focus** : Household head or spouse of household head in 1965 interviewed alternatively for men and women who are household heads and/or spouses of household heads  
The information reported below refers exclusively to the self reports in Wave 1
- Mode of reporting : Self reports
  - Socio-demographic data : Self identified ethnicity (Mexican American, Spanish speaking, Latin Americans, Mexicans), sex, age
  - Education : Highest grade completed, on-the-job training, type of school attended (Public, Catholic, or Private school) for elementary, middle, and high school
  - Marital history : Current marital status
  - Fertility history : Number of biological, non-resident, and co-resident children, number of times pregnant if the respondent is a female respondent
  - Labor force participation/ employment/occupation : Current employment status of household head, duration of current job, current occupation, partial employment histories
  - Assets/earnings : Homeownership, savings, total debt, total monthly payment due to debt, total family income, hourly wage rate

- Health : Whether the respondent experienced an illness and accidents in the previous 4 weeks, chronic health conditions, health insurance, medication
- B Secondary focus** : Children
- Mode of reporting : Proxy reports on all children in Wave 1 and 2, self reports for 2 randomly selected biological children in Wave 2. The information below is based exclusively on the proxy reports in Wave 1
- Socio-demographic data : Sex, age
- Education : Type of school attended (Public, Catholic, or Private) for elementary, middle, and high school
- Family background :
- Marital history : Current marital status
- Fertility history :
- Labor force participation/employment/occupation : Occupation in 1968
- Health :
- C Other focus** : Main respondents' parents. The information below is based exclusively on the proxy reports in Wave 1
- Mode of reporting : Proxy reports
- Socio-demographic data : Sex, age
- Education : Highest level of education completed
- Family background :
- Marital history :
- Fertility history :
- Occupation : Father's occupation
- D Other focus** : Household head provided information on the sex, age, marital status, current occupation, education, and earnings contribution for all members of the household. Respondents were also asked about the occupation and place of residence of siblings and whether their parents lived with sibling

### III. INFORMATION ON INTER/INTRA-GENERATIONAL RELATIONSHIPS

#### A Intergenerational transfer

- Financial transfers :
- Time/caregiving :
- Co-residence between adult children and parent : Household roster available
- Proximity : Respondent report on the city, state, and country where their parents live
- Social contact :
- Quality of ties :

#### B Intragenerational transfers

- Financial transfers :
- Time/caregiving :
- Co-residence between adult siblings :
- Proximity : Location of their sibling's place of residence
- Social contact : Frequency of social contact
- Quality of ties :

#### C General questions on transfers

- Financial transfers : Whether respondent gave/received financial help to/from relatives
- Time/caregiving : Whether respondent gave/received non-financial help to/from relatives
- Co-residence between relatives and respondent : Household roster available
- Social contact : Frequency of social contact via mail, telephone, and visitation with the relative

- Quality of ties : Identification of the relative to whom they feel the closest
- Expectations/obligations :

**D Transfers to/from other individuals/organizations**

**Government**

- Financial transfers :
- Time/caregiving :

**Charities**

- Financial transfers :
- Time/caregiving : Whether respondent sought help from priest, type of help sought from priest

**IV. GENERAL ATTITUDES ON THE FAMILY**

- Division of labor within family : Respondent rates whether it is appropriate for man/woman to manage finances, care for children, perform household chores, etc.
- Parenting : Whether the use of daycare by a mother with a 3 year old is appropriate
- Family function : Whether having children is the most important thing for a married woman
- Norms on fertility : Respondent rates the value of children, acceptance for contraception, expected number of children
- Norms/culture : Respondent predicts Mexican American status in the US in 50 years  
Strength of Mexican American families, Mexican American work ethics, and Mexican American emotionality

**V. SPECIAL SUPPLEMENTAL FILES**

- List of supplemental files :

**VI. FUNDING AGENCIES**

- : National Institute for Child and Human Development (NICHD)
- Ford Foundation
- Rockefeller Foundation
- Russell Sage Foundation
- Haynes Foundation
- UC California Policy Seminar
- UC-Mexus
- UCLA Institute of American Cultures
- UCLA California Center for Population Research
- UCLA Office of the Chancellor
- UCLA Office of the Vice Chancellor for Research
- UCLA Office of the Chancellor for Academic Development
- UCLA Office of the Dean of Social Sciences

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\*Documentation for wave 2 was unavailable when the information in this summary was compiled.

## MEXICAN FAMILY LIFE SURVEY (MxFLS)\*

**WEBSITE** : [www.mxfls.cide.edu](http://www.mxfls.cide.edu)

### I. DESIGN

- Data type : Longitudinal Survey on Foreign Populations
- Dates collected : Wave 1: August 2002-December 2002  
Wave 2: August 2005-August 2006  
Wave 3: Planned for August 2008-August 2009  
Wave 4: Planned for August 2011-August 2012
- # of waves : 1st wave completed; 2nd wave in progress; 3rd and 4th waves planned

#### A Sample

- Target population : Nationally representative sample of individuals in 150 communities in Mexico
- Sample design : Multistage stratified probability sample
- Primary sampling unit : Three strata unit constructed using 14 variables from the ENEU sample frame
- Achieved N : Wave 1: 8,440 households in 150 localities and 35,000 individuals in these households
- Respondents : Household members 15 years and older
- Geographic scope : Nationally representative of Mexico
- Mode of data collection : Face-to-face interviews for all respondents in Mexico, telephone interviews with movers to U.S., cognitive assessments and health assessments
- Special feature : Multiple respondents per household
- Over-sampled populations :
- Retrospective histories : Retrospective histories on education, employment, migration, marriage, consensual unions, and fertility
- Response rates : Wave 1: 84% of sampled households were interviewed of 10,000 targeted households. Response rate of 97% for eligible households. 13% were deemed ineligible due to problems in the sampling frame. (See below.)  
Wave 2: 90% of households were interviewed. 90% of migrants to the U.S. were tracked and interviewed

#### B Type of information gathered for inter/intragenerational relationships

- Multi-generational : Collects information on respondent's parents, respondent, respondent's siblings and respondent's children
- Co-residential & biological orientation : Sampling is based on co-residential relationships, but survey also collects information on all biological relationships including information on non-resident family members. All household members who move from the baseline household are eligible for tracking to their new household.

### II. CONTENT

#### A Main focus

- Mode of reporting : Self reports, proxy reports, and physical health assessment
- Socio-demographic data : Age, sex, current migration status, whether they have ever migrated
- Education : Current enrollment in school, highest level of education completed, educational history including information on educational interruption, type of school attended (public, private, etc.)
- Cognitive ability : Cognitive tests are administered to respondents between the ages of 5 and 65
- Family background : Whether parents are alive, age of parent's death if deceased, parental education and occupation

- Marital history : Current marital and cohabiting status, marital and consensual union history
- Fertility history : Number of biological children, whether each biological child is still alive, fertility history collected for women between the ages of 15 and 49 and included information on number of stillbirths, abortions, miscarriages, age at each pregnancy, pregnancy outcome, gender of each child, age of each child
- Labor force participation/employment, occupation : Employment status in the previous week, employment history, number of hours worked in the previous week, retirement, current occupation, last occupation if currently unemployed
- Assets/earnings : Earnings in last month, partial earning history recorded separately by spouse  
: Home ownership, amount of savings, amount of debts, total family income, total family income originating from labor in the past 12 months, total family income originating from non-labor activities in the past 12 months, household economic shocks in the past 12 months such as total loss of crops, robbery, death of a household member, unemployment of a household member, or business failure
- Health : Self-rated health, self-assessed emotional well-being, illness, acute morbidity, use of health services, physical health assessments measures anthropometry, hemoglobin levels, blood pressure. (See below)
- B Secondary focus** : Child less than 15 years of age
- Mode of reporting : Proxy reports by child's mother or caregiver
- Socio-demographic data : Age, sex
- Education : Current enrollment in school, whether child ever attended school, highest level of education completed, educational history
- Cognitive skills : Cognitive achievement
- Family background : Household roster available, marital and fertility histories collected on mother and/or female caregiver
- Labor force participation/employment, occupation : Chores or paid labor activities performed to contribute to household expenses, number of hours worked on paid labor activities
- Assets/earnings : Weekly earnings in the past year
- Health : Respondent rated child's health, illness, disability, inpatient and outpatient hospital utilization, medical history, anthropometry, hemoglobin levels
- C Other focus** : Adult's parent
- Mode of reporting : Proxy reports by adults 15 years and older
- Socio-demographic data : Age, sex, age at death
- Education : Highest level of education completed
- Family background :
- Marital history : Current marital status, marital status prior to death if deceased
- Labor force participation/employment/occupation : Current labor force and employment status, retirement, current occupation, occupation prior to death if deceased, first occupation
- Health : Whether respondent's parent had a chronic illness, disability
- D Other focus** : Socio-demographic information (age, sex, highest level of education completed, current employment status, total family income in previous 12 months) are collected for each household member. This information is also obtained for all biological kin such as non-resident parents, non-resident siblings, and non-resident children

### III. INFORMATION ON INTER/INTRA-GENERATIONAL RELATIONSHIPS

#### A Intergenerational transfers

- Financial transfers : Whether financial transfers were given to/received from parents and children, amount of transfers given to/received from parents and children in the past 12 months
- Time/caregiving : Amount of time giving/receiving care to/ from parents and children due to illness in the last 12 months, non-resident father's involvement in activities with the sampled children

- Co-residence between adult children and parent : Household roster, total number of non-resident children
- Proximity : Distance between place of residence after migration and place where family of origin resides

**B Intragenerational transfers**

- Financial transfers : Whether respondent gave/received financial transfers to/from siblings in the last 12 months, type of financial help received from siblings (help with tuition, medical costs)
- Time/caregiving : Amount of time spent giving/receiving care to/from siblings in the past 12 months
- Co-residence between siblings : Household roster

**C General questions on transfers**

- Financial transfers : Whether respondent gave/received financial transfers to/from others, amount of financial transfers that respondent gave to/received from relatives in the past 12 months, means of financing migration costs (own money, other household members, relatives, friends)
- Time/caregiving : Amount of time spent giving/receiving care to/from relatives in the past 12 months
- Co-residence : Household roster
- Proximity :
- Expectation/obligations : Whether respondent has someone to borrow money from (relatives, friends, known people)

**D Transfers from other organizations/individuals**

**Government**

- Financial transfers : Whether they received financial assistance from government, amount of financial assistance received from governments, whether respondent or child used public hospitals

**IV. GENERAL ATTITUDES ON THE FAMILY**

- Division of labor within family :
- Parenting :
- Family function :
- Norms on fertility : Ideal number of children
- Norms/culture :

**V. SPECIAL SUPPLEMENTAL FILES**

- List of supplemental files : Physical health assessments collect information on anthropometry, blood pressure, hemoglobin levels, cholesterol, glucose, dry blood spots stored

**VI. FUNDING AGENCIES**

- : National Institute of Child Health and Human Development (NICHD)
- : Mexican Council for Science and Technology
- : The Ford Foundation
- : The University of California Institute for Mexico and the United States
- : Mexican Ministry of Social Development
- : Mexican Social Security Institute
- : Mexican Ministry of Health
- : DHL
- : Banamex

**VII. ADDITIONAL INFORMATION PROVIDED BY THE PRINCIPAL INVESTIGATORS**

- Response rates : Of the 10,000 targeted households, 12.7% households were deemed ineligible due to problems in the sampling frame and 2.8% of households did not respond. This yielded a response rate of 96.7% of eligible households and 84.4% targeted households
- Decision making process : Who decides consumption, allocation of assets, and migration decisions
- Consumption : Consumption and expenditure on ~35 items

- Migration : Birthplace; complete migration history from age 15; people moved with for each migration
  - Time use : Time allocation of each adult respondent in economic and non-economic activities including leisure
  - Victimization/crime : Crime history experienced outside and at the household
  - Preferences : Risk taking and preferences
  - Biomarkers : Cholesterol, fasting glucose, dry blood spots (C-Reactive Protein assayed for subsample)
  - List of supplemental files :
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\*The User's Guide for MxFLS was unavailable when the information in this summary was compiled.



## MEXICAN HEALTH AND AGING STUDY (MHAS)

**WEBSITE** : [http://www.mhas.pop.upenn.edu/english/documents\\_avdoc.htm](http://www.mhas.pop.upenn.edu/english/documents_avdoc.htm)

### I. DESIGN

- Data type : Longitudinal Survey on Elderly Populations in Mexico
- Dates collected : Wave 1: 2001  
Wave 2: 2003
- # of waves : 2 Waves

#### A Sample

- Target population : Baseline survey includes a nationally representative sample of Mexicans ages 50 and older and their spouses or partners in consensual unions
- Sample design : Multistage stratified sample
- Sampling frame : Households sampled for the National Survey of Employment (ENE) 2000 that were surveyed between October and December 2000
- Achieved N : Wave 1: 15,186 individuals in 9,862 households  
Wave 2: 14,222 individuals in 9,191 households
- Respondents : Individuals 50 years and older and their spouses or partners in consensual unions
- Geographic scope : Mexico
- Mode of data collection : Face-to-face interviews
- Over-sampled populations : The six Mexican states which are the state of origin for 40% of all migrants to the U.S. were oversampled
- Retrospective histories : Partial retrospective histories on marriage, employment, and migration
- Response rates : Wave 1: 90% of sampled households (9,862 households were interviewed out of 10,933 sampled households)  
Wave 2: 94% of households were re-interviewed

#### B Type of information gathered for inter/intragenerational relationships

- Multi-generational : Collects information on respondent, respondent's parents, and respondent's children
- Co-residential & biological orientation : Sampled households with an orientation toward co-residential relationships, but includes questions on biological relationships including non-resident children, siblings, and parents

### II. CONTENT

#### A Main focus

- Mode of reporting : Self reports and proxy reports if the sampled individual did not speak Spanish or was incapacitated due to health reasons
- Socio-demographic data : Age, sex, date of birth, whether respondent had ever migrated to the US
- Education : Highest level of education completed
- Cognitive ability : Administration of a battery of cognitive exams such as the Verbal Delayed Memory Recall Test
- Family background : Whether respondent lived with grandparents before 10
- Marital history : Current marital status, partial marital history includes information on the start and end date of last marriage or last union, number of marriages, number of consensual unions
- Fertility history : Number of live births, number of children still alive, ages of children who are alive
- Labor force participation/ employment/occupation : Current employment status, current occupation, whether respondent has ever worked in the U.S., partial employment history includes information on age at first employment, end date of last job, number of years respondent has worked over lifetime, and

- Assets/earnings : years worked in main occupation  
: Self rated financial situation, home ownership, business ownership, amount of debts, total monthly earnings, pension income
- Health : Self-rated health, current health compared to health 2 years ago, illness such as hypertension, diabetes, cancer, heart problems, depression, inability to perform activities of daily living, smoking, alcohol use, medical access, medical expenses, anthropometric measures such as height, weight, waist width, hip circumference
- B Secondary focus** : Child
- Mode of reporting : Proxy report by individual over 50 or spouse/partner
- Socio-demographic data : Age, sex, relationship to head, whether they are currently living in the U.S. or had ever lived in the U.S.
- Education : Highest level of education completed
- Family background : Household roster information shows whether child's parents are living together
- Labor force participation/employment/occupation : Activity performed in the previous week (employment, job search, school attendance, household chores), whether each child has ever worked in the US
- Health : Current health problems, health problems before child was 10 years old
- C Other focus** : Parent
- Mode of reporting : Proxy report by individual over 50 or their spouse/partner
- Socio-demographic data : Whether parent is still alive, age, age at death if deceased, whether parent has ever lived in the U.S.
- Education : Highest level of education completed
- Marital history : Whether parent is currently married or in a union
- Fertility history : Number of respondents' siblings born alive
- Asset, earnings : Respondent rated parent's financial situation
- Health : Disability originating from health problems, whether parent can be left alone for an hour or more
- D Other focus** : Socio-demographic information (sex, age, highest level of education completed, current marital status, health, current migration status, number of children, financial situation) collected on all household members, co-resident children 12 years and older, and respondent's biological children who are 12 years or older and are not residing with respondent

