

NURTURING FATHERHOOD: Improving Data and Research on Male Fertility, Family Formation and Fatherhood

June, 1998

Federal Interagency Forum on Child and Family Statistics

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FOREWORD

I am pleased to extend my congratulations to the Federal Interagency Forum on Child and Family Statistics on the publication of *NURTURING FATHERHOOD: Improving Data and Research on Male Fertility, Family Formation and Fatherhood*. This report to the policy, information collection and

research communities will have a lasting influence on efforts to understand and foster fathers' active participation in the lives of their children.

In 1994, when I led "Family Re-Union 3: The Role of Men in Children's Lives" in Nashville, Tennessee, little did I realize the great outpouring of time, talent and commitment that soon would be dedicated to the issue of fatherhood. Program practitioners, community leaders, local, state and federal policy makers, and the public and private research community have taken very seriously research findings that the well-being of children is enhanced by the presence of caring and involved fathers and that father absence can have lasting detrimental effects on children's lives.

The Federal Interagency Forum has provided outstanding leadership in developing a public-private partnership to implement President Clinton's request that federal agencies do more to support the role of fathers in families and specifically that fathers be incorporated in government-initiated research regarding children and their families. The publication of *NURTURING FATHERHOOD* reflects the successful completion of the Forum's efforts to understand what we know through existing research on fathers and families. It is also the beginning of new opportunities to significantly increase our knowledge about fatherhood and the relationship of fertility and family formation to the way men experience fathering.

I believe that all children can benefit from the involved presence of a father in their lives. I commend the member agencies of the Forum, the public and private research community and the public and private funders who have made such an outstanding contribution to our understanding of what we know about fathers' involvement in the lives of children and to what more we need to know. Working together I know that we will m a better world for all of America's children.

Vice President Albert Gore

Preface and Acknowledgments

This report summarizes the presentations and recommendations of the Conference on Fathering and Male Fertility: Improving Data and Research, sponsored by the National Institute of Child Health and Human Development (NICHD), the Federal Interagency Forum on Child and Family Statistics, and the NICHD Family and Child Well-being Research Network.

The findings and recommendations presented at the Conference on Fathering and Male Fertility represent the cumulative effort of more than a hundred researchers, policy analysts, and public officials who, over the course of year, thought deeply and creatively about how to improve the information available to society on fathers. This report is being widely disseminated to those agencies of the federal government that conduct and/or fund research on children and families, to the broader research community, to policy makers, to the philanthropic world, and to the media.

The conference, which took place on March 13 and 14, 1997, was the culmination of a remarkable year-long effort to develop an action agenda to improve federal data and research on fathers and on male fertility, involving many of the nation's leading scholars and researchers within and outside of the federal government between March 1996 and March 1997.

Prior to the Conference in March of 1997, a Town Meeting on data needs for policy was sponsored by the Forum and two Conferences were sponsored by the National Institutes for Health and the NICHD

Family and Child Well-Being Research Network. One of the conferences focused on qualitative and clinical research and how it could be integrated with data from large scale surveys. The second conference invited scholars from several disciplines to present empirical work, primarily from large scale studies.

Three working groups were also established and charged with developing specific recommendations to improve data and research on fatherhood. The working groups looked specifically at 1) the conceptualization of fatherhood, 2) issues of family formation and male fertility, and 3) methodological challenges. The working groups presented their findings and recommendations at the March 1997 conference. Each group's report is presented in this volume.

A fourth working group was charged with examining the trade-offs and targets of opportunity to improve the federal statistical system's capacity to gather data on fatherhood based on information from all the review activities and developing a report to the Federal Interagency Forum on Child and Family Statistics. These recommendations were presented to the Forum on October of 1997.

The many individuals whose hard work and enthusiasm made this entire effort possible reflect the strength that building a public/private partnership brings to a complex and multifaceted project. The contributions of the following people are much appreciated:

The NICHD Family and Child Well-being Research Network: Kristin Moore (Child Trends, Inc.), H. Elizabeth Peters (Cornell University), Desmond K. Runyan (University of North Carolina), Jeanne Brooks-Gunn (Columbia University), Greg Duncan (University of Michigan), Jay Teachman (Washington State University), and Arland Thornton (University of Michigan).

Conference Coordination Committee: Christine Bachrach, Jeffrey Evans, Judy Whalen, and Marie Bristol, (NICHD), Kristin Moore and Angela Greene (Child Trends, Inc.), Freya Sonenstein (Urban Institute), Linda Mellgren (ASPE), Anne Benson (Office of Child Support Enforcement/DHHS), Wendy Taylor (OMB), and Gesine Hearn (NICHD Network).

The leadership of the working groups: Randal D. Day, V. Jeffery Evans, and Michael Lamb, co-chairs of the Working Group on Conceptualizing Male Parenting; Christine Bachrach and Freya Sonenstein, co-chairs of the Male Fertility and Family Formation Working Group; Andrew Cherlin and Jeanne Griffith, co-chairs of the Working Group on the Methodology of Research on Fathers; and Linda Mellgren and Wendy Taylor, co-chairs of the Working Group on Trade-Offs and Targets of Opportunity.

The National Center on Fathers and Families/University of Pennsylvania: Vivian Gadsden. The authors of the town meeting and conferences summary report: Angela Dungee Greene, Carol Emig and Gesine Hearn. For managing arrangements and logistics for the meetings and conferences: Gesine Hearn (NICHD Family and Child Well-Being Research Network), Fanette Jones and Sonia Subaran (Child Trends, Inc), Sylvia Ellison (NICHD), Anne Benson (OCSE/HHS), and Linda Mellgren (ASPE).

Finally, special thanks go to the Ford Foundation, the Kaiser Family Foundation, and the Annie E. Casey Foundation for their generous contributions to this effort. These private funders worked in partnership with federal agencies to defray conference costs and the costs of preparing and disseminating meeting summaries.

And last, but not least, a very special thank-you to Nancy Hoit, Lisa Mallory, and Beverly Godwin of Vice President Gore's National Partnership for Reinventing Government for their enthusiastic support and

to Duane Alexander, Director of NICHD and Ann Rosewater, Counselor to the Secretary and former Deputy Assistant Secretary for Human Services Policy, ASPE and Chair of the DHHS Fathers Work Group, for their leadership and willingness to devote staff resources to the effort.

CHAPTER ONE

INTRODUCTION

**Chapter One prepared by The Working Group on Targets of Opportunity and Trade-Offs
Linda Mellgren and Wendy Taylor (co-chairs)**

Purpose

The Federal Interagency Forum on Child and Family Statistics was founded in 1994 and formally established by Executive Order in April 1997 to foster the coordination and integration of the collection and reporting of data on children and families. The Forum's first publication, *America's Children: Key National Indicators of Well-Being*, has provided an easy-to-understand portrait of the well-being of our Nation's children, that brings together data on children from a variety of federal agencies and sources. The publication of *Nurturing Fatherhood: Improving Data and Research on Male Fertility, Family Formation and Fatherhood*, demonstrates that working together in public-private partnerships can greatly increase our understanding of the complex family and community context in which children grow and develop.

The purpose of this volume is to share with federal statistical agencies, federal and state policy-makers and the broad family and child well-being research community the results of a multi-year process by the Forum to review and analyze the state of data collection and research on male fertility, family formation, and fathering. This review considered what data has been collected about male fertility, family formation, and fathering, the quality of that data, what has have learned from the analysis of the data, what theoretical and empirical work remains to be done, and how the federal government can best build on current knowledge to expand our understanding of these complex areas of human behavior. It is believed that the results of this review will be a strong foundation for additional data collection and research within the public and private sectors.

This volume uses the term fathering in its broadest sense; it covers the activities and behaviors of a biological father toward his child and the actions and activities that lead to and are related to becoming a father--male fertility and family formation. This volume and the review upon which this volume is based focused primarily on data collection and research on biological fathers; however, research efforts should not ignore the importance and significance of other fathering relationships. Stepfathers, grandfathers, maternal uncles and next-door neighbors all may "father" a child. Whether such fathering is an adequate substitute for the care and commitment of a biological father is one of the questions for research efforts to address.

Background

In January of 1996, the Data Collection Committee recommended that the Forum undertake as one of its first agenda items the exploration of the adequacy of research and data collection on the issue of fatherhood. This recommendation reflected a fortunate convergence of policy and scientific interest in the topic. In June of 1995, President Clinton issued a memorandum to the Heads of Executive Departments and Agencies on supporting the role of fathers in families. In that memorandum, the President asked for a review of agency activities in four areas. These areas were:

Ensure, where appropriate, and consistent with program objectives, that programs seek to engage and meaningfully include fathers.

Proactively modify those programs that were designed to serve primarily mothers and children, where appropriate and consistent with program objectives, to explicitly include fathers and strengthen their involvement with their children.

Include evidence of father involvement and participation, where appropriate, in measuring the success of programs.

Incorporate fathers, where appropriate, in government-initiated research regarding children and their families.

The last two areas were directly related to the information collection and research activities of the federal government.

Unrelated to this governmental review, but in the initial planning stages, were two research conferences on issues related to families and fathers to be held in 1996. Two branches within the National Institute for Child Health and Human Development (NICHD), were planning a conference to review findings on family functioning from their small scale clinical research. The NICHD Family and Child Well-Being Research Network was also planning a conference to explore what was known and what could be learned about fathers and their impact on child development from large scale national survey data. Using the Presidential mandate and the already planned conferences as building blocks for a comprehensive review, the Data Collection Committee outlined for the Forum a series of activities designed to improve the capacity of the federal statistical system to conceptualize, measure, and gather information from men about their fertility and roles as fathers. These activities and related meetings would culminate with a report to the Forum.

Four major meetings were held as a part of this review.

The Town Meeting on Fathering and Male Fertility

Conference on Developmental, Ethnographic, and Demographic Perspectives on Fatherhood Conference on Father Involvement and Methodological Workshop

Conference on Father Involvement and Methodological Workshop

Conference on Fathering and Male Fertility: Improving Data and Research

The Town Meeting on Fathering and Male Fertility

The series began on March 27, 1996, with a Town Meeting on Fathering and Male Fertility in Washington, D.C. Invited speakers presented to the Forum short testimonies on methodological, theoretical, and political problems concerning collection of data on men. Presentations and discussions fell within five broad categories:

- the relevance of data on fathering and male fertility to the development of public policies that have significant effects on the well-being of children and the strength of families;
- the conceptual framework that should guide the collection of data on men;
- the limitations of existing data on men and ways to improve those data;
- issues to be addressed in future surveys of men; and
- the fiscal and political challenges to improving data on fathers

The Conference on the Developmental, Ethnographic and Demographic Perspectives on Fatherhood

On June 11-12, 1996, the Forum cosponsored, with NICHD's Demographic and Behavioral Sciences Branch, Mental Retardation and Development Disabilities Branch, and Family and Child Well-Being Research Network, a conference focusing on the substantive and methodological contributions that developmental, ethnographic, and anthropological research might make in improving federal data collection efforts and research on fathering. Leading researchers presented information from their studies and explored ways to integrate approaches and findings from small scale qualitative studies with data from large scale surveys.

The Conference on Father Involvement and Methodological Workshop

The Conference on Father Involvement was held on October 10-11, 1996 and was sponsored by the NICHD Family and Child Well-Being Research Network. Noted researchers were invited to present multi-disciplinary perspectives on the study of fatherhood and empirical papers that examined factors predicting increased involvement of fathers and the impact of father involvement on child outcomes. All papers were requested to have the following features:

- father involvement be defined more broadly than just presence or absence;
- the focus be on biological or legal fathers;
- consideration be given to the kinds of roles fathers can play across family types; and
- presentations reflect common topics and definitions of terms.

Following the main conference, a Methodology Workshop was held to provide more in-depth discussion of methodological issues related to the study of father involvement.

The Conference on Fathering and Male Fertility: Improving Data and Research

On March 13-14 1997, the Forum, together with NICHD and the DHHS Fathers' Work Group, sponsored a conference on measurement and data collection issues. This conference produced specific recommendations for changes in how information on fathers and male fertility should be gathered by federal agencies and by other public and private data collection efforts. The conference was based on papers written by working groups organized in advance of the conference. These working groups and their activities are described below:

The Work Group on Male Fertility and Family Formation examined the determinants and consequences of male fertility and union formation. It explored what is known and what needs to be learned about the male role in fertility and men's formation of sexual, cohabitational, and marital unions. Recommendations for improving data collection on these topics were developed.

The Work Group on Conceptualizing Male Parenting considered new ways of conceptualizing fatherhood. The group considered how fatherhood was operationalized in surveys and found that some important constructs were missing. It suggested that efforts should be made to modify constructs used in smaller scale research for use in larger surveys. This group also concluded that more basic research will greatly benefit data collection efforts. It identified both the short term and long term opportunities for improving data on male parenting.

The Work Group on Methodology examined the various approaches available to ensure better enrollment and retention of men in studies and how to best obtain information from them once they are in a study. This group considered how administrative data can be used, and how the study universe can be expanded into institutionalized settings such as prisons and clinical institutions.

The Work Group on Targets of Opportunity and Tradeoffs was responsible for identifying opportunities and tradeoffs within the existing data collection frameworks that would allow for the time-phased implementations of the recommended improvements. The major tasks of this group included identifying areas of consensus among the other working groups, looking for opportunities to make changes in the statistical system at reasonable cost, prioritizing issues, compiling preliminary suggestions, and keeping the issue visible and the agencies involved.

The Town Meeting and Conference Agendas can be found in Appendix A. Appendix A also has a list of the four working groups convened to develop materials for the March conference and to write the follow-up report to the Forum.