### III. INFORMATION ON INTER/INTRA-GENERATIONAL RELATIONSHIPS

#### A Intergenerational transfers\*

- Financial transfers : Whether respondents provided financial assistance to their parents in the last 2 years, total amount of financial support that respondents gave to their parents, whether respondent's siblings provided financial assistance to their parents in the last 2 years, total amount of financial support that respondents' siblings gave their parents, whether respondents gave/received financial assistance to/from their children in the last 2 years, amount of financial assistance given to/received from their children
- Time/caregiving : Whether respondents or their siblings took care of parents who were ill in the last 2 years, number of hours respondents or their siblings spent taking care of their parents, whether respondents took care of their children or grandchildren in the last 2 years, number of hours respondents spent taking care of their children or grandchildren
- Co-residence between adult children and parent : Household roster available, whether respondent's parents have always lived with respondent, number of years respondent has lived with their parents, whether respondent is currently living with his/her children over 12 years of age
- Proximity : Whether respondent's parent lives in the same neighborhood, same locality, or same city as the respondent
- Social contact : Number of times respondent has been in contact with his/her parent by telephone, mail, or in person

- Expectations/obligations : Expectations of future assistance from children

**B General questions on transfers**

- Financial transfers : Identification of individuals who financed moving, settling down, and migration costs resulting from the move of respondent's children over 12 years of age (no one, resident adult child's spouse, respondent, respondent's other siblings)
- Time/caregiving : Identification of individuals who helped respondent with activities of daily living in case respondent has a disability (child, child in law, grandchild, parent, other relative)
- Co-residence : Household roster available
- Proximity : Number of relatives currently living in the same neighborhood as respondent

**C Transfers from/to other individuals/organizations**

**Charities**

- Time/caregiving : Whether respondent volunteered for charities in the last 2 years, number of hours per week respondent spent volunteering

**IV. SPECIAL SUPPLEMENTAL FILES**

- List of supplemental files :

**V. FUNDING AGENCIES**

- : National Institutes of Health /National Institute of Aging  
Grant No. AG18016

**VI. ADDITIONAL INFORMATION PROVIDED BY THE PRINCIPAL INVESTIGATORS**

- List of supplemental files : Individual files linked to community level data on socioeconomic conditions of the community of residence using the 2000 Mexican Census. Use of this data is restricted  
Individual files linked to community level data on health care services in the community of residence using Ministry of Health facilities in the 2000 Mexican Census using restricted data

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\* Individual over 50 answers the questions. In couples, only one is selected to answer the questions on transfers to/from children.

## NATIONAL CHILD DEVELOPMENT STUDY (NCDS)\*

**WEBSITE** : <http://www.esds.ac.uk/longitudinal/access/ncds/>

### I. DESIGN

- Data type : Longitudinal Survey on Foreign-Born Cohorts
- Dates collected : Wave 1: 1958, Wave 2: 1965, Wave 3: 1969, Wave 4: 1974, Wave 5: 1978 (tests only)  
Wave 6: 1981, Wave 7: 1985, Wave 8: 1999-2000 (Combined with 1970 Birth Cohort Study), Wave 9: 2004, Wave 10: 2008 (in progress)
- # of waves : 9 waves, 10th wave in progress

#### A Sample

- Target population : All individuals born in England, Scotland, and Wales between 3/3/1958~ 3/9/1958
- Sample design : Collected data for total universe
- Primary sampling unit : No sampling was involved
- Achieved N : 17,634 respondents in 1958
- Respondents : Children born in 1958, their parents, midwives present at birth, medical officer for tests
- Geographic scope : England, Scotland, and Wales
- Mode of data collection : Self-administered questionnaires, face-to-face interviews, school teacher questionnaires  
school assessment, medical examination
- Retrospective histories : Retrospective histories on marriage and cohabitation
- Response rates : Response rate is defined as the % of base year respondents who were interviewed  
Wave 2: 94%, Wave 3: 92%, Wave 4: 91%, Wave 5: 90%, Wave 6: 88%  
Wave 7: 88%, Wave 8: 88%, Wave 9: N/A- documentation has not been released

#### B Type of information gathered for inter/intragenerational relationships

- Multi-generational : Sampled mothers and children. Includes questions on grandparents, parents, and child
- Co-residential & biological orientation : Sampled on biological relationships, but also includes questions on co-residential relationships

### II. CONTENT

#### A Main focus

- Mode of reporting : Children born in the first week of March, 1958 (Target child)  
Proxy reports on target child from mothers, midwives, and health care professionals and self reports collected from target child after 1969
- Socio-demographic data : Race/ethnicity (European, African, Indian, Other Asian, Mixed Race, N/A), sex, date of birth
- Education : Highest level of education completed, detailed information on school environments in each wave, educational assessments (A-levels, CSE, O-levels, reading, arithmetic, etc.), on the job training
- Marital history : Current marital status, marital and cohabitation histories
- Family background : Family structure during childhood can be inferred from records that detail date of separation from mother. Household roster data is available longitudinally
- Fertility history : Number of children, dates of birth
- Labor force participation/employment/occupation : Job histories include detailed information on first job, current job, hours worked in current job, unemployment spells, job search efforts, occupation
- Assets/earnings : Financial position of household in which target child lives, total family income, wage rate in part time work, wage rate, frequency of pay
- Health : Self rated health, detailed medical histories including information on medical problems, medical examinations by a health care professional

#### B Secondary focus

- : Target child's mother

- Mode of reporting : Self reports from mother and proxy reports by target child
- Socio-demographic data : Date of birth
- Education : Ascertains whether mother received more education beyond minimum schooling requirements, age when she left school
- Marital history : Current marital status, date current marriage began
- Fertility history : Number of children born by sex and survival outcomes, obstetric histories include information on pregnancy outcomes, sex of all children born to mother, weight, method of delivery, medical condition of child born, still birth, infant mortality within 20 days
- Labor force participation/employment/occupation : Mother reports whether she was employed since birth of target child, employment status prior to target child's enrollment in school, employment status after target child's enrollment in school, duration of employment, weekly hours worked, current employment status, type of job
- Assets/earnings : Homeownership, self rated financial situation, income
- Health : Weight prior to pregnancy, prenatal care
- C Other secondary focus** : Target child's children
- Mode of reporting : Proxy report by target child
- Socio-demographic data : Date of child's birth, asks whether the child in question is still alive
- Cognitive ability : Cognitive tests including Peabody Picture Vocabulary Test - Revised (PPVT-R) and Verbal Memory Subscale
- Family background : Target child's marital history provides information on their children's family background
- Health : Weight at birth, height at birth
- D Other focus** : Mother's husband (usually the father of the target child)
- Mode of reporting : Proxy reports by target child's mother
- Socio-demographic data : Age
- Education : Asks whether target child's father stayed in school beyond the minimum schooling requirements, age when he left school
- Marital history : Age at marriage of mother's first husband, age at marriage of mother's current husband, marital status of mother's husband when they first met
- Labor force participation/employment/occupation : Employment and occupation status at each wave
- Assets/earnings : Weekly wage rate, frequency of pay
- Health : Whether mother's husband smokes
- E Other focus** : Spouse of target child
- Mode of reporting : Proxy reports by target child
- Socio-demographic data : Age, sex
- Education : Asks whether spouse stayed in school beyond the minimum schooling requirements, age when she/he left school
- Labor force participation/employment/occupation : Current employment status, current/last occupation
- Assets/earnings : Earnings, frequency of pay
- F Other focus** : Reports on mother's father including information on his occupation at the time mother left school, place of residence of target child's parents at each wave, time of target child's parents' entry into the UK  
Reports on the number of co-resident siblings when target child's mother left school  
Contains information on the sex, age, and relationship to target child for all household members living with target child at each wave

### III. INFORMATION ON INTER/INTRA-GENERATIONAL RELATIONSHIPS

#### A Intergenerational transfers

- Financial transfers :
- Time/caregiving : Person who cares for the target child including biological parents, grandparents, others

- Co-residence between adult children and parent : Household roster available
- Social contact : Frequency of social contact between target child and mother in case of separation
- Quality of ties : Frequency of disagreements between target child and parent

**B General questions on transfers**

- Financial transfers : List of relatives or other household members who contribute towards total family income, inheritance from relatives
- Time/caregiving :
- Co-residence : Household roster available
- Social contact : Frequency with which target child performs a family activity, number of close friends that respondent has

**C Transfers to/from other individuals/organizations**

**Government Support**

- Financial transfers : Reports whether target child received financial assistance from government including school meals
- Time/caregiving : Reports whether target child was under the care of the local authority for over a month when they were a child

**Charities**

- Time/caregiving : Reports whether child was under the care of the Voluntary Society for over a month

**IV. GENERAL ATTITUDES ON THE FAMILY**

- Norms on fertility : Target child reports on the ideal number of children
- Norms/culture : Target child reports on the ideal age at marriage

**V. SPECIAL SUPPLEMENTAL INFORMATION**

- List of supplemental files : NCDS Qualitative Survey, NCDS DNA Project, NCDS Biomedical Survey, Exam tests collected from school

**VI. FUNDING AGENCIES** : National Birthday Trust Fund

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\*Formerly know as 1958 Perinatal Mortality Survey.

## NATIONAL LONGITUDINAL STUDY OF ADOLESCENT HEALTH (ADD HEALTH)

**WEBSITE** : [www.cpc.unc.edu/addhealth](http://www.cpc.unc.edu/addhealth)

### I. DESIGN

- Data type : Longitudinal Survey on U.S. Populations
- Dates collected : Wave 1 in-school questionnaire: September 1994-April 1995  
Wave 1 in-home interview: April 1995-December 1995  
Wave 2 in-home interview: April 1996-August 1996  
Wave 3 in-home interview: August 2001-April 2002  
Wave 4 in progress
- # of waves : 3 waves completed. Wave 4 is in progress
- A Sample**
- Target population : Wave 1: Nationally representative sample of adolescents in grades 7 through 12 in the U.S. in the 1994–95 academic year (target adolescent)  
Wave 2: Target adolescent with the exception of students in 12th grade and students disabled between Wave 1 and Wave 2  
Wave 3: Target adolescent and a sub-sample of partners who participated in Wave 1
- Sample design : Stratified probability sample of adolescents enrolled in non-saturated schools and all adolescents enrolled in 16 saturated schools
- Primary sampling unit : Schools in a database collected by Quality Education Data, Inc.
- Achieved N (including oversamples) : Wave 1 in-school questionnaire: 90,118 adolescents in 132 schools and 164 administrators. Eligible high schools included an 11th grade and had at least 30 students. The in-home interview was completed by 20,745 students who responded to the in-school questionnaire and/or were part of the school roster in the school sampled for the in-home interviews. 17,700 parents responded to the parent questionnaire  
Wave 2 in-home interview: 14,738 respondents to Wave 1 except for those who graduated or dropped out of high school and 128 school administrators  
Wave 3 in-home interview: 15,197 persons (target adolescents and a subsample of their partners)  
Wave 4: Planning in progress
- Respondents : Adolescents, school administrators, and parents
- Geographic scope : Nationally representative
- Mode of data collection : Wave 1 in-school questionnaire: Self-administered  
Wave 1 in-home interview: Face-to-face  
Wave 1 parent interviews: Face-to-face  
Wave 1 school administrator questionnaire: Self-administered  
Wave 2 in-home interview: Face-to-face  
Wave 2 school administrators interview: Telephone  
Wave 3 in-home interview: Face-to-face
- Special feature : Geographic identifiers were collected  
May include multiple respondent households
- Over-sampled populations : Ethnic: well-educated Blacks, Chinese, Cubans, Puerto Ricans  
Saturated schools: every student enrolled in the 16 (2 large and 14 small) saturated schools

Disabled: 589 students with disabilities involving the limbs  
 Genetic: pairs of siblings (identical twins, fraternal twins, and half siblings) were sampled. Also, non-biological pairs of siblings (step siblings, foster, and adopted children) were sampled

- Retrospective histories : Retrospective histories on education, employment, fertility, and marriage
- Response rates : Wave 1 -78.9% of main school sample, Wave 2 -88.2% of those eligible for Wave 2, Wave 3 -77.4% of Wave 1 respondents and a sub-sample of partners

**B Type of information gathered for inter/intragenerational relationships**

- Multi-generational : Information is available on target adolescent, their parent, and their children
- Co-residential & biological orientation : In-home interviews gear sampling toward co-residential relationships, but questionnaires also include information on non-resident biological fathers/mothers as reported by student

**II. CONTENT**

**A Main focus**

- Mode of reporting : Self reports
- Socio-demographic data : Race/ethnicity, sex, age
- Education : Current grade level in school, educational histories
- Family background : Household roster information on family structure, reports by target adolescent on number of siblings, and parent reports on their marital and cohabitation histories
- Cognitive ability : Add Health Picture Vocabulary Test (AHPVT): Computerized, abridged version of the Peabody Picture Vocabulary Test
- Marital history : Current marital status, number of times married, marital and cohabitation histories
- Fertility history : Sexual histories, number of pregnancies, number of children
- Labor force participation/employment/occupation : Current employment status, partial employment histories, active military service, current occupational status
- Assets/earnings : Hourly wage rate, overtime, pre-tax annual earnings, respondent's evaluation on his/her current financial situation
- Health : Self-rated health, weight, height, disabilities, biological specimens collected for sexually transmitted infections, health insurance

**B Secondary focus**

- Mode of reporting : A subsample of partners provide self reports on all domains reported by the target adolescent. The adolescent provides proxy reports on all other partners. The information below is gathered exclusively from proxy reports
- Socio-demographic data : Race/ethnicity, age, and sex
- Education : Highest degree attained
- Marital history : Partial marital, cohabitation, and romantic relationship histories
- Fertility history : Sexual histories, number of pregnancies, and number of children
- Labor force participation/employment/occupation : Current employment status, partial employment histories, active military service, and current occupational status
- Assets/earnings : Target adolescent rated financial status
- Health : Self-rated health, weight, height, disabilities, biological specimens collected for sexually transmitted infections, and health insurance coverage

**C Other focus**

- Mode of reporting : Self and proxy reports
- Socio-demographic data : Race/ethnicity, sex, age, month and year when target adolescent's parents died
- Education : Highest level of school attended
- Marital history : Current marital status, marital histories, age at first marriage
- Fertility history : Number of target adolescent's siblings
- Labor force participation/employment/occupation : Full-time employment, retirement status, current occupational status



- Assets/earnings : Total family income
- Health : Self-rated health, disability, alcohol use, smoking
- D Other focus** : Spouse of parent
- Mode of reporting : In some cases, the spouse of parent provided self reports in Parent Questionnaires. For those cases, the information gathered is the same as that collected for the adolescent's parent. For all other cases, proxy reports are provided by parents and the target adolescent. The information reported below refers exclusively to the information obtained from the proxy reports
- Socio-demographic data : Race/ethnicity, sex, age
- Education : Educational attainment
- Labor force participation/employment/occupation : Employment status, retirement plans, current occupational status
- Assets/earnings :
- Health : Self reported health, disability
- E Other focus** : Children of adolescent in Wave 3
- Mode of reporting : Proxy reports by target adolescent
- Socio-demographic data : Age
- Family background : Target adolescent reports the persons with whom the child lives including biological parents, siblings, grandparents, other relatives, friends, adoptive and foster parents
- Education :
- Health : Target adolescent rated child's health, emotional, physical, or mental limitations

### III. INFORMATION ON INTER/INTRA-GENERATIONAL RELATIONSHIPS

#### A Intergenerational transfers

- Financial transfers : Financial transfers from parents to adolescent, amount of transfers between parent and adolescent, amount of child support given to/received from the other parent of target adolescent's child, medical expenses incurred due to child's medical condition
- Time/Caregiving : Childcare provided by parents
- Co-residence between adult children and parent : Target adolescent reports whether they live with parents. They also report the individuals with whom their child resides: biological parents, foster parents, adopted parents
- Social contact : Frequency of contact with non-resident father/mother, type of activity performed by adolescent with parents, such as reading, going to the mall, number of hours target adolescent spent with parents in the last 12 months, date target adolescent last spent with his/her children
- Quality of ties : Closeness between target adolescent and his/her parents
- Expectations/Obligations : Parents' expectation of the target adolescent's educational attainment, target adolescent's perception of parents' expectation of educational attainment

#### B Intra-generational transfers

- Co-residence with adult sibling : Household roster provides information on co-resident siblings
- Social contact : Frequency of contact via e-mail and telephone, number of times traveled together
- Quality of ties : Closeness with siblings, desire for more/less closeness
- Expectations/obligations : Expectations of help from sibling in case of problems

#### C Transfers to/from other individuals/organizations

##### Friends

- Social contact : Frequency of interaction with friends via e-mail, telephone, visits
- Quality of ties : Relative influence of friends compared to family

##### Government support

- Financial transfers : Target adolescent and parent report whether they participate in welfare programs. They also report whether they participated in government sponsored job training

programs

**IV. GENERAL ATTITUDES ON FAMILY**

- Division of labor within family :
- Parenting : Parent reports on his/her attitudes about childrearing
- Family function :
- Norms on fertility :
- Norms/culture : 10-scale item rating importance of endogamy, living in a committed relationship, importance of money, questions on activities performed by respondent to balance marriage, work, and schooling

**V. SPECIAL SUPPLEMENTAL FILES**

- List of supplemental files : Contextual data for Waves I and II

**VI. FUNDING AGENCIES**

- : National Institute of Child Health and Human Development (NICHD)
- National Cancer Institute
- National Institute on Alcohol Abuse and Alcoholism
- National Institute of Deafness and Other Communication Disorders
- National Institute of Drug Abuse
- National Institute of General Medical Sciences
- National Institute of Mental Health
- National Institute of Nursing Research
- National Institute of Health and Human Services

**VII. ADDITIONAL INFORMATION PROVIDED BY THE PRINCIPAL INVESTIGATORS**

- Special supplemental files : Genetic data on twins and full siblings is also available
  - Funding agencies : Additional Cofunders:
    - Office of AIDS Research, NIH
    - Office of Behavioral and Social Sciences Research, NIH
    - Office of the Director, NIH
    - Office of Research on Women's Health, NIH
    - National Center for Health Statistics, CDCP, DHHS
    - Office of Population Affairs, DHHS
    - Office of Minority Health, CDCP, DHHS
    - Office of Public Health and Science, DHHD
    - Office of the Assistant Secretary for Planning and Evaluation, DHHS
    - The National Science Foundation
    - Center for Disease Control, NCHS, DHHS
    - National Institute of Aging
    - MacArthur Foundation
    - National Center for Minority Health and Health Disparities, NIH
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## NATIONAL LONGITUDINAL SURVEY OF YOUTH 1979 (NLSY 79)

**WEBSITE** : <http://www.bls.gov/nls/nlsy79.htm>

### I. DESIGN

- Data type : Longitudinal Survey on a U.S. Cohort
- Dates collected : Collected annually between 1979 and 1994 and biennially since 1994
- # of waves : 21 waves, 22nd in progress
- A Sample**
- Target population : Nationally representative sample of men and women born 1957-64 and present in the U.S. in 1978
- Sample design : Multistage probability sample of individuals within households
- Primary sampling unit : Standard Metropolitan Statistical Areas (SMSAs), counties (or parishes in Louisiana), parts of counties (parishes), and independent cities
- Achieved N : 1979: 12,686, 1984: 12,069, 1990: 10,346 1994: 8,891 2000: 8,891 2004: 7,724
- Respondents : 1979: Individuals between 14 and 21 in (1) cross-sectional sample designed to be representative of the non-institutionalized population, (2) supplemental oversample of Hispanic, black, and economically disadvantaged youths who are non-black/non-Hispanic, and (3) a military sample of youths who enlisted by 9/30/1978  
1986: NLSY 79 children supplement includes children born to the NLSY 79 women. It was later split into two supplementary files: (1) the Children Supplement collected information on children 14 years and younger and (2) the Young Adult supplement includes information on children 15 years and older
- Geographic scope : Nationally representative
- Mode of data collection : Face-to-face and telephone interviews
- Special modules : NLSY 79 Child supplement, NLSY 79 Young Adult Children supplement  
1980 high school survey, 1980-1983 transcript collections, 1980 administration of ASVAB
- Over-sampled populations : (1) Civilian Hispanic, black, and economically disadvantaged non-Hispanic/non-black youths living in the U.S. during 1979 born between 1/1/1957 and 12/31/1964  
(2) Youths born between 1/1/1957 and 12/31/1961 and enlisted in the military as of 9/30/1978
- Special features : (1) Due to the funding constraints, the oversample of youths in the military with the exception of 201 youths were dropped from the sample after 1984  
(2) Due to funding constraints, the oversample of economically disadvantaged non-Hispanic/non-black youths were dropped from the sample after 1990  
(3) Geocode data is available  
(4) Multiple respondent households include extensive information on respondent's siblings
- Retrospective histories : Event history from data on employment, marriage, welfare program participation, and education
- Response rates : Response rate is defined as the % of base-year respondent youths that remained eligible (i.e. youths that were not part of the oversamples that were permanently dropped and were alive)  
1980: 96%, 1981: 96%, 1982: 96%, 1983: 97%, 1984: 96%, 1985: 95%

1986: 93%, 1987: 91%, 1988: 91%, 1989: 93%, 1990: 91%, 1991: 92%  
 1992: 92%, 1993: 92%, 1994: 91%, 1996: 89%, 1998: 87%, 2000: 83%  
 2002: 81%, 2004: 81%

**B Type of information gathered for inter/intragenerational relationships**

- Multi-generational : Starting in 1986, NLSY 79 also collected information on the children born to the NLSY 79 women who were later split off to form the Young Adult Children supplement when they turned 15
- Co-residential & biological orientation : Sampled with a focus on biological relationships, but also includes questions on co-residential relationships and non-resident parent and children

**II. CONTENT**

- A Main focus** : Youths born 1957-64 and living in the U.S. in 1978 (NLSY 79 youths)
  - Mode of reporting : Self reports
  - Socio-demographic data : Race/ethnicity, nationality, date of birth, age, sex
  - Education : Current enrollment status, highest degree received, date received
  - Marital history : Current marital status, changes in marital status since last interview, dates of each change, number of marriages, start date and end date of marriage, cohabitations since last interview, on-going cohabitations
  - Family background : Household roster when respondent was 14, residential history from birth to age 18, parental education and occupation, nativity of parents
  - Fertility history : Number of children in household, relationship of each child to respondent
  - Labor force participation/employment/occupation : Current labor force status including information on whether the respondent was employed, unemployed, or out of the labor force in the week preceding the survey, company specific information if employed, start and end date of current and previous jobs, number of hours worked per week in the past year, occupation, class of worker
  - Assets/earnings : Possession and value of assets, debt, total family income, wage rate, severance payment, fringe benefits, participation in pension plans
  - Health : Self-rated physical and emotional health, disabilities, height, weight, illness, health insurance coverage, prenatal care if respondent was ever pregnant, job injuries, drug, alcohol and tobacco use
- B Secondary focus** : Spouses (and partners in recent rounds) of NLSY 79 youths
  - Mode of reporting : Proxy reports from NLSY 79 youths
  - Socio-demographic data : Age
  - Education : Highest grade completed
  - Marital history : Current marital status, number of previous marriages
  - Fertility history : Number of children with respondent
  - Labor force participation/employment/occupation : Current labor force status
  - Assets/earnings : Total family income, hourly wage rate
  - Health : Disabilities
- C Other focus** : Parents of NLSY 79 youths
  - Mode of data collection : Proxy reports from NLSY 79 youths - mostly in first round
  - Socio-demographic data : Whether respondent's parents are still living
  - Education : Highest grade completed by parents
  - Labor force participation/employment/occupation : Parent's employment status, parent's occupation when youth was 14
  - Health : Health status if parents are still living, cause of death if parents are dead
- D Other focus** : Children of NLSY 79
  - Mode of reporting : Self-administered questionnaires and proxy reports from NLSY 79 youths

- Socio-demographic data : Ethnic self identification, age, sex, date of birth, place of birth
  - Education : Ever attended school, current grade in school, reasons for stopping school, on the job training, detailed quality information from children & young adults
  - Cognitive Ability : Battery of cognitive tests including memory for locations, Peabody Vocabulary Tests
  - Marital history : Current marital status, cohabitation, relationship histories including dating
  - Family background : Children of NLSY 79 youths report on their living arrangements. Information can also be ascertained from the NLSY 79 youth's report of their marital histories and household rosters at each wave
  - Fertility histories : Fertility histories were collected for those in the NLSY79 Young Adult Children supplement
  - Labor force participation/employment/occupation : Respondents in the Child Supplement report whether they worked for pay, frequency of work per week  
Respondents in Young Adult Supplement provide information on their current labor force status, weeks and hours of work per week in previous year, union membership, spells of unemployment, and characteristics of current employment
  - Assets/earnings : Money earned during a week, hourly wage rate, fringe benefits
  - Health : Illness, accidents, medical treatment, prenatal care if older than 14 and ever pregnant, height, weight, substance use, prenatal care for children of Young Adults
- E Additional information gathered on NLSY 79 youths and children of NLSY 1979 youths** :
- NLSY 1979 Youths:*
- (1) The 1993 survey asked the NLSY 79 youths to report the age, education, and fertility of as many as 13 biological siblings. Follow-up questions in 1994 confirmed whether the relationship was that of an identical or fraternal twin  
*Child & Young Adult Supplement*
  - (1) Principals of schools where child respondent attended were interviewed to get information about child's school environment for 1994 and 1995 school years
  - (2) Information by proxy was also collected from respondents on the characteristics of children's current or previous spouses on topics such as ethnicity, education, employment, and income
  - (3) Basic demographic information is available for each person living in the respondent's household including information on each resident's sex, age, relationship to respondent, highest grade of schooling completed, and labor force status during the past year

### III. INFORMATION ON INTER/INTRA-GENERATIONAL RELATIONSHIPS

#### A Intergenerational transfers

- Financial transfers : Inheritances and rights to estate (the source of inheritance is not ascertained)
- Time/caregiving :
- Co-residence between adult children and parent : Household roster available for NLSY 79 and Young Adults
- Social contact : Contact with non-residential children, support provided by children, type of activities performed with parents
- Proximity : Proximity may be determined by geocode data on NLSY 79 respondents and their children
- Quality of ties : Intergenerational closure, quality of interaction between parent and child  
Closeness between parents and children in the supplement as reported by child, frequency of arguments between parent and child

#### B Intra-generational transfers

- Social contact : Social contact with sibling to whom respondent feels closest

#### C General questions on transfers

- Financial transfers : Whether respondent received property, inheritance from relatives or friends during the previous year, amount of the inheritance (source not ascertained)

- Time/caregiving : Childcare arrangements for the first 3 years of children's life; whether care provided by parents, step parents, relatives, non-relatives, formal childcare
- Co-residence between adult siblings : Household roster available of siblings
- Social contact :
- Quality of ties :

**D Transfers to/from other individuals/organizations**

**Friends**

- Quality of ties : Closeness with friends is reported in the NLSY 79 Child supplement and Young Adults supplement

**Government Support**

- Financial transfers : Subsidy for rent or public housing, earned income tax credit, targeted benefits from public assistance programs for NLSY 79 respondents and their children in the supplement

**Charities**

- Time/caregiving : Whether child in Young Adult Supplement performed volunteer work in the last 2 years

**IV. GENERAL ATTITUDES ON THE FAMILY**

- Division of labor within family : NLSY 79 youths and Young Adults report on attitudes about women working, whether respondent would work if they had sufficient resources
- Parenting : Attitudes on parenting
- Family function :
- Norms on fertility : Young adult children report on youngest age one should have a child
- Norms/culture : Young adult children report on ideal age for marriage

**V. FUNDING AGENCIES**

- : Bureau of Labor Statistics
- : U.S. Department of Labor
- : National Institute of Child Health and Human Development
- : Department of Defense
- : National Institute on Drug Abuse
- : National Institute on Alcohol Abuse and Alcoholism

**VI. ADDITIONAL INFORMATION PROVIDED BY THE PRINCIPAL INVESTIGATORS**

- Cognitive ability : Measured using ASVAB
  - Fertility history : Collects detailed fertility roster, contraception and abortion, desired fertility
  - Labor force participation/employment/occupation : On-the-job training, job hierarchies
  - Health : Health inventory at age 40
  - Political Involvement of main focus : Questions about voting and ideology from American National Election Survey
  - Miscellaneous : Preferences, consumption, and financial behavior
-

## NATIONAL LONGITUDINAL SURVEY OF YOUTH 1997 (NLSY 97)

**WEBSITE** : <http://www.bls.gov/nls/nlsy97.htm>

### I. DESIGN

- Data type : Longitudinal Survey on a U.S. Cohort
- Dates collected : Wave 1: Feb/Oct. 1997- Mar/May 1998  
Wave 2: Oct. 1998- April 1999  
Wave 3: Oct. 1999-April 2000  
Wave 4: Nov. 2000-May 2001  
Wave 5: Nov. 2001- May 2002  
Wave 6: Nov. 2002-May 2003  
Wave 7: Nov. 2003- May 2004
- # of waves : 7 waves, 8th in progress

#### A Sample

- Target population : Nationally representative sample of youths born between 1980 and 1984 residing in the U.S. in 1996
- Sample design : Multistage probability sample of individuals within households
- Primary sampling unit : Standard Metropolitan Statistical Areas (SMSAs), counties (or parishes in Louisiana), parts of counties (parishes), and independent cities
- Achieved N : 8,984 respondents from 6,819 households (6,748 cross-sectional sample and 2,236 oversamples), 6,124 parents for 7,942 youths in Wave 1
- Respondents : Youths born in 1980~1984 in all waves; parents were also sampled in Wave 1
- Geographic scope : Nationally representative
- Mode of data collection : Face-to-face interviews, telephone interviews
- Over-sampled populations : Supplemental sample of Blacks and Hispanic youths
- Special features : (1) Multiple respondent households include detailed information on respondent's siblings  
(2) Geocode data
- Retrospective histories : Event history form data on employment, marriage, welfare program participation, and education
- Response rates : Response rate in Wave 1 and retention rates from Wave 2 to Wave 8  
Retention rates defined as the % of base-year respondents who were interviewed in the survey years. Deceased respondents are included in the calculations below.  
Wave 1: 91% of those sampled, Wave 2: 93%, Wave 3: 92 %, Wave 4: 90%,  
Wave 5: 88%, Wave 6: 87%, Wave 7: 86%

#### B Type of information gathered for inter/intragenerational relationships

- Multi-generational : NLSY 97 also sampled the parents of NLSY 97 youths and asked questions about the children of NLSY 97 youths
- Co-residential & biological orientation : Sample is based on co-residential relationships, but also includes questions on non-resident parents as reported by NLSY 97 youth and the parent in residence

### II. CONTENT

- #### A Main focus
- Mode of reporting : Self reports
  - Socio-demographic data : Race/ethnicity, date of birth, age, sex
  - Education : Current enrollment status, highest grade attended, highest grade completed, GPA, on the job training
  - Cognitive Ability : Armed Services Vocational Aptitude Battery (CAT-ASVAB) in the summer of 1997,

- Marital history : the fall of 1997, and the winter of 1998
- Family background : Current marital status, marital histories, cohabitation histories
- Fertility history : Co-resident parent of NLSY 97 youth provided marital and partner histories, residential histories as reported by respondent, household roster available
- Labor force participation/employment/occupation : Number of biological/adopted children, number of pregnancies, fertility and sexual histories for NLSY 1997 youths 17 years and older
- Assets/earnings : Current employment status, hours per week worked, methods of job search in the previous 4 weeks, start and end dates in jobs, number and duration of unemployment spells, current occupation
- Health : Whether they possess certain assets, value of each asset, debt, whether they incurred debt, wage rate, total family income in previous year, income by source
- Health : Self-rated general health, mental health, health behaviors, height, weight, chronic health conditions, health insurance
- B Secondary focus** : Current and previous partner of NLSY 97 youth
- Mode of data collection : Proxy reports from NLSY 97 youth
- Socio-demographic data : Race, age
- Education : Highest grade completed, highest degree earned
- Marital history : Current marital status
- Fertility history :
- Labor force participation/employment/occupation : Current labor force status, current occupation
- Assets/earnings : Income in previous year by source of income, perceived economic status of children's other parent as reported by NLSY 97 youths
- Health :
- C Other focus** : Parents of NLSY 97 youth
- Mode of reporting : Self reports in wave 1 and proxy reports in follow-up surveys
- Socio-demographic data : Nationality, place of birth, date biological father/mother died if deceased
- Education : Highest grade completed
- Marital history : Current marital status, marital and partner histories
- Family Background : Reports whether parents of NLSY 97 youths lived with biological parents
- Fertility history : Parent's household roster may provide number of parent's co-resident children
- Labor force participation/employment/occupation : Employment history
- Assets/earnings : Assets in previous year, total income in previous year
- Health : Longstanding health problems, height, weight
- D Other focus** : NLSY 97 includes information about race, ethnicity, sex, age, employment, marital status and occupation on all household members and non-resident children. Limited information is also available on the other parent of the NLSY 97 youth