Summary of What We Learned

Most of the discussion of the importance of fathers in the United States today focuses on fatherhood in terms of men who are fathers. The questions posed in the press, in social commentary and in research are those of fathers fulfilling or not fulfilling their obligation--"Are fathers absent from their children's lives?" "Are divorced and never-married fathers meeting their financial responsibilities?" and "Are fathers in families with two working adults picking up their share of the parenting load?" Ignored are the vital demographic and social processes that bring men into fathering roles and influence the circumstances under which they act out those roles. But a proper and complete understanding of fatherhood is impossible without recognizing and accounting for these larger processes. Male fertility and union formation and dissolution are essential to understanding fatherhood. The case for this broad understanding rests on three points. First, *historically*, fatherhood has changed largely because of changes in the social and demographic processes of marriage, divorce, and child bearing. Second, *theoretically*, it is difficult to separate these processes from the nature of fathering itself. Third, in terms of *policy*, opportunities for improving the lives of children and parents will be missed if these processes are ignored. So the review and this volume concerns itself with understanding both how men become fathers, and what they do as fathers.

Relationship of Fertility and Fathering to Child Well-being, Healthy Families, Adult Productivity and Poverty

Policy interest in the role of fathers in families has been exploding as new research findings have been made available on fertility and on the role of father involvement in child growth and development. Until recently, fatherhood research was primarily clinical in orientation and concentrated in the fields of psychology, family studies and child development. But growing interest in nonmarital childbearing, child support, and their relationship to welfare has pushed the fatherhood issue into more large scale quantitative analysis, initially investigating the relationship of nonmarital childbearing and child support payments on child poverty and child well-being. More recently, research efforts have expanded to include additional measures of qualitative and quantitative father involvement and family relationships. This growing body of research, much of it funded by federal agencies and based on federal data collections efforts, has called into question the popular assumption that the primary, if not only, contribution fathers

make to their children's lives is financial support.

Today nearly one-third of children are born out of wedlock, and many of those children born to married couples experience the divorce of their parents. Increases in nonmarital childbearing and divorce over recent decades reflect complex economic, social and cultural changes that are still incompletely understood.

Research shows that marriage confers important health and economic benefits to individuals as well as to the children that married couples raise. However, marriage is increasingly delayed or foregone. This is particularly true in disadvantaged populations, where not only economic constraints but changing values and norms have increasingly distanced marriage as a viable option.

After decades of increasing sexual activity among adolescent boys, a leveling off or decline was seen in the early 1990s. Adolescent males hold positive attitudes toward responsible sex and parenting, but few pregnancy prevention programs have sought to involve them, and contraceptive options and reproductive health services for boys are extremely limited. Much more needs to be known about the motivational and social factors that influence male sexual and reproductive behavior.

The chances that a man will become a father are strongly influenced by the nature of his relationships with women, and being a father affects the course of his intimate relationships. Available data show these interconnections clearly with respect to marriage, but we know very little about how being a father affects and is affected by the relationships of unmarried couples. Additionally, the circumstances of conception and birth affect fathers' support of and relationship with their children.

Involved fathers are spending more time with their children, but fewer men are involved fathers. Fathers who live with their children are spending more time taking care of them, but divorce and nonmarital childbearing have reduced the average amount of time fathers spend with their children over the life course. Almost half of the fathers who do not live with their children have no contact with their children at all.

The absence of a father in the home has adverse consequences for children's school achievement, labor force attachment, early childbearing, and risky behavior taking. Family structure makes a difference, even when income is taken into account. Two parents are better than one, but the data also show that many children, raised by dad alone or mom alone make a successful transition from childhood into adulthood.

Research that separates father involvement from mother involvement indicates fathers have an independent effect on child well-being. For example, the father's parenting style, level of closeness, flexibility, and other family processes affect the child's well-being.

Positive effects of father involvement have been a fairly consistent finding in studies of two-parent families, however, there is a growing body of research that indicates financial support plus the positive involvement of a father, including cooperation between parents, increases positive outcomes for children who do not live with both of their parents.

Fathers affect children's behavior, but children also affect fathers' behavior as well. Married men with children work more hours and have higher earnings than other men. Parental competence and satisfaction are also associated with positive effects on fathers' own development and participation in the larger community.

Problems Encountered in Data Collection and Research

The problems identified below emerged from the review process, and especially from the March 1997 conference and its related activities, as the most serious data collection issues that affect our ability to understand how fathering affects men, women, families and child well-being. These problems are directly addressed in the targets of opportunity that have been identified in this report.

Household surveys and the decennial census are affected by coverage problems, especially under coverage of men and children. For example, the Census undercount disproportionately affects information collection about young, unmarried minority fathers.

Male fertility and fatherhood information is not consistently collected in national surveys, routine data collection effects, or clinical studies of children and families. For example, questions about women's fertility and child-rearing responsibilities are almost always asked, but often such basic information as the number of own biological children ever born is not asked of male respondents. Additional developmental work is needed to find methodologically sound ways of collecting this information.

There is concern that existing surveys and studies may not be correctly measuring all the things that fathers do and how they affect their children. Relatively little work has been done that systematically compares the meaning and behaviors associated with fathering across ethnic, cultural and socioeconomic groups. Questions about what fathers do are often the same questions asked about mothers and there is little systematic data collected on family processes or dynamics. It may be that we are not asking the right questions about fathering, or are not asking the questions in the right way.

Reliance on marital status and household composition often misrepresents the identification of single parent households and the degree to which fathers are involved with their children.

Comparable information is needed on mothers and fathers, and, where possible, directly from mothers and fathers. Reports from mothers and fathers about facts often agree, but differ in their explanation of why things happened. However, even this agreement on concrete events is greatly affected by the state of the parents' relationship.

Structure of This Volume

The subsequent chapters of this volume focus on the Conference on Fathering and Male Fertility: Improving Data and Research and the papers and reports developed prior and subsequent to the conference. But it also builds on all the activities included as a part of the Forum review--the March Town Meeting and the June and October Conferences; the work of the National Center on Fathers and Families at the University of Pennsylvania; and the expertise of scores of research and policy experts on fertility behavior and family and child well-being. Many research needs and data collection improvements have been identified as a part of this multi-year review. It is hoped that this volume will encourage a broad response from the research community beyond the unique role of the federal agencies in collecting information and conducting research for the development of government policies and programs.

Chapter Two of this report summarizes the presentations, discussions and recommendations from the March Conference on Fathering and Male Fertility: Improving Data and Research. The next three chapters contain the papers written by the various working groups in preparation for the March

conference. Chapter Three is the paper written by members of the *Work Group on Male Fertility and Family Formation* on determinants and consequences of male fertility and family formation. Chapter Four, written by members of the *Work Group on Conceptualizing Male Parenting*, identifies the conceptual, data, and policy issues that must be addressed to understand social fatherhood and paternal involvement. Chapter Five presents a review of the methodological issues and changes that must be addressed if data and research are to be improved; this chapter was written by members of the *Work Group on Methodology*. The final chapter summarizes the opportunities to improve federal data collection and research that have been identified for the Federal Interagency Forum on Child and Family Statistics to consider and provides information on the steps that are being taken by the Forum member agencies to turn opportunities into realities. The volume ends with a series of supporting appendices related to the review process and work group papers.

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CHAPTER TWO

CONFERENCE ON FATHERING AND MALE FERTILITY: IMPROVING DATA AND RESEARCH

Chapter Two Conference Summary prepared by:
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Introduction

On March 13-14, 1997, the final conference in a year-long series of conferences and meetings took place to summarize the findings of the work groups and develop an action agenda for improving the quality and quantity of federal data and research. The goal of this conference was to develop a specific action agenda for improving federal data and research on fathering and male fertility. Much of that agenda is directed specifically to the federal statistical agencies that gather data, fund data collection efforts, and conduct or sponsor research on families and children. However, the agenda inevitably goes beyond the federal government to the members of the private research community as well.