### III. INFORMATION ON INTER/INTRA-GENERATIONAL RELATIONSHIPS

#### A Intergenerational transfers

- Financial transfers : Amount of child support received/given from/to partner with children
- Time/caregiving :
- Co-residence between adult children and parent : Whether the NLSY 97 youth co-resides with their parents
- Proximity : Distance from biological mother/father as reported by NLSY 97 youth, geocode data
- Social contact : Frequency of contact between respondent and non-resident parents, frequency of family rituals and holidays
- Quality of ties : Closeness between respondent and parents, youth's opinion on parent's supportiveness, communication with parental figures

#### B Intra-generational transfers



- Social contact :

**C General questions on transfers**

- Financial transfers : Whether respondent receives financial assistance from relatives/friends for tuition, childcare and housing costs
- Time/caregiving : Whether childcare needs met by spouse, relatives, or non-relatives
- Co-residence : Household roster available
- Proximity : Number of relatives living close by
- Social contact :
- Quality of ties : Quality of relationship between respondent and partner/child's biological father

**D Transfers to/from other individuals/organizations**

**Government Support**

- Financial transfers : Earned income tax credit on last year's return, number and duration of food stamp spells, number and duration of AFDC/TANF/ADC spells, eligibility for government assistance, benefits/limits of government assistance for NLSY 97 youths and parents
- Time/caregiving : Respondent's participation in the Head Start program

**IV. GENERAL ATTITUDES ON THE FAMILY**

- Division of labor within family :
- Parenting :
- Family function :
- Norms/culture :

**V. SPECIAL SUPPLEMENTAL FILES**

- List of supplemental files : Census of all high schools within the primary sampling unit, high school transcripts collected

**VI. FUNDING AGENCIES** : Bureau of Labor Statistics, U.S. Department of Labor

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## NATIONAL SURVEY OF BLACK AMERICANS (NSBA)\*

**WEBSITE** : <http://webapp.icpsr.umich.edu/cocoon/ICPSR-STUDY/06668.xml>

### I. DESIGN

- Data type : Longitudinal Survey on U.S. Populations
- Dates collected : Wave 1: 1979-1980, Wave 2: 1987-1988, Wave 3: 1988-1989, Wave 4: 1992
- # of Waves : 4 waves

#### **A Sample**

- Target population : Individuals 18 years and older who self-identified as Black Americans and were U.S. citizens
- Sample design : National multistage probability sample
- Primary sampling unit : Survey Research Center (SRC) areas
- Achieved N : Wave 1: 2,107, Wave 2: 951, Wave 3: 793, Wave 4: 659
- Respondents : Black Americans in the U.S. ages 18 and older who are citizens
- Geographic scope : Continental U.S.
- Mode of data collection : Face-to-face interviews
- Retrospective histories : Partial retrospective histories on employment, military service
- Response rates : Wave 1: 67% of sampled individuals

#### **B Type of information gathered for inter/intragenerational relationships**

- Multi-generational : Includes questions about respondent's parents, respondent, respondent's children
- Co-residential & biological orientation : Sampled at the household level. Therefore, it has an orientation toward co-residential relationships. However, some questions ask about biological relationships including questions about non-resident family members

### II. CONTENT

#### **A Main focus**

- Mode of reporting : Self reports
- Socio-demographic data : Sex, date of birth, place of birth, interviewer reports about skin color, words used by respondent to describe his/her race
- Education : Highest level of education completed, whether respondent has high school diploma, whether respondent attended college, on-the-job training
- Family background : Number of siblings while growing up, identification of father figure during childhood
- Marital history : Current marital, cohabitation, and dating status, duration of marriage
- Fertility history : Number of children, number of biological children, number of children under 18 living with respondent
- Labor force participation/employment/occupation : Current labor force and employment status, number of hours worked per week, number of years spent working full time and part time, labor union status, main occupation, job characteristics such as promotion opportunities, supervisor's race, reasons for not working, occupation after retirement
- Assets/earnings : Homeownership, total family income in previous year, wage rate, fringe benefits, financial situation compared to 3 years ago
- Health : Psychological well-being, respondent reports on their self esteem, self rated health, health problems

#### **B Secondary focus**

- Respondent's spouse
- Mode of reporting : Proxy reports by respondent
- Socio-demographic data : Age
- Education : Highest level of education completed, whether respondent has high school diploma,

- Labor force participation/ employment/occupation : whether respondent attended college, on-the-job training  
: Current employment status, current occupation, last occupation
- C Other focus** : Respondent's parents
- Socio-demographic data : Whether father and mother are still alive
- Education : Highest level of education completed by mother/father
- Assets/earnings : Mother's main occupation while respondent was growing up, father's main occupation

### III. INFORMATION ON INTER/INTRA-GENERATIONAL RELATIONSHIPS

#### A Intergenerational transfers

- Financial transfers :
- Time/caregiving : Whether parents helped respondent settle in a new place if they moved recently
- Co-residence between adult children and parent : Household roster available to report whether respondent lives with parents, grandparents, great-grandparents, and children, asks respondent to identify where respondent's immediate family lives
- Quality of ties : Problems between respondent and children

#### B General questions on transfers

- Financial transfers : Whether respondent has received help from family members, amount of financial assistance received from family members
- Time/caregiving : Whether relative helped respondent settle in a new place, identification of the relative who helped respondent settle in, asks whether respondent can count on someone for childcare, provide advice on childrearing, whether respondent provides care to family members with health problems and whether it affects their work
- Co-residence between relatives and respondent : Number of relatives that live in the same household, whether respondent's family has taken in a relative or friend who needed a place to stay, identification of the friends or relatives who were taken in because they didn't have a place to go
- Social contact : Frequency of social contact with family and friends either in person, via mail or phone
- Quality of ties : Whether respondent's family is close to each other, respondent's satisfaction with his/her family life, respondent's closeness to Black community
- Proximity : Number of relatives that live in the same neighborhood, city, state, asks whether the reason for most recent move is to be closer to friends and family, respondent rated distance from relatives
- Expectations/obligations : Expectations to receive help from relatives

#### C Transfers with other individuals/organizations

##### Friends

- Financial transfers : Whether respondent received/gave financial assistance from/to friends
- Time/caregiving : Whether respondent received/gave non-financial assistance from/to friends
- Frequency of social contact : Frequency of social contact with friends in the past 12 months either in person, via telephone, or e-mail
- Proximity : Whether move was motivated to be near friends

##### Government

- Financial transfers : Government transfers such as unemployment compensation, general assistance, retirement benefits

##### Charity

- Time/caregiving : Type of volunteer work performed by respondent, number of hours spent volunteering

### IV. GENERAL ATTITUDES ABOUT THE FAMILY

- Division of labor within family : Attitudes on gender division of labor in the family, importance of having a man or a woman for money reasons or housework
- Parenting : Importance for respondent to have a man/woman in the house to raise children
- Norms on fertility :
- Norms/culture : Respondent rates his/her perceptions of Blacks by rating truthfulness of statements, such

as Blacks are hardworking, lazy, honest, liars, giving, selfish, whether he/she believes that Blacks shouldn't date whites, Blacks should only shop in Black stores, the effects of Civil Rights on respondent's prospects in life, impact of miniseries Roots

**V. FUNDING AGENCIES**

: National Institute of Mental Health  
Center for Study of Minority Group Mental Health

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\*See also the Family Connections across Generations and Nations Survey. The information in this summary was obtained, in part, from <http://webapp.icpsr.umich.edu/cocoom/n/ICPSR-Study/08512.xml> active in November 2006.

## FAMILY CONNECTIONS ACROSS GENERATIONS AND NATIONS\*

**WEBSITE** : <http://micda.psc.isr.umich.edu/project/detail.html?id=32839>

### I. DESIGN

- Data type : Survey of list sample generated in NSAL of U.S., Jamaica, and Guyana
- Dates collected : April 2004 through December 2005
- # of waves : 1 Wave

#### A Sample

- Target population : Individuals aged 13+ who resided in a consecutive 3-generation family
- Sample design : National multistage probability sample
- Primary sampling unit : Survey Research Center (SRC) areas
- Achieved N : U.S.: 2,304, Jamaica 1,559, Guyana 2,068
- Respondents : African American, white, and Caribbean Black aged 13 or older who spoke English
- Geographic scope : United States and the Caribbean
- Mode of data collection : U.S. CATI telephone interviews, Caribbean face-to-face paper and pencil
- Retrospective histories :
- Response rates : N/A

#### B Type of information gathered for inter/intragenerational relationships

- Multi-generational : Questions about respondent, spouse, parents, children. Also, interview conducted with 2 other family members that make up 3-generation triad.
- Co-residential & biological orientation : Sampling went beyond the HH level and asked about all family members, therefore a random triad could be selected. Families could have been represented nationally or internationally.

### II. CONTENT

#### A Main focus

- Mode of reporting : Self reports
- Socio-demographic data : Sex, date of birth, place of birth, interviewer reports about skin color, words used by respondent to describe his/her race, race, shade of skin color
- Education : Highest level of education completed, whether respondent has high school diploma, whether respondent attended college, degree earned
- Family background : Number of siblings while growing up, identification of father figure during childhood
- Marital history : Current marital, cohabitation, and dating status, duration of marriage
- Fertility history : Number of children, number of biological children, number of children under 18 living with respondent
- Labor force participation/employment/occupation : Current labor force and employment status, number of hours worked per week, number of years spent working full time and part time, main occupation, irregular work and volunteer work
- Assets/earnings : Homeownership, total family income in previous year, wage rate, fringe benefits, outside support, overseas support
- Health : Psychological well-being, respondent reports on their self esteem, self-rated health, health problems, self-reported dental health

#### B Secondary focus

- Mode of reporting : Respondent's spouse
- Mode of reporting : Proxy reports by respondent
- Socio-demographic data : Age, race, shade of skin color
- Education : Highest level of education completed, whether respondent has high school diploma, whether respondent attended college, degree earned,

- Labor force participation/employment/occupation : Current employment status, current occupation, last occupation

- C Other focus** : Respondent's parents
- Socio-demographic data : Race, place of birth
- Education : Highest level of education obtained
- Assets/earnings :

### III. INFORMATION ON INTER/INTRA-GENERATIONAL RELATIONSHIPS

#### A Intergenerational transfers

- Financial transfers : Anyone not in HH give money or other goods to support HH
- Time/caregiving : OASIS questions about responsibility for caregiving of elderly
- Co-residence between adult children and parent : Family listing available denote location of residence
- Quality of ties : Positive and negative interactions between respondent and parents, and children

#### B General questions on transfers

- Financial transfers : Anyone not in HH give money or other goods to support HH
- Time/caregiving : Social support received from other relatives
- Co-residence between relatives and respondent :
- Social contact : Frequency of social contact with family and friends either in person, via mail or phone
- Quality of ties : Positive and negative interactions between respondent and family members
- Proximity :
- Expectations/obligations :

#### C Transfers with other individuals/organizations

##### Friends

- Financial transfers :
- Time/caregiving :
- Frequency of social contact :
- Proximity :

##### Government

- Financial transfers : Government transfers such general assistance

##### Charity

- Time/caregiving : Type of volunteer work performed by respondent, number of hours spent volunteering

### IV. GENERAL ATTITUDES ABOUT THE FAMILY

- Division of labor within family :
- Parenting :
- Norms on fertility :
- Norms/culture : Caribbean acculturation questions, race socialization, exposure to media

### V. FUNDING AGENCIES : National Institute of Aging

National Institute on Drug Abuse

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\*See also the National Survey of Black Americans. The information in this summary was provided exclusively by the principal investigators of the data. The Family Connections Across Generations and Nations URL active in April 2007 was <http://sitemaker.umich.edu/3genstudy/home>.

## NATIONAL SURVEY OF FAMILIES AND HOUSEHOLDS (NSFH)

**WEBSITE** : <http://www.ssc.wisc.edu/nsfh.design.htm>

### I. DESIGN

- Data type : Longitudinal Survey on U.S. Populations
- Dates collected : Wave 1: 1987-1988  
Wave 2: 1992-1994  
Wave 3: 2001-2002

- # of waves : 3 waves

#### A Sample

- Target population : Noninstitutionalized persons aged 19 and older, living in a household and able to be interviewed in English or Spanish
- Sample design : Multistage area probability sample of households
- Primary sampling unit : ISR's 100 Primary Sampling Unit (PSU) National Sampling Frame that is based on 1985 population projections. The PSU consist of self representing areas (SMSA or Standard Consolidated Areas with a population of 2 million or more) and the rest of the country (SMSA or a combination of adjacent counties with a populations of 150,000 or more)
- Achieved N : Wave 1: 9,643 respondents in the main sample and 3,374 respondents in the over sample who were either the primary respondent or the spouse or cohabiting partner of the primary respondent  
Wave 2: 10,007 primary respondents from Wave 1; 5,624 spouses or cohabiting partners of primary respondent at Wave 2; 789 former spouses or partners who were interviewed at Wave 1; 1,415 focal children ages 10 to 17; 1,090 focal children ages 18 to 23, 802 proxy reports on spouses or cohabiting partners who were interviewed at Wave 1 but died in between waves, 3,348 randomly selected parent of primary respondent  
Wave 3: 4,073 primary respondents with a child eligible for focal child interviews at Wave 2; 2,793 spouses or cohabiting partners irrespective of the current status of their union with a child eligible for focal child interviews at Wave 2; 4,128 children eligible for focal child interviews ages 18 to 33; 4,914 primary respondents ages 45 and older without a child eligible for the focal child interviews at Wave 2; and 2,643 spouses or cohabiting partners of primary respondents interviewed at Wave 1 ages 45 or older without a child eligible for focal child interviews at Wave 2
- Respondents : Wave 1: one randomly selected adult in the household and their spouse or cohabiting partner at the time of the interview  
Wave 2: the original respondent, current spouse or current cohabiting partner, former spouse or partner interviewed at Wave 1, focal child ages 10 to 17 and ages 18 to 23, and one randomly selected parent of primary respondent.  
Wave 3: For those with a focal child eligible for the NSFH2 focal-child interview, NSFH3 telephone interviews include: original respondents, NSFH1 spouses or cohabiting partners, eligible focal "children," now ages 18-33, irrespective of whether they were interviewed at NSFH2. For those with no focal children eligible for the NSFH2 focal-child interviews, NSFH3 telephone interviews include: original respondents age 45 or older, NSFH1 spouses or cohabiting partners of primary respondents age 45 or older at NSFH3

- Geographic scope : Nationally representative
- Mode of data collection : Face-to-face interviews, self-administered questionnaires, telephone interviews
- Over-sampled populations : Blacks, Puerto Ricans, Mexican Americans, single-parent families, families with step-children, cohabiting couples and recently married persons
- Retrospective histories : Retrospective histories on marriage, cohabitation, education, employment, fertility, living arrangements in childhood, and departures and returns to/from their parental home
- Response rates : Baseline response rates are defined as the number of completed interviews over the number of successful screens minus the screens where they were not eligible for interviews. In Waves 2 and 3, response rates were defined as the number of completed self and proxy reports over the total sample size with the subtraction of all deceased respondents.  
Wave 1- screening rates: 88% (main sample), 94% (oversample), 91%(total)  
Wave 1- response rates: 74% (main sample), 77% (over-sample), 74% (total)  
Wave 2: 94% of NSFH 1 respondents were located and 87% of those located were successfully interviewed for an overall response rate of 82%  
Wave 3: 55% of NSFH 2 respondents completed self reports, 71% of primary respondents that completed Wave 2, 22% of primary respondents who completed the interview at Wave 1 and not in Wave 2, 68% of spouses who completed the survey at Wave 2, and 48% of focal children\*
- Source : <http://www.ssc.wisc.edu/nsfh/wave3/fieldreport.doc> (p. 42)