The conference format consisted of presentations and discussions of the findings and recommendations of three working groups -- on conceptualizing fatherhood, on issues related to male fertility and family formation, and on methodological challenges -- followed by intensive work by conference participants in small "breakout groups" to develop further recommendations for future data collection and research. The efforts of the working groups and the conference participants were informed by findings and discussions from three prior conferences that examined, among other questions, what is currently known and potentially available from the federal statistical system, and ways to inform large-scale surveys with findings from small-scale qualitative studies.

The findings and recommendations of the working groups are summarized here, as are the recommendations of the conference as a whole.

Working Group on Conceptualizing Male Parenting Social Fatherhood and Paternal Involvement: Conceptual, Data, and Policymaking Issues

The Working Group on Conceptualizing Male Parenting, co-chaired by Randal Day, V. Jeffery Evans, and Michael Lamb, explored conceptual, data, and policy issues related to fatherhood.

Definitional Issues and A Thematic Framework

"Social fatherhood" is the term this working group used to describe its approach to conceptualizing fatherhood issues. The term encompasses biological fathers -- "the most important group of men we consider" -- but also extends to men who are not biological fathers but nevertheless assume some or all of the roles of a father in a child's life.

Working group members identified four themes they consider central to understanding the variety of issues related to fatherhood in contemporary society: the importance of family structure issues in light of recent sociodemographic changes in family composition;

the role of cultural diversity, specifically the divergent ethnic and cultural patterns that shape fathers' parenting experiences;

the role of gender in shaping the social context of parenting as well as how males and females view and experience their parenting roles; and

the salience of a developmental trajectories perspective that recognizes that fathers, mothers, and children have different needs, goals, and interests which they express at various points throughout their overlapping life courses. **Assessing and Measuring Father Involvement** Several issues need to be considered when attempting to assess and measure father involvement. They include:

Domains of fathering. Drawing on the thematic framework presented above, the working group conceptualizes father involvement as much more than "hands-on parenting experience," to include the following ways that fathers can be involved with their children:

cognitive involvement, such as making plans for activities together or for the child's future;

affective involvement, such as being affectionate with a child or giving praise; and

behavioral involvement, such as playing sports or games with a child.

Resources. Research needs first to identify the types of resources fathers provide, the amount of resources they share with their children and their children's mother, and the mechanisms for transferring resources. It then needs to distinguish these resources from resources provided by the mother and by others who may be contributing to children's support. Coleman (1992) identifies the following categories of resources that fathers provide to their children:

human capital (e.g., skills, knowledge, and traits that foster achievement in U.S. society;

financial capital, including money, goods, and experiences purchased with income; and

social capital, including family and community relations that benefit children's cognitive and social development.

The working group emphasized the need for more research on how all three types of capital influence children's well-being.

Generativity. Social fatherhood can best be conceptualized using a generative fathering perspective -- one that views fathering as an emergent process that accentuates men's personal growth in relation to their children's well-being.

Responsible fathering. The working group endorsed Levine and Pitt's (1995) proposal that the "responsible man" does not participate in conceiving a child until he is emotionally and financially prepared to support a child, establishes legal paternity, shares in the continued emotional and physical care of his child, and shares in the continuing financial support of his child.

Paternal involvement. Fathers' involvement with their children include a diverse array of potentially overlapping dimensions and is further distinguished by individual and subcultural differences. Recognizing that individuals' implicit definitions of a "good father" may differ widely, the working group nevertheless sought to develop further an understanding of the factors that lead to positive forms of fathers' involvement. Among the elements the working group considered essential to paternal involvement are:

nurturing and caregiving;
moral and ethical guidance;
emotional, practical, and psychosocial support of female partners; and
economic provisioning or breadwinning.

Time Use. While there are a number of problems with father/child time use data, the research nevertheless points to a number of critical issues for data collection and analysis:

Maternal employment does not appear to increase the time fathers spend interacting with their children; rather, the proportion of time fathers spend with children increases because mothers do less interacting as a result of working outside the home.

Maternal employment probably has led to changes in the types of activities in which fathers engage.

The amount of time fathers spend with their children is associated with socioeconomic class, children's age, and gender.

Quantifying the time involved in fathering is difficult. In particular, "the anxiety, worry, and contingency planning that comprise parental responsibility often occur when the parent is ostensibly doing something else."

There are a host of measurement inconsistency problems across studies.

Economic provider. The working group paid particular attention to the role of fathers as economic providers since this role is central to most people's definition of fatherhood, is a critical form of paternal involvement, and is related to several important public policy issues. Accordingly, the working group offered the following points with respect to fathers' role as provider:

Economic resources matter because economic instability can lead to marital conflict, which in turn has negative consequences for children.

Fathers who provide more money to their families often do so at the cost of spending less time with them.

Mothers spend money in more child-friendly ways than do fathers.

Many nonresident fathers do not pay formal child support. However, they may provide heretofore unreported support in the form of informal monetary or nonmonetary contributions to the mother.

Child support has positive effects on children's cognitive achievement and educational attainment that cannot be accounted for solely by the financial contributions.

Very little is known about the economic contributions to the household and to children of stepfathers or male cohabiting partners.

Motivations for Fathering

The working group also examined issues related to the factors that motivate men to become fathers and to perform responsibly in that role. In general, men's motivation to procreate and to act as responsible

fathers are shaped by cultural images of fatherhood as well as men's sociocultural background, their current social circumstances, and their earlier experiences, particularly with their own parents. The primary motivations identified were:

- the experience of caring for and raising children;
- an opportunity to strengthen their bond with their romantic partners;
- to ensure that they are not lonely or financially vulnerable in their later years;
- to feel more connected to their extended family and/or friends.

Other motivations noted by the working group include:

Some fathers are motivated to be involved with their children because such involvement is related to healthy adult development;

some men are motivated by recollections of the fathering they experienced as children as well as their interpretations of other men's fathering behaviors in specific social situations;

some are motivated by a desire to seek or enhance a level of maturity and receive confirmation of social status;

some are motivated by their commitment to being a certain kind of man, partner, or father, which affects their desire to be involved with their children in particular ways.

Finally, the group noted a growing thread of research in which sociobiologists suggest that both men and women strive to maximize the representation of their genes in future generations.

The role of motivation in conceptualizing men's parenting role is fertile ground for researchers. Very little is known about why men choose to parent and how those choices vary by age, ethnicity, culture, or social class. Nor is much known about why some men are more motivated than others to be involved in particular ways in their children's lives.

Family Processes and Fathering

Family process research explores how family members think, feel, and act toward each other and is measured by assessing the relationships among multiple family members. There is little research exploring how a parent's gender may affect family processes. Yet there is evidence suggesting that when a father's and mother's contributions are examined separately, the differences predict in discrete ways and reveal more about family outcomes than does research that examines family process only from one parent's point of view or from a combined perspective. The working group therefore emphasized the need for specific studies of fathers' roles in family processes.

Policy Issues

The working group noted that, in the past, public policies related to fathers have been largely punitive or coercive, for example, enforcing child support obligations. Until recently, there has been little discussion of policy initiatives that encourage responsible fathering.

Two recent trends are particularly significant for public policy. First, while it appears that the proportion of fathers who are interested in playing a more active role in their children's lives has been increasing, the

proportion of fathers who are either disengaging or are pushed away from their paternal responsibilities has also been rising (Furstenberg, 1988). Second, the increasing frequency of diverse family types requires men (and others) to visualize and negotiate new roles. If social policy is based on the traditional nuclear family model, new forms of responsible fathering by biological fathers or stepfathers are likely to be constrained.

The working group highlighted several areas in which public policies could be developed or refined to promote father involvement. The working group also identified several paradigmatic issues that should be revisited in light of changing roles within families and the influence of various social institutions on the family. These include:

The Divorce Process. Some research suggests that continued positive father interaction after divorce promotes more favorable child outcomes. Among the suggestions offered by the working group are policies that provide couples with easy access to mediation during and immediately after the divorce proceedings and exploring ways to encourage post-divorce relationships that promote children's best interests.

Procreative Responsibility. Researchers and policymakers need to adopt an expanded conceptualization of fatherhood and men's responsibilities as fathers by acknowledging men's prenatal experiences and orientation toward procreative responsibility.

Mother/Father Differences. Do fathers differ from mothers in their family behavior, and do fathers' contributions to and involvement in their children's lives change as children grow up? If so, fathers' disengagement early in a child's life must be evaluated in terms of possible future effects, as well as short-term effects.

Incomplete Institutions. Our culture has changed so rapidly that nontraditional family forms have not had time to become "institutionalized." There are no well-defined "standards" to apply to these new situations. Public policies should acknowledge that in many cases nontraditional families are facing uncharted territory and may need assistance during critical transitions.

Duality. Fathers are traditionally seen as their children's protectors, providers, and guides in the transition to adulthood. But some fathers are negative role models or present a danger to their children through violent or self-destructive behavior. Policymakers need greater insights from research on how to address these competing realities.

Public Policies. The working group report highlighted several proactive roles that public policy, law, and the private sector can develop to assist fathers to engage in responsible fathering. These include greater sensitivity to structural changes in the economy that have marginalized the material contribution that economically disadvantaged fathers can make to their children; reexamination of "man in the house" rules; reevaluation of the latent consequences of administrative rules that require fathers' child support to be used to reimburse the government for welfare support provided to the mother and her children; allowing nonresident fathers of children on welfare to enter job training and other welfare-to-work programs; and inclusion of specific fatherhood programs in either child support and/or maternal health programs.

Divorce and Custody Issues. The working group also noted several areas where divorce and custody policies and practices might be reexamined to promote father involvement. These include improving policymakers understanding of the complexities that characterize divorced families; application of informed research to the child custody decision-making process; additional research on the consequences

of family relocation following a divorce; further exploration of the relationship between fathers' visitation patterns and child support payment, and whether greater father contact is related to better child outcomes.

Existing Policies and Programs. The working group pointed out that health insurance determinations and policies around programs like Head Start are places where strong father/family friendly components could be added.

Workplace Policies. Growing social expectations that fathers will increase their caretaking roles suggest that men may have to change their expectations for themselves at work, and that employers may have to change their expectations to adapt to male employees who are more involved fathers.

Recommendations

The working group concluded with several specific recommendations, summarized here:

- 1. To enhance their understanding of fatherhood in contemporary society, researchers and policymakers should attend systematically to four themes: changes in family structure, the role of social class and race, gender as a major organizing principle of social life, and the salience of developmental trajectories.*
- 2. Researchers should continue to show how conceptual and theoretical concerns, measurement and data questions, and policymaking issues overlap and mutually inform each other.*
- 3. Concepts should be developed that capture the meaning and definition of who fathers are, and should address conceptions of fatherhood throughout the life course.*
- 4. Researchers and policymakers should attempt to understand individuals' perceptions of the varied meanings associated with biological and social fatherhood and the consequences of these perceptions.*
- 5. Research should explore how individuals distinguish between fathers' investments or perceptions of their status as fathers versus their views and involvement in the process of fathering.*
- 6. Research and social policy need to focus on fathering as a process, in addition to focusing on it as a social or legal issue.*
- 7. More attention should be given to family processes and to specific contexts that either help or hinder specific expressions of fathering and shape children's well-being.*
- 8. Researchers should seek to develop a more systematic and richer portrait of how men, women, and children from different backgrounds view aspects of fatherhood.*

Finally, the working group offered four recommendations related specifically to data collection issues of concern to policymakers:

- 1. Ensure that future data collection efforts in the area of fatherhood are done in an interdisciplinary context.*

2. Increase efforts by the research and funding communities to improve large-scale data collection efforts.

3. At the same time, promote smaller-scale studies that focus in-depth on particular fatherhood topics.

4. Focus resources on studying the processes associated with key transitions that affect fathering. In particular, research should examine paternal involvement during crises or transitional periods, e.g., issues associated with nonmarital births, divorce or custody issues, entry or release from prison, and work and family transitions.

Working Group on Male Fertility and Family Formation

Research and Data Needs on the Pathways to Fatherhood

The Male Fertility and Family Formation Working Group, co-chaired by Christine Bachrach and Freya Sonenstein, reviewed the state of knowledge about fertility and union formation and dissolution among men, and suggested data and research necessary to advance understanding of these issues and inform policy.

The Case for a More Complete Understanding of Fatherhood

This working group proposed that a more complete understanding of fatherhood would go beyond simply studying men who are fathers to a consideration of the demographic and social processes that bring men into fathering roles and influence the circumstances under which they act out those roles. Three factors led the group to this conclusion:

First, historical changes in marriage, fertility, and normative attitudes toward family behaviors have played a central role in reshaping fatherhood.

Second, the process of union formation and dissolution and the processes of male fertility themselves have important theoretical implications for fathering. Specifically, the nature of fathering roles, expectations, and behaviors are linked to the circumstances in which biological fatherhood occurs, and to the nature of men's relationships with the biological mother of their children.

Third, the processes of male fertility and family formation are critical to policies and programs aimed at strengthening fathers. Because fertility and family formation processes provide the context for how fathers function in their families, understanding them can help to improve and target interventions for strengthening father involvement. These processes also provide additional points of intervention for programs that seek to promote responsible fathering.

A Model of Biological and Social Fatherhood

The distinction between biological and social fatherhood is critical for understanding how fertility and unions affect fatherhood. Fertility creates biological fatherhood, a status that is fixed regardless of how paternal responsibilities are defined or carried out, and revocable only through the death of the child. Social fatherhood, by contrast, is not a fixed status. It includes all the childrearing roles, activities, duties, and responsibilities that fathers are expected to perform and fulfill. Biological fatherhood is one of several paths to social fathering. Unions formed and maintained with women who are mothers -- whether of the

man's child or someone else's child -- are another critical path to social fatherhood.

Male Fertility

To discern how men become fathers, it is critical to go beyond the simple biological facts and understand better the complexities underlying sexual and contraceptive behavior of males, the motivation underlying these behaviors, and the factors influencing them.