**B Type of information gathered for inter/intragenerational relationships**

- Multi-generational : Primary respondent, parents, and focal children are represented by self and/or proxy reports. Also includes questions on primary respondent's grandparents
- Co-residential & biological orientation : Sampled with a focus on co-residential relationships, but also includes information on biological relationships including parents and children who may not reside with the primary respondent

**II. CONTENT**

- A Main focus** : Primary respondent
- Mode of reporting : Self reports in all waves and proxy reports collected in Wave 3 from NSFH 1 spouses if primary respondent was too ill
- Socio-demographic data : Race/ethnicity, sex, age
- Education : Highest level of school completed, educational history
- Family background : Asks whether primary respondent lived with biological parents from time of birth to age 19. Parent calendar sequence section details primary respondent's living arrangement histories including age at which respondent lived with biological parents, step parents, and others
- Marital history : Current marital status, current dating status, marital history, cohabitation history
- Fertility history : Full fertility history including information on number of biological, adopted, and step children, co-resident and non-resident children, number of children by age and sex
- Labor force participation/employment/occupation : Current labor force, employment, and unemployment status, full-time/part-time job, number of hours worked per week, work history, change of occupation between waves, most recent or current occupation
- Assets/earnings : Homeownership, debts, wage rate, gross salary before deductions, income
- Health : Self reports on primary respondent's general health, height, weight
- B Secondary focus** : Current spouse or cohabiting partner (current spouse)  
In Wave 1, the current spouse is asked to complete a short questionnaire; however, in Wave 2, current spouses are interviewed with questions that are almost identical to those of the primary respondent
- Mode of reporting : Self and proxy reports



- Socio-demographic data : Race/ethnicity, age, date of birth
- Education : Highest grade completed, school enrollment status during first year of marriage,
- Family background : Asks whether current spouse lived with both parents from the time they were born until they left home to be on their own, identification of ages when spouse lived with biological mother/father
- Marital history : Age at first marriage, marital status, cohabitation prior to current marriage, date of marriage
- Fertility history : Fertility histories including information on the number of children prior to and during their marriage to the primary respondent, future birth intentions
- Labor force participation/employment/occupation : Current labor force, employment, and unemployment status, full-time/part-time job, number of hours worked per week, work history, change of occupation between waves, most recent or current occupation
- Assets/earnings : Total earnings from a diverse array of sources including wages, tips, farm business in previous year, gross salary in previous year
- Health : Self-rated health
- C Other focus** : Former spouse if they responded to Wave 1 interviews and split with primary respondent after Wave 1 interviews. In Wave 2, current spouse is interviewed with questions that are almost identical to those of the primary respondent.
- Mode of reporting : Self and proxy reports
- Socio-demographic data : Race/ethnicity, age, date of birth
- Education : Highest grade completed, highest degree obtained, degrees obtained between waves, current school enrollment, full-time and part-time school enrollment status
- Family background : Family structure at 14
- Marital history : Dates of marriages, separations, divorces, and widowhood since Wave 1, dates of beginning and ending cohabitations since Wave 1
- Fertility history : Fertility histories, number of children prior to and during marriage, future birth intentions
- Labor force participation/employment/occupation : Current labor force, employment, and unemployment status, full-time/part-time job, number of hours worked per week, work history, change of occupation between waves, most recent or current occupation
- Assets/earnings : Total earnings
- Health : Self-rated health
- D Other focus** : Parent or in-laws of primary respondent
- Mode of reporting : Self and proxy reports
- Socio-demographic data : Race/ethnicity, sex, asks whether they are still living, age if alive, year of death if dead
- Education : Highest grade completed
- Marital history : Current marital status, number of times married, marital histories
- Fertility history : Number of biological and adopted children
- Labor force participation/employment/occupation : Whether they were employed in the last 12 months, occupation of father or step parent at 16, retirement
- Assets/earnings : Homeownership
- Health : Self-rated health, depression scale, alcohol use, hospitalization, memory
- E Other focus** : Child of primary respondent
- Mode of reporting : Self report from focal child and proxy reports provided by primary respondent and primary respondent's spouse or cohabiting partner
- Socio-demographic data : Whether the child is alive, sex, age, date of birth
- Education : Current school enrollment, highest level of education completed, grade in school, achieved grade (A, B,...,F) in Wave 2, educational histories
- Family background : Whether child is living with two biological parents, living arrangement history, time when separated with biological mother or father for a period of six months or more)

- Marital history : Current marital status, marital history, cohabitation history, and dating history for focal children 18 years and older
- Fertility history : Current pregnancy, number of children, date of birth of each child, living arrangement of each child for focal children older than 18
- Labor force participation/employment/occupation : Employment status, number of hours worked, work history, current or most recent occupation
- Health : Emotional health, physical health, injuries, illness
- F Other focus** : Siblings of primary respondent
- Mode of reporting : Proxy interviews
- Socio-demographic data : Relative age (older or younger than respondent), sex, relationship with respondent (full, half, and step siblings)
- G Other focus** : Includes information on the educational attainment of current and former spouse's parent, includes information on the focal child's parents if they are not primary respondent's current or former spouse or cohabiting partner

### III. INFORMATION ON INTER/INTRA-GENERATIONAL RELATIONSHIPS

#### A Intergenerational transfers

- Financial transfers : Whether primary respondent or spouse gave/received financial assistance to/from their children/ parents in the last 12 months
- Time/caregiving : Number of hours primary respondent or spouse spent helping parents or in-laws, number of hours respondent spends with children, frequency with which primary respondent performs activities, such as eating breakfast or engaging in leisure activities with his/her children, number of nights primary respondent's grandchildren spent the night in respondent's home without their parents
- Co-residence between adult children and parent : Age at which respondent left parents' home for more than 4 months, start and end date of parents' residence in primary respondent's home after respondent was on their own, Whether respondent's adult children or step children are still living at primary respondent's home
- Proximity : Distance between child's place of residence and respondent's place of residence, distance between parent/in-law's and respondent's place of residence
- Social contact : Frequency of primary respondent's contact with their parents, focal child's contact with biological parents, including information on the frequency of contact between focal child and non-resident parents in the last 12 months
- Quality of ties : Quality of relationship between primary respondent and parents, quality of relationship between focal child and parents, including the number of disagreements between the focal child and the parent, primary respondent is asked to rate his/her relationship with biological or step children
- Expectations/obligations : General questions about attitudes about obligation and expectations for help, advice

#### B Intragenerational transfers

- Financial transfers :
- Time/caregiving : Amount of time focal child spends with siblings
- Co-residence between siblings : Household roster information on co-residential status between adult siblings
- Proximity : Distance between respondent's and sibling's place of residence
- Social contact : Frequency of social contact between primary respondent and siblings
- Quality of ties : Focal child is asked to describe how well his/her siblings get along compared to other families
- Expectations/obligations : Likelihood that focal child will seek advice from any sibling if they are depressed or making a major decision

#### C General questions on transfers

- Financial transfers : Whether respondent received any gifts or loans over \$1000 dollars in the last 12 months

- Time/caregiving : from relatives  
: Asks whether respondent provided care to a household member requiring assistance in the last 12 months, year of first assistance, identification of relative who provided childcare during respondent's working hours
- Co-residence between relatives and respondent : Household roster available and partial residential histories
- Expectations/obligations : Existence of relatives or friends respondent can count on for advice

**D Transfers with other individuals/organizations**

**Government**

- Financial transfers : Whether respondent or family members received public assistance, amount of transfers from government, histories of public assistance, public assistance received by household members

**Friends**

- Social contact : Number of close friends by sex

**IV. GENERAL ATTITUDES ON THE FAMILY**

- Division of labor within family : Perception on the effect of mother's work on children's well-being
- Parenting : Attitudes on parenting and step parenting
- Family function : Norms on family obligation including question on whether adult children care for their elderly parents
- Norms on fertility : Number of additional children by child's gender, ideal family size, general reasons for desiring more children
- Norms/culture : Attitudes about cohabitation, attitudes about divorce

**V. SPECIAL SUPPLEMENTAL FILES**

- List of supplemental files :

**VI. FUNDING AGENCIES**

- : National Institute of Child Health and Human Development  
National Institute of Aging

**VII. ADDITIONAL INFORMATION AVAILABLE FROM THE PRINCIPAL INVESTIGATORS**

- The PI indicated that updated response rates for focal children may be available. The response rates are listed here are based on the field reports cited above.

# NATIONAL STUDY OF MIDLIFE DEVELOPMENT IN THE UNITED STATES (MIDUS)\*

**WEBSITE** : <http://midus.wisc.edu/>  
<http://midmac.med.harvard.edu/tech.html> (technical report)

## I. DESIGN

- Data type : Longitudinal Survey on U.S. Populations
- Dates collected : Wave 1: 1994-1995, Wave 2: 2004-2005
- # of waves : 2 waves\*
- A Sample**
- Target population : Nationally representative sample of non-institutionalized, English speaking adults in the U.S. between the ages of 25 and 74
- Sample design : Random digit dial sample of noninstitutionalized, English speaking adults aged 25-74 selected from working telephone banks in the coterminous U.S.
- Sampling frame : List of telephones from working telephone banks in coterminous U.S.
- Achieved N : Wave 1- Main sample: 4,242 adults ages 25 to 74, Sibling sample: 951, Twin Sample: 1,996
- Respondents : Adults ages 25 to 74 and their (twin) siblings
- Geographic scope : Nationally representative sample of the U.S.
- Mode of data collection : Telephone interviews and self administered questionnaires by mail
- Over-sampled populations : Older men, sibling pairs, twin pairs, 5 metropolitan areas (Boston, Atlanta, Chicago, Phoenix, San Francisco)
- Special feature : Sibling and twin samples
- Retrospective histories : Partial retrospective histories on employment and marriage; maternal and paternal affection, discipline, and generosity in childhood
- Response rates : In Wave 1, the response rate for the main sample collected through random digit dialing was 70%. Of those who completed telephone interviews, 86% completed self-administered questionnaires yielding an overall response rate of 61%
- B Type of information gathered for inter/intragenerational relationships**
- Multi-generational : Respondent provides proxy reports on his/her parents and children
- Co-residential & biological orientation : MIDUS collects information on co-residential relationships. Oversample is based on biological relationships including twin and sibling samples, but

## II. CONTENT

- A Main focus** : Adults ages 25 to 74 (main respondent)
- Mode of reporting : Self reports
- Socio-demographic data : Age, sex, ethnicity, whether respondent lived in an institutionalized setting
- Education : Highest grade completed, highest degree received
- Cognitive ability : Adults are administered the word list recall test and Wave 2 includes telephone administered speed of information processing assessments
- Family background : Whether respondent lived with both biological parents at 16, whether lived in a female headed household while growing up, reasons for not living with both biological parents, identification of male household head during respondent's childhood, number of siblings while respondent was growing up
- Marital history : Current marital or cohabitation status, number of times married, incomplete marital histories including date of entry into first and current marriage, date of separation from first and current marriage
- Fertility history : Number of biological children, date of birth of each child

- Labor force participation/employment/occupation : Description of work situations now and 10 years ago including employment status, retirement, schooling, incomplete educational histories, current occupation, full-time or part-time status, current occupation, supervisory role, number of overnight shifts  
For current job: work hours can be derived from start/end times for work and work scheduling is available for respondent and spouse
- Assets/earnings : Assets, absence of telephone at home in the past 5 years, debts, household income in the last 12 months, pension plan, respondent rates their current financial situation
- Health : Self-rated health, self-rated emotional health, illness, disabilities, health behaviors, height, weight, medical care, smoking and alcohol consumption in the last 12 months, health insurance, biomarkers collected to determine level of functioning on immune system, cardiovascular processes, medical histories, brain electrical activity collected to determine levels of stress

**B Secondary focus**

- Mode of reporting : Proxy reports by adult between 25 and 74 years old
- Socio-demographic data : Date of birth, date of death if deceased, whether parents were born in the US
- Education : Highest level of education completed
- Marital history : Current marital or cohabitation status
- Labor force participation/employment/occupation : Current employment status, unemployment in the last 12 months, reasons for quitting
- Assets/earnings : Personal earnings income, pension income, social security income
- Health : Respondent rated physical and emotional health, disability, and illness

**C Other focus**

- Mode of reporting : Proxy reports by main respondent
- Socio-demographic data : Year of birth, sex, whether still alive, age, respondent's age when mother/father died if deceased
- Education : Highest level of education mother completed
- Marital history : Date of separation between parents in case of a divorce
- Labor force participation/employment/occupation : Whether mother worked during respondent's childhood, mother's occupation during respondent's childhood, mother's job characteristics including if she was a supervisor, roles, father's occupation when respondent was growing up
- Assets/earnings : Current financial health compared to parents when parents were respondent's age
- Health : Main respondent reports on their parent's health

**III. INFORMATION ON INTER/INTRA-GENERATIONAL RELATIONSHIPS**

**A Intergenerational transfers**

- Quality of ties : Respondent rates his/her relationship with mother and father figure when respondent was growing up; retrospective report of psychological and physical violence during childhood from mother, father, brother, sister; retrospective report of maternal and paternal affection, discipline, and generosity during childhood

**B General questions on transfers**

- Financial transfers : Amount of money per month given to/received from parents, in-laws, children
- Time/caregiving : Number of hours per month spent helping/receiving assistance from spouse, children, parents, in-laws, other relatives, friends, neighbors, time diaries provide further information on the amount of assistance received/given
- Co-residence : Co-residence in the past 12 months with adult children, parents, and other relatives
- Social contact : Frequency of contact with parents, children, relatives, friends

**C Transfers with other individuals/organizations**

**Government**

- Financial transfers : Whether respondent's family was on welfare or AFDC for a period of over 6 months during respondent's childhood and adolescence

**Charity**

- Financial transfers : Dollars per month given to other individuals (not kin), religious groups, political organizations; dollars per month received from religious groups, non-government orgs
- Time/caregiving : Hours per month spent in nursing homes, school, volunteer work, church

**IV. GENERAL ATTITUDES ON THE FAMILY**

- Division of labor within family : Relationship between pay and division of labor in households, gender equality at home
- Family function : Importance of marriage, effect of marital dissolution for children, difficulties of single parenthood, work to family and family to work perceived positive and negative spillover
- Norms/culture : Altruism, normative obligation to primary and secondary kin and friends; civic responsibility; gender attitudes, quality of ties with partner, children, sexuality

**V. SPECIAL SUPPLEMENTAL FILES**

- List of supplemental files : (1) Biomarker data collected to determine functioning in hypothalamic-pituitary-adrenal axis, the autonomic nervous system, the immune system, cardiovascular system, metabolic processes, and brain electrical activity measures including (EEG, fMRI)

**VI. FUNDING AGENCIES**

- : John D. and Catherine T. MacArthur Foundation  
National Institute of Aging  
Institute of Aging at the University of Wisconsin, Madison

**VII. ADDITIONAL INFORMATION PROVIDED BY THE PRINCIPAL INVESTIGATORS**

- Health : Daily stressors (work overload, family arguments), chronic stressors (caregiving, work-family spillover), acute stressors (divorce, remarriage, job change)
- List of supplemental files : (1) Life event history collects information on age and effect of assaults, parental drinking, difficulty with in-laws, infidelity, family death, child accident/injury, welfare  
(2) Data on psycho-social factors includes information on personality traits, well-being, sense of control, coping strategies, goal orientations, perceived discrimination, social support, social well-being, generativity  
(3) Data on religion and spirituality includes information on religious identification, religious practices, religious support, religious coping, spiritual experiences, mindfulness

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\*For wave 2, only the questionnaires were available when the information in this summary was compiled.

## NEW IMMIGRANT SURVEY (NIS)\*

- WEBSITE** : <http://nis.princeton.edu/index.html>
- I. DESIGN**
- Data type : Longitudinal Survey of U.S. Populations
  - Dates collected : NIS-Pilot: 1996  
NIS-2003-1: June 2003 to June 2004  
Second round planned for Summer 2007
  - # of waves : NIS-Pilot completed, NIS-2003 baseline completed, and follow-up rounds planned
- A Sample**
- Target population : Nationally representative sample of adult immigrants admitted to legal permanent residence during a specified period and two types of child immigrants (adopted orphan and child of U.S. citizen) who would not be found in the households of adult immigrants
  - Sample design : Stratified random sample
  - Sampling frame : Electronic administrative records compiled for new immigrants by the U.S. government
  - Achieved N : NIS-Pilot: 1,984 immigrants (1,839 adult and 145 child immigrants)  
NIS-2003-1: 9,383 immigrants (8,573 adult and 810 child immigrants)
  - Respondents : Sampled adult immigrants, sponsor-parents of sampled child immigrants, spouses of sponsor parents, sampled children, and other children living in the household of sampled adult and child immigrant
  - Geographic scope : 85 Metropolitan Statistical Areas (MSAs) and 38 counties with high representation of immigrants who have been admitted to legal permanent residence
  - Mode of data collection : NIS-Pilot: telephone interviews  
NIS-2003-1: Face-to-face interviews, cognitive assessments, and telephone interviews
  - Special feature : Several variables based on INS records. Although these variables are collapsed or recoded for confidentiality reasons, this feature may allow linkage with INS records
  - Over-sampled populations : Principals who entered the U.S. with employment visas are sampled twice the rate of others. Principals who entered the U.S. with diversity visas are sampled three times the rate of others
  - Retrospective histories : Retrospective histories on education, employment, migration, marriage, and fertility
  - Response rates : NIS-Pilot: 62% of those sampled (Jasso et al., 2000)  
NIS-2003-1: 69% in Adult Sample
- B Type of information gathered for inter/intragenerational relationships**
- Multi-generational : Interviews were conducted for adult respondents and children living in the household of the sampled adult and child immigrants (Jasso et al., 2005)
  - Co-residential & biological orientation : Interviews with co-resident spouses
- II. CONTENT**
- A Main focus** : New legal permanent resident
- Mode of reporting : Self reports in Adult Sample, proxy reports from parents for the Child Sample, and use of immigration record
  - Socio-demographic data : Age, month and year of birth, sex, country of birth, country of citizenship
  - Education : Current enrollment status, highest level of schooling completed, highest level of schooling completed in the U.S., educational histories
  - Marital history : Current marital status, marital history including information on number of times married
  - Fertility history : Number of biological and adopted children, date of birth and sex of each child
  - Labor force participation/ : Employment status at each wave, pre-immigration and post-immigrant employment

- employment/occupation : histories include information on hours worked per week in each job, occupation
- Assets/earnings : Homeownership, value of business, earnings in the past 12 months, wage rate, various sources of income in the last 12 months
- Health : Self rated health, health compared to a year ago, illness, disability, smoking, alcohol use, depression
- B Secondary focus** : Spouse of sampled adult immigrant, sponsor-parents of sampled child immigrant
- Mode of reporting : Self reports from adult immigrants and proxy reports from sponsor parent for child immigrants
- Socio-demographic data : Year of birth, country of birth
- Education : Current enrollment status, highest level of schooling completed, highest level of schooling completed in the US, educational histories
- Marital history : Current marital status
- Fertility history :
- Labor force participation/employment/occupation : Current employment status, full- and part-time status, job search over the past 4 weeks, employment histories, current occupation
- Assets/earnings : Homeownership, value of business, earnings in the past 12 months, wage rate, various sources of income in the last 12 months
- Health : Self-rated health, health compared to a year ago, illness, disability, smoking, alcohol use, depression
- C Other focus** : Children in the households of sampled adult and child immigrants
- Mode of reporting : Self and proxy reports by adult respondents
- Socio-demographic data : Sex, age, year of birth, place of birth, whether still alive, year of entry into the U.S.
- Education : Current enrollment in school, current enrollment in ESL programs
- Cognitive ability : Woodcock Johnson Test for Achievement, Digit Span Attention Tests
- Family background : Household roster available
- Health : Parental reports on child's health, limitations, year when child was afflicted with limitation, illness, hospitalization due to illness

### III. INFORMATION ON INTER/INTRA-GENERATIONAL RELATIONSHIPS

#### A Intergenerational transfer

- Financial transfers : Amount of financial assistance that sampled adult gave to/received from parents, in-laws, and children in the previous 12 months, value of non-financial assistance in the form of goods and services given to/received from parents, in-laws, and children
- Time/caregiving : School activities performed by sampled adult or spouse or sponsor-parent and spouse such as attending a school meeting or speaking to a counselor
- Co-residence with adult : Household roster available
- Quality of ties :

#### B Intragenerational transfer

- Financial transfers :
- Time/caregiving :
- Co-residence with adult : Household roster available
- siblings

#### C General questions on transfer

- Financial transfers : Number of relatives who work in the family business
- Time/caregiving : Time scheduled by a family member to take children to museum, outing, etc. in the past 12 months
- Co-residence between relatives and respondent : Household roster available

#### D Transfers with other individuals/organizations

- **Friends**
- Financial transfers : Amount of financial assistance to and from friends



- Frequency of social contact :

**IV. SPECIAL SUPPLEMENTAL FILES**

- List of supplemental files : Possible linkage with files from U.S. Citizenship and Immigration Services

**V. FUNDING AGENCIES**

- : National Institutes of Health (NIH)
- : National Institute of Child Health and Human Development (NICHD)
- : National Institute on Aging (NIA)/Office of Behavioral and Social Science Research
- : National Science Foundation (NSF)
- : U.S. Immigration and Naturalization Service, U. S. Citizenship and Immigration Services
- : Office of the Assistant Secretary for Planning and Evaluation (ASPE), HHS
- : Pew Charitable Trusts

**VI. ADDITIONAL INFORMATION PROVIDED BY THE PRINCIPAL INVESTIGATORS**

- Retrospective histories : Retrospective histories on language and religion

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\*The information in this summary was compiled using the documentation for the NIS-Pilot and NIS-2003 baseline surveys. All information in the summary pertains to NIS-2003 unless explicitly noted.

## PANEL STUDY OF INCOME DYNAMICS (PSID)\*

**WEBSITE** : <http://psidonline.isr.umich.edu/data/>

### I. DESIGN

- Data type : Longitudinal Survey on U.S. Populations
- Dates collected : Survey was collected annually between 1968 and 1996 and biennially since 1997
- # of waves : 34 Waves
- A Sample**
- Target population : Individuals who were members of a nationally representative sample of families in the U.S. in 1968 plus national sample of low-income families from Survey of Economic Opportunity (SEO) study and their offspring
- Background : At its origin, the PSID consisted of 2 samples: a cross-sectional nationally representative sample (SRC) and a national sample of low income families (SEO). The individuals in families sampled in these two samples in 1968 are said to have the "PSID gene" and they are interviewed and re-interviewed in every year whether or not they live in the same dwelling or with the same people. Individuals with the PSID gene "transmit" this gene to their biological (or legally adopted) offspring. Thus when a child with the PSID gene that was sampled in 1968 -- or, more generally, a biological (or adopted) offspring of someone with the PSID gene subsequently -- form their families/household of destination as adults, these families/households are said to have "split off" from their original families/households of origin and, in principle, are followed by the PSID in subsequent waves of the Study.
- Sample design : The Survey Research Center (SRC) sample in 1968 is an equal probability sample of families from 48 states in 1968  
The Survey of Economic Opportunity (SEO) sample in 1968 is an equal probability sample of low families with heads under the age of 60 in Standard Metropolitan Areas and non-Standard Metropolitan Areas in the South in 1968
- Primary sampling unit : SRC sample: 48 states  
SEO sample: Standard Metropolitan Statistical Areas (SMSA) and non-Standard Metropolitan Areas in the South in 1968
- Special features : In 1990, 2,000 Mexican, Puerto Rican, and Cuban households were added and then dropped in 1995. In 1997, 441 Mexican, Puerto Rican, and Cuban families were added again to the sample. Also, in 1997, the low income sample was trimmed by dropping two-thirds of the SEO sample, but a portion of the dropped sample of families headed by an African American who had at least 1 child below the age of 12 were re-instated in the sample. In 1997/1999 a refresher sample of 511 post 1968 immigrant families was added. Most family heads in the immigrant sample identify their race as Latino (52.4%), followed by Asian (21.1%), white (11.7%), black (7.8%), and other (6.8%).
- Respondents : Heads of families interviewed in 1968, heads of families containing a member of the family originally sampled in 1968, and, more generally, the biological (or adopted) children that have the PSID gene
- Achieved N : 1968: 18,230 individuals in 4,820 families; 1969: 17,211 individuals in 4,460 families; 1970: 17,350 individuals in 4,645 families; 1971: 17,590 individuals in 4,840 families; 1972: 18,051 individuals in 5,060 families; 1973: 18,236 individuals in 5,285 families; 1974: 18,395 individuals in 5,517 families; 1975: 18,625 individuals in 5,725 families,

1976: 18,768 individuals in 5,862 families; 1977: 18,998 individuals in 6,007 families, 1978: 19,140 individuals in 6,154 families, 1979: 19,443 individuals in 6,373 families, 1980: 19,747 individuals in 6,533 families; 1981: 19,796 individuals in 6,620 families; 1982: 20,112 individuals in 6,742 families; 1983: 20,329 individuals in 6,852 families; 1984: 20,393 individuals in 6,918 families; 1985: 20,680 individuals in 7,032 families; 1986: 20,437 individuals in 7,018 families; 1987: 20,486 individuals in 7,061 families; 1988: 20,506 individuals in 7,114 families; 1989: 20,451 individuals in 7,114 families; 1990: 28,197 individuals in 9,371 families; 1991: 27,845 individuals in 9,363 families; 1992: 29,275 individuals in 9,829 families; 1993: 29,726 individuals in 9,977 families; 1994: 31,546 individuals in 10,765 families; 1995: 29,884 individuals in 10,401 families; 1996: 21,810 individuals in 8,511 families; 1997: 19,760 individuals in 6,748 families; 1999: 20,514 individuals in 6,997 families; 2001: 21,396 individuals in 7,406 families; 2003: 22,290 individuals in 7,822 families; 2005: N/A

- Geographic scope : Coterminous states in the U.S.
- Mode of data collection : Face-to-face interviews, telephone interviews, and self-administered questionnaires
- Over-sampled populations : Low-income households, Puerto Rican, Cuban, and Mexican households, and households headed by new immigrants
- Retrospective histories : Retrospective and prospective histories on living arrangements, marriage, fertility, employment, and occupation
- Response rates : 1968: 76% of sampled families, 1969: 89%, 1970+: 97%~99% 1988: 56% cumulative
- Special modules : PSID has collected multiple special topic modules: Activity Saving Files 1984-1989 and 1989-1994; Estimating Risk Tolerance 1996; Family Income Plus Files 1994-2001; Health Care Burden File 1993; Other Family Unit Member Income Detail File 1993; Hours of Work and Wage Files 1994-2001; Wealth Files 1984, 1989, 1994, 1999, 2001; Time and Money Transfer File 1988; Self-Administered Health Supplement 1990; Telephone Health Supplement 1990; Parent Health Supplement 1991; Childbirth and Adoption History File 1985-2001; Marriage History File 1985-2001; Relationship File 1968-1985; Geocode Match Files;

**B Type of information gathered for inter/intragenerational relationships**

- Multi-generational : Information is collected on the household head, their children, their grandchildren, and on occasion, great-grandchildren. Note that some of this information is collected directly from those in subsequent generations to the household head due to the PSID gene following rule noted above. Furthermore, the PSID Child Supplement specifically samples respondents and their children
- Co-residential & biological orientation : PSID was initially sampled at the household level, and therefore, it was sampled with an orientation toward co-residential relationships. However, the inheritance of the PSID gene across generations and the formation of split-off families ensures that the PSID sample has a strong orientation toward biological ties and can be linked across generation regardless of co-residence

**II. CONTENT**

- A Main focus** : Household head
- Mode of reporting : Self reports
  - Socio-demographic data : Race/ethnicity, age, sex
  - Education : Enrollment in school at each wave, highest level of education completed, on-the-job training
  - Marital history : Marital status at each wave, marital history includes information on the number of marriages, start and end date of each marriage
  - Fertility history : Whether head ever had children, fertility history includes information on when head's first child was born
  - Labor force participation/ : Labor force and employment status at each wave, employment history includes

employment/occupation	:	information on main occupation, number of years head worked for present employer, number of jobs that head has had in the ten years prior to the interview, whether head has been laid off from work for more than a month due to illness in the year prior to the interview at each wave, number of days head was unemployed in the year prior to the interview at each wave, number of days head was sick in the year prior to the interview at each wave, whether head is a member of a labor union at each wave
- Assets/earnings	:	Homeownership, present value of their house, whether family owns a car, whether family has any debt, amount of principal and secondary mortgage, total family income in the year prior to the interview at each wave
- Health	:	Current health status, health status from birth to the age of 16, health conditions including hypertension and arthritis, limitation to daily activities, use of health care, illness, accidents, smoking, alcohol use, dietary knowledge
<b>B Secondary focus</b>	:	Spouse of head
- Mode of reporting	:	Proxy report by head
- Socio-demographic data	:	Age
- Education	:	Highest level of education completed by each wave, whether spouse has a college degree, whether spouse obtained any informal schooling by each wave
- Marital history	:	Marital history includes information on number of times spouse got married, start and end date of different marriages
- Fertility history	:	Child and adoption history details information on year of birth of spouse's child with head
- Labor force participation/ employment/occupation	:	Labor force and employment status in the year prior to the interview date at each wave, number of annual hours spouse worked for pay in the year prior to the interview at each wave, number of annual hours of work spouse lost due to illness in the year prior to the interview at each wave
- Assets/earnings	:	Homeownership, amount of wife's income by source of income in the year prior to interview at each wave
- Health	:	Illness, disability, health behaviors, health care access
<b>C Other focus</b>	:	Head's parent or in-law (head's parent)
- Mode of reporting	:	Proxy report by female head or wife in 1991 Parent Health Supplement
- Socio-demographic data	:	Whether head's mother/father is still alive, date of parent's death if deceased
- Marital history	:	Whether parents are married to each other, marital or cohabitation status in 1991, marital history includes information on start and end date of marriage, move in/out date for cohabitation
- Assets/earnings	:	Whether head's parent has a net worth exceeding 25,000 dollars, 100,000 dollars, amount of debt, whether head's parent has an annual income exceeding 20,000 dollars, 50,000 dollars
- Health	:	Whether parent has cancer, angina, allergies, and other illnesses, whether parent is not able to live independently due to illness
<b>D Other focus</b>	:	Head's child
- Mode of reporting	:	Proxy reports by head
- Socio-demographic data	:	Race/ethnicity, sex, age, age at death if deceased recorded in the Child Birth Supplement
- Education	:	Whether head's child stopped attending school in the survey year at each wave, highest level of education completed by the survey year at each wave, highest level of education head expects child to complete at each wave
- Family background	:	Whether head's child under 25 does not live with household head at the time of the interview at each wave, socio-demographic information on head's child such as age, sex, school enrollment are provided at each wave

- Health : Birth weight
- E Other focus** : Child between 0 and 12 years of age in a PSID family in 1997 sampled for the PSID Child Development Supplement (CDS child)
- Mode of reporting : Self report by child 8 years or older, proxy reports by primary caregiver, child assessments
- Socio-demographic data : Race/ethnicity, age, sex
- Education : Enrollment in school at CDS 1 and CDS 2, enrollment in a gifted program at CDS 1 and 2, type of school CDS child attends (Public, Religious, Private), whether child has ever been expelled from school, whether child has ever been held back from school
- Cognitive ability : Woodcock-Johnson Revised Tests of Achievement and the WISC Digit Span Test for Memory was administered to the child
- Family background : Whether child lives with biological father at the time of CDS 1 and 2, date when non-resident father last lived with the child
- Health : Primary care giver rates CDS child's health, medical diagnosis of illness such as epilepsy, diabetes, number of hospitalizations, year of hospitalizations, date last seen a doctor or nurse due to injury in the last 12 months, number of school days missed in the last 12 months due to illness or injury, health insurance coverage