Whether or not contraception is used in intercourse is determined by a complicated set of conditions involving two people. The first condition involves choosing or negotiating which partner uses contraception. The second condition involves whether or not the partners desire pregnancy. (In this case, the conscious decision not to use contraception because pregnancy is desired should be differentiated from the non-use of contraception for other reasons.) Very little is known about the "proceptive" behavior of either men or women in the U.S. who are seeking parenthood.

Decisions about sterilization are also important to understand -- particularly why men are less likely than women to undergo sterilization. Another decision in which some men participate involves carrying a pregnancy to term or terminating it. How a man's relationship to his child is colored by the nature of his participation in decisions leading to unintended pregnancy and birth is an open empirical question.

Noting that information about male fertility behavior is scant, the working group made several recommendations about what we need to know about male reproductive behaviors and the factors influencing those behaviors:

Trends in Nonmarital Sex, Unprotected Sex, and Unintended Pregnancies and Births. The National Center for Health Statistics in cooperation with other agencies should develop an approach to institutionalizing the collection of data about male fertility, either by adding to existing surveys or by launching independent efforts.

Motivations and Attitudes. To develop a more complete understanding of male motivation and its links to behavior, the working group recommends:

Research on the motivation of males to engage in sexual activity, to contracept, to impregnate partners, to father children, to obtain vasectomies, and to terminate unintended pregnancies.

Methodological studies to develop better measures of motivation in these areas.

In-depth studies of special populations which focus on theory building and a more comprehensive understanding of the motivational underpinnings of reproductive behavior.

Inclusion of measures of motivation with known levels of reliability and validity in representative sample surveys of males.

Factors That Influence Male Reproductive Behaviors. A wide range of theoretical frameworks have been advanced to explain reproductive behavior, each emphasizing various influences on behavior. The working group identified several of these influences and offered recommendations for research to explore their applicability:

Biological factors. Basic research is needed on the links between physiological traits and reproductive

behaviors for men, and also for women.

Family influences. Longitudinal studies of both boys and girls are needed to gain a better understanding of the factors in childhood and adolescence that lead to the development of adult expectations and behaviors regarding sex, pregnancy, childbearing, and childrearing.

Gender role ideology. In sample surveys containing measures of reproductive behavior, more information should be collected about gender role attitudes. In particular, greater information about men and women's attitudes towards male gender roles need to be added to the conventional measures used to gauge attitudes towards women's gender roles.

Peer and community influences. Efforts to create multilevel data sets should be supported. The feasibility of adding contextual measures to sample surveys that are currently freestanding should be explored.

The working group also offered several research strategies for exploring the factors that influence male reproductive behavior. These include:

Mining existing data sets thoroughly for insights into male reproductive behavior.

Expanding data collection strategies beyond sample surveys to include studies using a variety of methods.

Initiating a longitudinal study of children that traces their development over the course of their childhood and their transition into adult roles.

Union Formation and Dissolution

The formation and dissolution of relationships with women often have profound effects on men's roles as social fathers. The working group therefore reviewed what is known about the meaning of different types of unions and the determinants of union formation and dissolution, and suggested data and research directions.

The Meaning of Marriage and Cohabitation. Because of the shifts in the types of unions men and women form, the working group noted the need for better information about marriage, cohabitation, and other types of relationships. Specifically, the recommended:

substantive and methodological research concerning the meanings of different kinds of unions today, including marriage, cohabitation, and non-coresidential unions;

research on the historical trends in union formation and dissolution, with particular emphasis on explicating the explanations and meanings of those choices.

What Influences the Formation and Dissolution of Different Types of Unions? Union formation and dissolution are intertwined with, influenced by, and consequential for many other dimensions of life. To identify and explore the factors that influence men and women to form and/or dissolve unions, the working group recommended:

Research on the causes and consequences of union formation and dissolution, particularly the causal processes and mechanisms that lead people into unions, influence them to form different types of unions,

and result in the dissolution of their unions.

Exploration of the ways in which individuals and couples make decisions about the formation and dissolution of unions.

Research Agenda and Data Needs. The working group concluded its discussion of union formation and dissolution by noting that the data requirements for describing and explaining behavior and trends in this area have become more complex and rigorous. To address these needs, the group offered the following recommendations:

Ensure that data collections focusing on union formation and dissolution be designed to include information about a wide range of union types.

Wherever possible, basic studies of union formation and dissolution should ascertain complete marriage and cohabitation histories.

Conduct additional data collection and analysis using qualitative approaches. Expand the utilization of multi-method approaches in studying union formation and dissolution.

Expand and maintain data collection systems for monitoring future trends in union formation and dissolution. Current data collection efforts should be expanded and supplemented to include information that permits the monitoring of attitudes, values, and behavior, and other information that is useful for studying the causes and consequences of union formation and dissolution.

Plan and field a new study that is designed explicitly to examine union formation and dissolution. Such a study should be designed explicitly to study causes and consequences, negotiation and decision making, and the processes leading up to the formation and dissolution of unions.

The Interrelationships of Male Fertility and Unions

Whether a man has sex, impregnates a woman, and becomes a biological father are all influenced by the nature and dynamics of his relationships with women. These factors also affect whether legal paternity will be established, whether a man is recognized informally as a child's father, and whether he has access to the child. Similarly, pregnancy and birth can have an important effect on the course of male-female relationships. The working group reviewed what is known about how personal characteristics, relationship dynamics, and fertility interact throughout the life course, noting that our understanding is very incomplete.

The Effects of Relationships on Fertility. Sexual relationships have both demographic and interactive dimensions, each of which can affect sexual behavior, contraception, abortion, pregnancy intentions, and birth. For example, relationship commitment seems to have a positive effect on attitudes towards having a birth with that partner.

The Effects of Fertility on Relationships. Research indicates that, just as relationships affect fertility, pregnancy and birth can prompt changes in relationships. For example, the probability of marriage increases sharply in the short run in response to pregnancy or birth. Pregnancy can also lead to conflicts and stress within relationships. Finally, research shows that the presence of children deters union dissolution among married couples.

The Effects of Prior Unions and Births on Later Family Formation. Evidence is beginning to accumulate that suggests that prior union and fertility experiences influence the formation and stability of later unions and fertility within them. One study, for example, demonstrates that nonmarital childbearing reduces a woman's likelihood of marrying during her childbearing years, while another demonstrates that children deter remarriage after divorce among white women.

In addition, there is evidence that unions formed by individuals who already have children appear to be less stable. There is also some evidence that appears to suggest that husbands with children from prior marriages have lower fertility in new unions.

Gaps in Research and Data. With respect to the interrelationships of male fertility and union formation/dissolution, the working group again noted serious gaps in our knowledge and offered recommendations:

New data are needed to provide a more comprehensive view of the intersection of fertility with relationships of all types.

Information about relationships is needed from both men and women in order to understand gendered views of relationships, sex and contraception, and childbearing, and in order to capture both parties' motivations and influence on decisions that affect the likelihood of pregnancy and birth.

Relationship data should be longitudinal, so that researchers can disentangle self-selection into relationships from relationship effects on childbearing.

Research and data are needed to understand better how and why patterns of fertility and family formation vary among groups that differ in socioeconomic status, nativity, race, and ethnicity.

The potential of new and emerging studies for answering these research questions should be thoroughly exploited through analyses of existing data.

Existing data should be reinforced through the expansion of ongoing data collection efforts.

Efforts to strengthen quantitative data should be accompanied by further qualitative studies in a broad range of communities and populations.

Health Education/Reproductive Health

The working group reviewed what is known about males' receipt of reproductive information from schools and other sources, as well as their utilization of reproductive health services.

Sex Education/Information. While survey data exist that measure school age males' knowledge of reproduction and whether they receive sex education, there is little detailed information about the kinds of instruction that occur. Nor is much known about other sources of information related to reproductive health, such as peers, parents, and the media. There is also an abiding need to identify promising program approaches to reducing the risk of early sexual involvement, unintended pregnancy, and STD transmission, and to evaluate these interventions rigorously.

The working group therefore recommended that:

Surveys of teenagers and adults should collect data about the sources of information that are used to gain knowledge of reproductive health issues and to support the examination of the relative effectiveness of different information sources in increasing knowledge and influencing behavior.

Trend information is needed about the types of instruction about reproductive issues that schools are providing.

Promising prevention programs need to be identified and to undergo rigorous evaluations.

Reproductive Health Services. No comprehensive source of information about the use of reproductive health services by men is currently available, although administrative records and a few national surveys provide some limited information. The working group therefore recommended:

Surveys of men that collect information about their receipt of a broad array of medical and health services and assess their awareness of attitudes toward, use of, and experiences with male reproductive health services, alone or in the company of partners.

Studies of the determinants of males' use of reproductive health services, including provider characteristics and social or structural barriers that may deter use.

Indicators of Male Fertility and Family Formation

Because there are no institutionalized mechanisms in the U.S. for collecting data on male fertility or union formation, the working group recommended establishing a set of indicators to monitor key aspects of the fertility and union processes that influence fatherhood. These indicators should include both attitudes and behaviors and be drawn from a variety of relevant domains. The group further recommended that existing data collection efforts be strengthened to provide valid and timely monitoring of key indicators of male fertility and family formation.

Theory and Methodology

There is no unified and accepted theory that explains union and fertility behavior among men and women; rather there are many useful perspectives drawn from a variety of disciplines and research traditions. The working group therefore recommended that:

Any data collected should permit the testing of a broad range of hypotheses drawn from relevant theoretical perspectives.

Theoretical frameworks should incorporate the perspectives of both men and women, and take account of the dyadic nature of fertility and family formation.

Theoretical advances need to address issues of gender explicitly.

Methodological Issues. Theory development must be accompanied by methodological research to facilitate valid tests of hypotheses. While identifying a range of methodological challenges, the working group nevertheless stressed that adequate methodologies are already within reach to pursue much of the research agenda outlined in its report, and that research and data collection should therefore occur simultaneously with methodological work.

To meet the methodological challenges it identified, the working group recommended:

Development of survey methods that facilitate the inclusion of "missing populations" in studies, such as incarcerated and homeless men, men loosely attached to households, men in the military, and male partners who are loosely attached to relationships.

Research to identify and correct sources of bias in men's reports about their fertility and family formation experience.

Development of new measures in several domains, including the study of nonmarital relationships; motivations for sexual, contraceptive, fertility, and union-related behaviors; and the meanings of and attitudes toward gender, unions, and parenthood across different population groups.

Further development of statistical methods that permit analyses of dyadic decision-making and behavior while accounting for selection effects.

Steps for the Future: Indicators, Data Collection and Research on Male Fertility and Family Formation

The working group concluded by summarizing its key recommendations for federal agencies concerned with research and data collection related to fatherhood. These include three areas of effort: developing indicators, collecting data, and mobilizing research.

Indicators. A core set of indicators should be developed to monitor key aspects of the fertility and union processes that influence fatherhood. Consideration should be given to including this set of indicators in *Trends in the Well-Being of America's Children and Youth*, an annual report by the Assistant Secretary for Planning and Evaluation in the Department of Health and Human Services. One or more key items might also be included in *America's Children: Key National Indicators of Well-Being*, a shorter volume produced by the Interagency Forum on Child and Family Statistics.

Data Collection. Data collection efforts should be strengthened and, in some cases, institutionalized to provide a reliable basis for producing indicators and provide data for analytic studies. NCHS, in collaboration with the Census Bureau and other agencies, should take the lead in expanding or modifying current data collection systems to provide indicator data on a timely (approximately every three years) and reliable basis.

There is also a need for new longitudinal data to provide the basis for analytic studies of the processes involved in male fertility, union formation and dissolution, and the interrelationships among fertility, unions, and parenting.

Research. Various agencies, including ASPE, OPA, NICHD, and ACF, should promote and stimulate research on male fertility and union formation and dissolution. The working group recommended that this research focus on the following major substantive areas:

Research on gender roles and attitudes, and the influence of gender on the processes of family formation and fertility.

Research on union formation and dissolution, including studies of the causal processes associated with the formation, maintenance, and dissolution of unions, and the meaning of different union types, and

studies that explain and interpret historical changes in union formation and dissolution.

Research on the factors influencing male fertility and fertility-related behaviors, motivations, and attitudes, including those relating to sexual behavior, contraceptive use, pregnancy and pregnancy outcomes, paternity establishment, and fathering; and including influences at the individual, family, peer, institutional, and community levels.

Research on the intersections among fertility, union formation and fathering, including the effect of planned or unplanned fatherhood, paternity establishment, and transitions in union status on fathering, and the influence of changing meanings of fatherhood on fertility and family formation behaviors.

Research on the nature, availability, use and effectiveness of reproductive health education and services that help to prevent unintended pregnancy and contribute to the health and well-being of men.

Working Group on the Methodology of Research on Fathers

Methodological Issues in Improving Data on Fathers

The Working Group on the Methodology of Research on Fathers, co-chaired by Andrew Cherlin and Jeanne Griffith, examined important methodological issues that need to be addressed to increase confidence in data to be collected on fathering and fatherhood.

Studies of Methodological Interest

The working group's report began with brief summaries of some of the major national surveys with protocols of methodological interest, including Add Health, Early Childhood Longitudinal Study (ECLS), National Adult Literacy Study (NALS), National Longitudinal Survey of Youth (NLSY-97), National Survey of Adolescent Males, National Survey of Families and Households (NSFH), National Survey of Family Growth (NSFG), National Survey of Men, Panel Study of Income Dynamics (PSID), Survey of Income and Program Participation (SIPP), and various surveys conducted by the Bureau of Justice Statistics. These surveys are currently the primary sources of information on fathers and thus serve to inform the discussion of further methodological advances that may be required.

Methodological Issues

The working group addressed methodological issues in three major areas: population identification, data collection procedures, and study design.

Population Identification: Undercounting. Fathers who are not located or are not included in the survey process at all are undercounted in large scale sample surveys. Undercount rates are higher for men than for women, and for minorities relative to whites and Asians. They are also higher for unrelated persons, such as men who are not married to the household respondent. Undercounting also appears to be greater for never-married fathers than for previously-married fathers. In addition, men in the military, prisons, jails, or other institutions are typically excluded by design from household-based surveys.