### III. INFORMATION ON INTER/INTRA-GENERATIONAL RELATIONSHIPS

#### A Intergenerational transfer

- Financial transfers : Whether head/spouse gave/received financial assistance to/from parents/in-laws, amount of financial assistance given/received, identification of person who gave/received financial assistance as reported in the Time and Money Transfer Files
- Time/caregiving : Non-financial transfer received from/given to respondent's parents/in-laws, activities performed with CDS child in the past 12 months (wash/fold clothes, wash dishes together, go to the store, do yard work together)
- Co-residence between adult children and parent : Household roster available
- Proximity : Whether CDS child's non-resident father/mother lives in the same neighborhood, same city, and same state as CDS child, geocodes for place of residence available on all PSID gene members in a family
- Social contact : Frequency of contact between CDS child and non-resident father/mother either in person, via e-mail, via telephone in the past 12 months as reported by primary caregiver

#### B General questions on transfers

- Financial transfers : Financial burden assumed due to immediate or extended family's health care costs
- Time/caregiving : Whether CDS child was taken care of by relative on a regular basis, date of childcare, age of CDS child when they were taken care of by a relative on a regular basis
- Co-residence between relatives and respondent : Household roster information available
- Proximity : Proximity of respondent's residence with that of friends and relatives, number of relatives and friends that live in the same neighborhood as respondent
- Quality of ties : Number of CDS child's closest friends that the primary caregiver knows by sight, number of CDS child's closest friends' parents primary caregiver knows by sight, primary caregiver reports frequency of conflict between themselves and non-resident father on CDS child's leisure, religious, and school organized activity

#### C Transfers to/from other individuals/organizations

##### Government

- Financial transfers : Whether family received food stamps, AFDC/TANF, SSI, unemployment compensation, VA pension in the year prior to the interview

- Time/caregiving : Whether CDS child was in childcare provided by Head Start program, date when CDS child was enrolled in the Head Start program

**Charities**

- Time/caregiving : Whether head participates in social clubs or other organizations at each wave, amount of time spent per week doing volunteer work

**IV. GENERAL ATTITUDES ON THE FAMILY**

- Division of labor within family : Performance of household chores by husband and wife
- Parenting : Parenting, employed mother and relationship to children
- Norms/culture : Attitudes for/against cohabitation

**V. SPECIAL SUPPLEMENTAL FILES**

- List of supplemental files : PSID Child Supplement collects additional information on parents and children between the ages of 0 and 12 in 1997. It can be linked to the Department of Education's Common Core Data to obtain information about the child's school environment; Death Files permit linkage to the National Death Index; Medical Care File permit linkage to files in Medicare.

**VI. FUNDING AGENCIES**

- : Office of Economic Opportunity
- Assistant Secretary for Planning and Evaluation of the Department of Health Education and Welfare (now Health and Human Services)
- Departments of Labor and Agriculture
- National Science Foundation
- National Institute of Child Health and Human Development
- National Institute of Aging
- Ford Foundation
- Sloan Foundation
- Rockefeller Foundation

**VII. ADDITIONAL INFORMATION PROVIDED BY THE PRINCIPAL INVESTIGATORS**

- Respondents : A knowledgeable proxy may also respond
- Health of head and spouse : Information on mental health, whether respondent exercises
- Special modules: : Mortality File

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\*Documentation for the 2005 PSID was unavailable when the information in this summary was compiled.

## SURVEY OF HEALTH, AGEING, AND RETIREMENT IN EUROPE (SHARE)

**WEBSITE** : <http://www.share-project.org>

### I. DESIGN

- Data type : Longitudinal Survey on Foreign-Born Elderly Populations
- Dates collected : Austria- Core Sample: May 2004 to October 2004  
Denmark- Core Sample: May 2004 to October 2004  
France- Core Sample: October 2004 to November 2004  
Vignette Sample: June 2005 to July 2005  
Germany- Core Sample: May 2004 to October 2004  
Vignette Sample: May 2004 to October 2004  
Greece- Core Sample: May 2004 to October 2004  
Vignette Sample: January 2005 to March 2005  
Italy- Core Sample: May 2004 to October 2004  
Vignette Sample: August 2004 to December 2004  
Netherlands- Core Sample: May 2004 to October 2004  
Vignette Sample: August 2005 to December 2005  
Spain- Core Sample: May 2004 to October 2004  
Vignette Sample: November 2004 to December 2004  
Sweden- Core Sample: May 2004 to December 2004  
Vignette Sample: November 2004 to December 2004  
Supplementary Sample: November 2004 to December 2004  
Switzerland- Core Sample: May 2004 to October 2004
- # of waves : 1 wave in each country
- A Sample**
- Target population : Varies by country  
Austria: All German speaking residents born in 1954 or earlier and their spouses/ partners at the time of the interview excluding individuals who live in prison  
Denmark: All Danish speaking residents born in 1954 or earlier and their spouses/ partners at the time of the interview excluding individuals who live in prison  
France: All individuals older than 50 excluding all individuals living in institutions  
Germany: All German speaking residents born in 1953 or earlier and their spouses partners at the time of the interview excluding individuals who live in prison  
Greece: All Greek speaking residents born in 1954 or earlier and their spouses/ partners at the time of the interview excluding individuals who live in prison  
Italy: All Italian speaking residents born in 1954 or earlier and their spouses/partner at the time of the interview excluding individuals who live in institutions  
Netherlands: All Dutch speaking residents born in 1954 or earlier and their spouse/ partners at the time of the interview excluding individuals who live in prison  
Spain: All Spanish speaking residents born in 1954 or earlier and their spouses/ partners at the time of the interview excluding individuals who live in prison  
Sweden: All Swedish speaking residents born in 1954 or earlier and their spouses/ partners at the time of the interview excluding individuals who live in prison  
Switzerland: All French, German, or Italian speaking residents born in 1954 or earlier and their spouses/partners at the time of the interview excluding individuals who live in institutions

- Sample design : Varies by country  
Austria: Multistage stratified random sample using a CD-ROM of telephone numbers  
Denmark: Simple random sample  
France: Multistage stratified probability sample  
Germany: Multistage stratified random sample  
Greece: Multistage stratified random sample using a telephone directory  
Italy: Multistage stratified probability sample  
Netherlands: Multistage stratified random sample  
Spain: Multistage stratified random sample  
Sweden: Stratified random sample  
Switzerland: Stratified random sample using the telephone directory of Switzerland
  - Primary sampling unit : Varies by country  
Austria: Municipalities and political district areas  
Denmark: Households  
France: List of dwellings in a master sample  
Germany: Municipalities  
Greece: Nomos (Greek prefectures)  
Italy: Municipalities  
Netherlands: Municipalities  
Spain: Municipalities  
Sweden: All residents registered in the population registry NAVET of the Swedish tax authority  
Switzerland: Telephone numbers in the Swiss phone directory
  - Achieved N : Austria: 1,957 interviews out of 4,347 sampled individuals  
Denmark: 1,699 interviews out of 2,872 sampled individuals  
France: 1,746 interviews out of 2,533 sampled individuals  
Germany: 2,350 interviews out of 4,478 sampled individuals  
Greece: 2,131 interviews out of 3,845 sampled individuals  
Italy: 2,023 interviews out of 4,603 sampled individuals  
Netherlands: 2,350 interviews out of 4,338 sampled individuals  
Spain: 1,813 interviews out of 4,900 sampled individuals  
Sweden: 2,116 interviews out of 5,121 sampled individuals  
Switzerland: 997 interviews out of 2,979 sampled individuals
  - Respondents : Individuals over 50 and their spouses/partners at the time of the interview
  - Geographic scope : Continental Europe
  - Mode of data collection : Face-to-face interviews and self-administered questionnaires
  - Over-sampled populations : None
  - Retrospective histories : Partial retrospective histories on marriage, employment, medical condition
  - Response rates : Detailed explanations on how the response rates were computed are available in [http://www.share-project.org/new\\_sites/Documentation/TheSurvey.pdf](http://www.share-project.org/new_sites/Documentation/TheSurvey.pdf)  
Overall individual response rates: 48%, Austria: 45%, Denmark: 59%, France: 69%, Germany: 52% Greece: 55%, Italy: 44%, Netherlands: 54%, Spain: 37%, Sweden: 41%, Switzerland: 33% (Table 9.14 in above mentioned document; Also see additional information provided by PI.)
- B Type of information gathered for inter/intragenerational relationships**
- Multi-generational : Collects information on respondent's parents, in-laws, respondent, and their children



- Co-residential & biological orientation : The surveys are sampled at the household level. It is sampled with an orientation toward co-residential relationship, but also includes questions on biological relationships

**II. CONTENT**

- A Main focus** : Individuals 50 years or older, spouse or partner
- Mode of reporting : Self reports and physical health assessments
- Socio-demographic data : Date of birth, country of birth, respondent's parity at birth (oldest, youngest, middle child)
- Education : Highest level of education completed
- Cognitive ability : Respondents rate their cognitive ability including their reading and writing skills, tests such as ten word learning delayed recall test and numeracy tests are administered to assess respondent's cognitive skills
- Marital history : Current marital status, partial marital history including information on the year of current marriage and year of registered partnership for current union, year of separation from last spouse or partner
- Fertility history : Number of biological children that are still alive, age and sex of each child
- Labor force participation/employment/occupation : Current employment status, number of hours worked per week during past year, partial employment history including start and end date of employment
- Assets/earnings : Homeownership, value of property, savings, debt, total family income, pre-tax income, income from capital gains in the past 12 months, pension income in the past 12 months
- Health : Self-rated health, long-term illness, partial medical history including the age when respondent was first diagnosed with an illness, disability, smoking, alcohol use, health insurance coverage, walking speed test administered to assess respondent's functionality
- B Other focus** : Parents and in-laws
- Mode of reporting : Proxy reports
- Socio-demographic data : Whether biological mother/father is still alive, age, age of death if deceased
- Fertility history : Whether ever had siblings, number of siblings who are alive, respondent's birth order
- Labor force participation/employment/occupation : Last occupation prior to retirement or death
- Health : Respondent rated parent's health
- C Other focus** : Child
- Mode of reporting : Proxy reports
- Socio-demographic data : Age, year of birth, sex, child's relationship to respondent (biological, adopted, or step), date of birth
- Education : Highest level of education completed
- Marital history : Current marital status, whether child has a cohabiting partner
- Fertility history : Number of children
- Labor force participation/employment/occupation : Current employment status, job characteristics such as full-time/part-time status, self employment, current occupation, whether child is currently on parental leave, whether child has retired
- Health :

**III. INFORMATION ON INTER/INTRA-GENERATIONAL RELATIONSHIPS**

**A Intergenerational transfers**

- Financial transfers : Whether respondent gave/received financial assistance to/from parents or children in the past 12 months, amount of financial assistance respondent or spouse/partner gave/received to/from parents or children in the past 12 months, whether respondent received/gave an inheritance or large gift, identification of the person who gave/received the inheritance or large gift year when respondent gave/received an inheritance or a large gift, amount of

- Time/caregiving : inheritance  
: Whether respondent gave/received help with daily activities to/from a child or parent in the past 12 months, amount of time respondent or respondent's spouse/partner spent giving/receiving help in the past 12 months, type of help respondent gave to/received from child or parent (help with dressing, bathing, using the toilet), whether respondent provided child care for grandchildren in the past 12 months, frequency with which respondent provides childcare (almost every day, once a week, infrequently), number of hours per week respondent typically spent providing childcare in the past 12 months
- Co-residence between adult children and parent : Whether respondent's children live in the same house as respondent
- Proximity : Distance between respondent's place of residence and select child's/ parent's place of residence
- Social contact : Frequency of contact between respondents and parents/children per week in the past 12 months via e-mail, telephone, or in person
- Quality of ties : Respondent is asked to report the frequency with which they have disagreements with parents, in-laws, children for a subsample
- Expectations/obligations : Expectations of receiving/leaving an inheritance totaling 150,000 € or more

**B General questions on transfers**

- Financial transfers : Whether respondent and respondent's spouse/partner gave/received help to/from relatives, neighbors, and friends in the past 12 months, identification of people who gave/received financial assistance, amount of financial assistance given/received in the past 12 months
- Time/caregiving : Whether respondent gave/received help with personal care to/from relatives, or friends in the past 12 months, number of times per week respondent gave/received help to/from relatives in the past 12 months, number of hours per week respondent spent giving/receiving help to/from relatives, neighbors, and friends in the past 12 months
- Quality of ties : Respondent is asked to report the frequency with which they have disagreements with spouse/partner, other family members, friends

**IV. GENERAL ATTITUDES ON THE FAMILY**

- Division of labor within the family : Respondents are asked to indicate who should bear the main responsibility for earning money, cleaning, cooking, taking care of the elderly
- Parenting : Respondents report whether they agree with the statements that it is the parents' duty to do what is best for the child even at their own expense; grandparents must contribute toward the economic security of grandchildren or their families
- Family function :
- Norms/culture : Respondents indicate whether they feel it is the duty of the family or the State to bear the financial responsibility for older persons who are in need

**V. SPECIAL SUPPLEMENTAL FILES**

- List of supplemental files :

**VI. FUNDING AGENCIES**

: European Commission's Research Directorate  
U.S. National Institute on Aging  
The Austrian Science Fund  
Belgian Science Policy Office  
Swiss Federal Office of Education and Science

**VII. ADDITIONAL INFORMATION PROVIDED BY PRINCIPAL INVESTIGATORS**

- Response rates : PIs also report the following response rates  
Overall: 62%, Austria: 58%, Denmark: 63%, France: 74%, Germany: 63%  
Greece: 61%, Italy: 55%, Netherlands: 61%, Spain: 53%, Sweden: 50%

Source	: Switzerland: 37%
	: Table 9.1 in <a href="http://www.share-project.org/new_sites/Documentation/TheSurvey.pdf">http://www.share-project.org/new_sites/Documentation/TheSurvey.pdf</a>
- Intergenerational Proximity	: Categories on the distance between parents and children include categories between less than 1 kilometer away to more than 500 kilometers
- Social contact with parents/ children	: Frequency of social contact is described using 7 categories ranging from daily to never
- Other information	: Belgium participated in data collection, but is experiencing delays in supplying the data. They will be included in the 2nd release.

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## WISCONSIN LONGITUDINAL STUDY (WLS)

**WEBSITE** : <http://www.ssc.wisc.edu/wlsresearch/>

### I. DESIGN

- Data type : Longitudinal Survey on U.S. population
- Dates collected : Survey data on original respondents and parents: 1957, 1964, 1975, 1993, 2004  
Survey data on selected siblings: 1977, 1994, 2005  
Survey data on the spouse of the original respondent: 2004  
Survey data on spouse of the selected sibling: 2005
- # of waves : Original Respondents: 5 waves  
Selected Siblings: 3 waves

#### A Sample

- Target population : 1957 high school graduates in Wisconsin (Graduates)
- Sample design : 1/3 Random sample of all 1957 high school graduates
- Primary sampling unit : Individuals
- Achieved N : 10,317 men and women who graduated from Wisconsin high schools in 1957. Later waves include interviews with current spouse, and a randomly selected sibling of the graduate and the sibling's spouse.
- Respondents : Graduates, parents, selected siblings, spouse of graduate, spouse of selected sibling
- Geographic scope : At each wave of the survey 2/3 of graduates lived in WI, and about 1/3 lived elsewhere in the U.S. or abroad.
- Mode of data collection : Telephone interviews, self-administered questionnaires via mail, administrative data linkages
- Special modules : Brain imaging, anthropomorphic measures, bio-indicators and content analyses on interviews
- Over-sampled populations :
- Retrospective histories : Retrospective histories on marriage, job, fertility
- Response rates : The rates below describe retention rates for original respondents (1957 HS graduates)  
Wave 2 (1964): 81%; Wave 3 (1975): 89%, Wave 4 (1977): 86%,  
Wave 4 (1992-1993): 87%, Wave 5 (1993-1994): 80%, Wave (2004-2005): 88%

#### B Type of information gathered for inter/intragenerational relationships

- Multi-generational : Collects data on graduate, graduate's parent, graduate's current spouse, siblings, and adult children. For some items, multiple participants are asked the same question.
- Co-residential & biological orientation : Sample based on biological and co-residential relationships including questions on non-resident biological family members

### II. CONTENT

#### A Main focus

- Mode of reporting : Self reports by graduates and proxy reports from parents, siblings, and spouses
- Socio-demographic data : Race, sex, age, living status
- Education : Highest level of education attained, total years of schooling, current school enrollment, educational history
- Cognitive ability : Range of cognitive test scores including IQ score mapped from data collected on raw Henmon-Nelson test score, IQ measured in multiple years
- Family background : Family structure at age 16
- Marital history : Current marital status, marital history, date when current marriage began, date

- Fertility history : when last marriage ended
- Labor force participation/employment/occupation : Fertility history including up to 10 children
- Assets/earnings : Job history including information on employment status, unemployment spells, retirement plans, current occupation, first occupation, and expected occupation after graduation from high school
- Health : Homeownership, value of home, savings, debt, income in the previous 12 months, earnings, wage rates, frequency of pay
- Health : Self-rated health, health compared to others, BMI, height, weight, disability, health insurance coverage
- B Secondary focus** : Spouse of graduate
- Mode of reporting : 2004 telephone interview with the graduate's current spouse, earlier information on the spouse is available from proxy reports given by the graduate in earlier waves. Information below is based on the proxy reports from before 2004.
- Socio-demographic data : Race, age of current spouse, date of death if deceased
- Family background : Reports on the current spouse's family structure when they were 16 years of age including whether they were in an intact, single father, single mother, or other family type
- Marital history : Year current marriage began, number of times current spouse was married prior to marriage with graduate
- Fertility history : Number of children from current marriage
- Labor force participation/employment/occupation : Current labor force and employment status of spouse, current occupation of spouse
- Assets/earnings : Earnings
- Health : Health compared to others, BMI, height, weight, disability, health insurance
- C Other focus** : Children of graduate
- Participant in survey : Proxy reports provide some information on all children, but they provide more detailed information on a randomly selected child
- Socio-demographic data : Sex and date of birth for all children
- Education : Highest level of education attended by all children, information on college enrollment, educational aspiration for randomly selected child
- Marital history :
- Fertility history : Number of children
- Labor force participation/employment/occupation : Child's current and past activities, current employment status, current occupation of randomly selected child
- Assets/earnings :
- Health : Disability
- D Other focus** : Parents of graduate
- Mode of reporting : Proxy data by graduates; self reports in 1975
- Socio-demographic data : Graduate reports whether his/her parents are alive, date of death if deceased
- Education : Highest degree obtained by parents
- Family background :
- Marital history : Asks whether parents are still married to each other in Wave 4
- Fertility history : Number of graduate's siblings
- Labor force participation/employment/occupation : Mother's occupation, father's occupation, occupation of household head in 1975
- Assets/earnings : Parent's income in last 12 months in earlier waves, home ownership of parents or in-laws in later waves
- Health : Graduate rates parents' health
- E Other focus** : Siblings of graduates of 1957
- Mode of reporting : Proxy reports by graduates. Self reports by selected siblings (one per graduate) who

provide the same information as that provided by the graduates. The data include IQ scores for selected siblings. The information below is based exclusively on the proxy reports

- Socio-demographic data : Gender, age, age at death if deceased
- Education : Highest level of education completed
- Cognitive ability :
- Family background :
- Marital history :
- Fertility history :
- Labor force participation/ employment/occupation :
- Assets/earnings :
- Health :

### III. INFORMATION ON INTER/INTRA-GENERATIONAL RELATIONSHIPS

#### A Intergenerational transfers

- Financial transfers : Respondents report whether they or their spouses received gifts/bequests worth \$1000 from parents or in-laws, the total value of the gift/bequest, identifies the parent or in-law who gave the respondent the gifts/bequests, the total value of the gifts/bequests, why they received the gifts/bequests (e.g., educational expenses, down-payment of home, etc.), most recent year when parent/in-law gave the bequests, whether they gave gifts over \$1,000 to parents/adult children, identify the parent/child who received the gift, total amount of the gift, main reason for receiving the gift, year when gift was made. Select surveys ask whether the bequest was evenly divided between the graduate and their siblings. In 2003 info obtained on largest inheritance of \$10,000 or more
- Time/caregiving :
- Co-residence between adult children and parent : Household roster available
- Proximity : Reports whether graduate's parent lives in the same household as graduate
- Social contact : Frequency of contact between graduate and randomly selected child
- Quality of ties : Closeness between graduates and parents, parents' influence on graduate's future plans. Closeness between respondent and randomly selected child

- Expectations/obligations :

#### B Intragenerational transfers

- Financial transfers : Respondents report whether they gave to/received from their siblings a gift worth more than \$1000, amount of help given, main reason for giving/receiving help, identifies the siblings that received or gave the most help
- Time/caregiving :
- Co-residence between adult siblings : Household roster available
- Proximity :
- Social contact : Frequency of contact between respondent and sibling via mail, visits, or telephone
- Quality of ties : Closeness between respondent and selected sibling
- Expectations/obligations :

#### C General questions on transfers

- Financial transfers : Respondent reports whether they or their spouses received gifts/bequests worth \$1000, the total value of the gift/bequest, identifies who gave the gifts/bequests, the total value of the gifts/bequests, main purpose of the gifts/bequests (e.g., educational expenses, down-payment of house, etc.), respondent report whether they gave gifts over \$1000, identification of the individual that received the gift, total amount of the gift, year when gift

- Time/caregiving : was made (See entry for intergenerational transfers)  
: Care given to/received by respondent or spouse for more than one month in duration over the last twelve months, reasons for giving/receiving care, length of time giving/receiving help to/from relatives or family members
- Co-residence : Household based information on co-residence between spouse and respondent is available
- Proximity :
- Social contact : Number of times respondent has gathered together with family, friends, etc.
- Quality of ties :

**D Transfers with other individuals/organizations**

**Government Support**

- Financial transfers : Asks whether graduate received financial transfers from government, income from public assistance

**Friends**

- Financial transfers : Frequency of contact with friends

**Charities**

- Financial transfers : Graduate reports whether they made any charitable contributions over \$500, the amount of contributions

**IV. SPECIAL LIST OF SUPPLEMENTAL FILES**

- List of supplemental files : Tax records, content analysis on recorded files, year-book study, school records, brain imaging

**V. FUNDING AGENCIES**

- : National Institute on Aging
- Vilas Estate Trust
- National Science Foundation
- Spencer Foundation
- Graduate School of the University of Wisconsin-Madison

**VI. ADDITIONAL INFORMATION PROVIDED BY PRINCIPAL INVESTIGATORS**

- Health : Diagnoses of specific conditions
  - In 2004 interviews were conducted with spouse/widow of the original graduate respondent and the spouse/widow of the selected sibling. These data include information that parallels much of that obtained information from the graduate and sibling respondents, including IQ.
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*Appendix 5.G.2*

**Questions asked of Data Collectors Concerning Data Strengths and Weaknesses, Future Needs and Potential Innovations for Research on Generational Family Structure and Relationships**

**I. Strengths and Weaknesses of your data collection efforts with respect to research on intra- and inter-generational of families:**

- A. What do you consider to be the 3-4 major strengths of your data for analyzing intra- and inter-generational issues?
- B. What do you consider to be the 3-4 major deficiencies of your data for analyzing intra- and inter-generational issues?

**II. Please identify and describe key data needs, now and in the future, that you foresee to improve our understanding of the following issues related to the family and their behaviors:**

- A. *Changes over time in intra-generational relationships of family members*
- B. *Changes over time in inter-generational relationships of family members*
- C. *Differences across subgroups (i.e., racial, ethnic, immigrant, etc., subgroups) in intra-generational relationships among family members.*
- D. *Differences across subgroups (i.e., racial, ethnic, immigrant, etc., subgroups) in inter-generational relationships among family members.*

**III. Potential Innovative Data Collection Strategies and Data Content for studying change and subgroup variation in intra- and intergenerational relationships**

- A. New and innovative strategies for sampling frames?
- B. Data gathering methods, e.g., surveys by Internet, administrative data sources and/or linking of such data, mixed modes of data collection?
- C. New data content, e.g., strategies for getting more reliable and dynamic information on interactions and the quality of relationships within and between generations of a family or for gathering data on preferences, attitudes, values, etc.
- D. For any of the above innovations, we would be very interested in descriptions of innovations that you contemplated for your data collection efforts but decided not to undertake and why you did not undertake them, e.g., they were too burdensome for respondents, they were too expensive to implement, they involved risks to subject confidentiality, etc. You might also comment on what you think would have been required to make such innovations feasible in the near future.



## APPENDIX 6.A

### Template for a New, Large-Scale Study

This appendix sketches some proposed features for a new large-scale study of U.S. families. It summarizes work conducted in the last few months of the project by a subcommittee of the Explaining Family Change Project team. This appendix represents initial thoughts about features of a new study that would provide cross-sectional data to describe family life and would lay the groundwork for a prospective study to explain variation and change. This is a tall order for a single data set. The EFC project purposely did not focus on designing a new, large-scale data collection for reasons we elaborate in the main text to this report (see Chapter 6, “Major New Data Collections”).

We began to consider design issues for new data collection toward the end of the project period for two reasons. First, at the Duke conference, many family scholars and researchers urged us to discuss the features, costs, and benefits of major new data collection. Second, the team’s own identification of data needs for new questions about families and our assessment of the features of existing data demonstrated significant gaps that cannot be addressed by existing data. The project recommendations reported in Chapter 6 propose a coordinated series of steps, including methodological studies and augmentation to existing data that should inform the design of a new study. This appendix is a preliminary outline of a design that can be a starting point for a process of planning the next generation of data collections on families.

The design we propose has many features that are drawn from the PSID, the NSFH, and the NLSY. To preview, we anticipate that the most useful new survey will sample individual adults in the United States and a randomly selected child (from infancy to age 18) from that adult’s household. The survey would be a prospective, longitudinal design in which both the adult and random child would be followed over time. A sibling of the child also would be interviewed to identify family effects and to examine variation within families.

At this point, the design mimics the NSFH. However, a crucial difference is that we do not conceive of this as a sampling-based frame or design. We do use the household to identify the child and sibling sample at the beginning, but the remainder of the design follows the web of relationships surrounding these individuals through time and across the life course. Co-residence does not define the set of persons to be sampled and followed. Family or “family-like” relationships do.

The adult’s partner (spouse, cohabiting partner, other) also would be interviewed.<sup>1</sup> We treat family as a concept that is both defined by the individual respondent and a priori by the researcher so that the new data can be used to study socially and theoretically important relationships (e.g., biological parents and children, spouses) as well as relationships the individual defines as important (e.g., friends or fictive kin). We recommend a survey with embedded studies for a rich description of family dynamics and to advance explanations for family change and variation.

We propose selecting two random individuals from a household-based sampling frame. One is a random adult aged 18 or older. The baseline sample of adults for the new study will be a cross-section of all U.S. adults in households. This is essential to be able to describe the state of the American family. This aspect of the design should be repeated every 10 to 15 years.

The second individual selected is a child (infancy to age 18). As noted, the child is sampled from the same household as the adult. These individuals are the targets of the study. The prospective longitudinal design always follows them. These respondents are asked about some relationships in all interviews. A subset of “others” (parent, partner/spouse, etc.) in these

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<sup>1</sup> Ideally, this person would be the random child’s parent or stepparent. We have not worked out how to handle complications arising from a partner who is not some type of parent to the child.

relationships may be interviewed as well.

It would be valuable to include a sibling of the random child to identify family effects and to examine within-family variation. At the first interview, the sibling would be eligible for inclusion if he or she were in the same age range as the focus, random child and lives with the sibling. In general, we do not think co-residence should determine eligibility for either respondent's reports about a particular relationship or interviewing of the "other." We make an exception at the baseline interview for the sibling as a way to increase response rates because of the importance of identifying family effects. Conceptually, the sibling is a characteristic of the random child rather than an independent member of the sample.

The design we recommend privileges some relationships (parent/spouse-partner/child/sibling) over other relationships, whether or not the respondents identify these people as important to them, provide significant help, or co-reside. Specifically, the study should interview a relationship partner who is not in the sampled individual's household, for example, a dating partner or a Living Apart Together partner. Of course, it is a challenge to decide when it is appropriate to interview the other (how serious or of what duration should the relationship be before the relationship partner is eligible for interview?). One also must determine when that partner should be followed after the relationship dissolves. Following partners only if they had or reared a child with the sampled individual means that one only knows about the aftermath of separation for a selective type of couple/individual. We recommend collecting at least some information on all of these privileged relationships.

In addition, the survey also should use network generators (defined earlier in this chapter) that allow the respondent to identify a "network of caring." This network may overlap heavily with the kin identified through the privileged relationships described above, but this is an empirical question. We expect substantial variation in the degree of overlap (between privileged kin relations and the network of caring) by age, race-ethnicity, and social class. The proposed study should attempt to interview some of these nonprivileged others.

Some groups should be oversampled in the baseline. At the least, it is important to have enough cases to compare European whites, African-Americans, and Latinos. Oversampling of other groups should be justified by the substantive import of the additional tests they allow.

The design we propose also incorporates successful features of the National Longitudinal Surveys in that we recommend following the random child as he or she forms and dissolves relationships. The recommendation that we collect data from a sibling as a way to identify family effects and learn about within-family variation also builds on the NLS. A difference between our recommendations and the NLSY is in the content of the study we recommend. The content of a new study should include information from the random child and from the sibling about their relationship with each other as well as parallel information from each about their own lives and their relationships with other family members. We recommend asking the random child (and sibling) about relationship partners and that some of these partners be interviewed. Eventually the children of the random child and the sibling also would be included in the study. This genealogical aspect of the design is similar to the NLSY79/Mother-child file/NLSYA as well as the PSID. The inclusion of children of siblings provides variation on degree of relatedness that would be useful for some behavioral genetics designs.

### **Trade-offs We Considered**

There is a trade-off between choosing a random child within a specific age range (e.g., critical life stages) and choosing a random child within a broad age range, such as age 0 to 18.<sup>2</sup> We chose the

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<sup>2</sup> There are better survey measures of child development starting around age 2 than for age 0-2 years. The availability of high-quality survey measures for children under age 2 may improve over time. The study design should be sufficiently flexible to incorporate advances in measurement.

broader age range to be able to describe the experiences of all U.S. families. Without children of all ages, the study would also miss important life stages for the random adult. The design we propose has a tension between collecting information from the child as a feature of the random adult's life or as a study of the random child's development and pathway to adulthood.

There also is a trade-off in cost and potential burden on the family of following partners of the random child and following partners of the randomly selected adult.

### *Context*

In a national survey like the one we propose it is key that geographical indicators be collected. These indicators would allow for characteristics of place to be matched to the respondents. Ideally the study would collect very precise data via GPS coordinates. Further, the GPS coordinates should be collected not only for the respondent's residence but other key locations (work place or school, the residence of privileged kin and of those identified in the respondent's caring network).

### *Embedded studies*

It is important to allow for embedded studies within the larger design. This can be by topical modules in longitudinal follow-ups, as the HRS does. But, as we addressed above, there are several reasons to embed studies using nonsurvey methods. It is a difficult decision of whether to embed in-depth interviews and observational studies that draw respondents from the main study or whether the embedded studies should be conducted in parallel with different respondents/participants. The results of these embedded studies could be used to guide development of new topical modules.

### *Content of the baseline interview*

The content of the baseline interview is vital because it is the source of information about individuals who will later become nonrespondents. The baseline interview also is important as a cross-sectional view of U.S. families; these data can be used as a point in a time series of cross-sections to describe historical change in American families. Decisions about the content must balance the need for replication of earlier family studies (e.g., using NSFH or Americans' View of their Mental Health) and building new ways to study families on the basis of innovations and new questions about families that have developed over time.