One promising technique for reducing the undercount within household surveys is to use expanded rosters with multiple probes, as the Census Bureau did in an experimental "Living Situation Survey" in 1993. Other surveys are planning dual rosters. The NLSY97, for example, will include a household roster and a second roster of relevant individuals who live elsewhere, such as noncustodial parents, nonresident

children, etc. Future studies might benefit from a typology of living arrangements, which would help with the creation of a list of terms and probes, while also moving survey researchers beyond thinking in terms of traditional families.

The use of administrative records will help reduce both undercoverage and undercounting. Household members not identified by respondents can sometimes be found through these records. Absent family members, especially those institutionalized or homeless, also could be identified.

The working group urged that the interviewer's role in undercoverage and undercounting be addressed. For example, vacancy checks could be conducted both to find missing households and to evaluate interviewer reports. The eligibility rates obtained by individual interviewers could be compared to one another or to historical estimates. Interviewing techniques for persuading reluctant households to participate in a survey could be refined and improved.

Finally, weighting represents another way to reduce the effects of undercoverage and undercounting, and the working group noted that work to develop adjustment models is already underway.

Population Identification: Underreporting. Absent male parents tend to underreport their parental status to a large extent. Technological advances in survey research may reduce this underreporting. For example, ACASI technology, which involves giving respondents earphones and a laptop, has boosted reports of abortion in tests of women conducted by NCHS and may be a useful technology for increasing reports by males of children and of sensitive behavior.

Population Identification: Changing Family Structures. Most large scale sample surveys reflect more traditional two-parent family models or parents living singly. It has been less common for surveys to take into account multiple family forms such as cohabiting unmarried couples or families with other relatives who play important parenting roles. In multi-family households, CAPI methodology allows for creating spinoff cases with new family rosters. Spinoff cases could be created for parents or children not living in the household, who could be linked to the household by special relationship codes in the original roster.

Population Identification: Sampling Strategies. Much of the interest in fathers focuses on men who are relatively rare in the population, such as fathers in varied employment statuses. Problems of adequate sample size are exacerbated in analyses that need to cross-classify by race/ethnicity, socioeconomic status, age and gender of the child, or various family configurations.

One of the basic problems is the large sample size needed to arrive at an eligible sample which can provide sufficient statistical power. This requires either substantial funding or the ability to piggyback onto other research or find other cost-effective approaches. Research which investigates the cost and error implications of the choice of mode would be useful.

Another problem is following movers in longitudinal surveys, which is important for measuring long-term outcomes. The working group noted that much can be learned from the NLSY, SIPP, and other surveys which attempt to track respondents across significant periods of time. Administrative records might also be explored as a way of following families that separate.

Population Identification: Institutional Populations. Typically, large scale national surveys of the population represent the civilian, noninstitutionalized population only. A large share of men excluded by these approaches are fathers. It is therefore important to examine better ways to obtain information from men who are in various types of institutions or in the military.

Data Collection Procedures: Response Burden. Two types of response burden need to be addressed. The first involves the difficulty of the task and relates to length of questionnaire, how many respondents are interviewed, and the difficulty of the questions. Much more research is needed to develop less burdensome data collection instruments for fathers and children. Research is also needed on the problems associated with recall of family history and the usefulness of available records in the household. The optimal frequency of data collection for recurring surveys should also be determined.

The second type of response burden is related to sensitive items. Here, mode of administration is important, since distance from the interviewer can affect the respondent's feelings of privacy and confidentiality. Methods for reducing this burden include randomized response techniques, self-administered survey instruments, and question order.

Data Collection Procedures: Reporting. Further research is needed on subject areas for which previous partners or children are able to serve as proxy respondents and which ones require the additional expense of locating and interviewing the fathers to achieve needed accuracy and reliability. With respect to accuracy, it is not clear that self-response is always more accurate than proxy reports.

Data Collection Procedures: Administrative Records. The usefulness of administrative data depends on the topic being studied and the availability of information in different records systems. In any application, researchers must investigate whether access to records can be obtained, what information is available, the quality and completeness of the information, and how such information might be linked to other data being obtained in the study.

Data Collection Procedures: Mode of Data Collection. The consequences of gathering data using different modes (mail, telephone, or personal interviews; degree of computer-assistance; observational studies; diaries; or other modes) are closely related to the type of study being undertaken. Most studies of the effects of interviewing mode have examined the more typical respondent, in this case, the mother or the child. Further research is needed into how various modes may influence data quality and response rates.

Study Design: Questionnaire Design and Measurement Issues. Compared with mothers, fathers may have unique ways of interacting with their children, and such relationships cannot be discerned using traditional survey questions. Further research is needed on what aspects of fathering are important to men, what aspects are important to children, and ways to improve the quality of information through improving the questions asked. New questions will be needed to assess what fathers contribute to their children, and the ways fathers and children view their relationships with each other. All questions must be thoroughly tested to ensure data quality.

Among the working group's other recommendations are that research should also be undertaken to develop methods which overcome problems of memory and recall; questionnaires should be designed that work well with the mode of data collection; and multiple measures from multiple sources will be necessary to ensure the quality and/or accuracy of the data.

Study Design: Linking Quantitative and Qualitative Designs. Enhancing quantitative survey designs with qualitative research methods has the potential to enhance knowledge. The working group pointed to examples of the effective use of qualitative methods to inform and guide quantitative research and highlighted lessons from these experiences. One is that qualitative methods are useful for designing questionnaires which interviewers can administer more easily and that respondents can understand. They

can also help explain seemingly conflicting or confusing findings from quantitative research.

Study Design: Longitudinal or Cross-sectional Designs. While longitudinal designs tend to be thought of as more expensive, they may be more cost-effective through providing richer information with a smaller sample than may be achieved with repeated cross-sectional studies.

Study Design: Population Diversity. In studies characterized by uniform administration (such as large-scale sample surveys), conscious compromises will need to be made to develop items that are understandable to a wide variety of respondents. In other types of research, special, more targeted approaches may be taken when dealing with different populations.

Study Design: Measuring Time Use. The most accurate ways to collect time-use data (observation, time sampling) are also the most expensive. Yet the most common method used in survey research -- asking parents directly -- is known to be biased. Fortunately, substantial methodological work has established the validity and reliability of data collected in time-diary form.

How Should New Data Collection Be Undertaken?

Two fundamental issues for the research community to consider in designing studies on fathers are whether to initiate a new study or add on to an existing survey, and whether the study should be conducted by federal statistical agencies or as a privately sponsored effort. The working group provided some guidance about factors to consider when addressing these questions.

New versus Supplemental Studies. New studies have a distinct advantage in that the designers and sponsors have greater latitude in defining the scope of the study. They have the disadvantage of higher costs and longer start-up times. Supplemental studies are typically lower in cost and have a faster start-up time, but the study directors generally have little control over the design of the survey and sample.

Federal versus Privately Sponsored Studies. While federal studies historically have had more secure funding sources, this may no longer be the case in the current budget climate. Federal surveys have a small advantage in easier access to national sampling frames. In addition, requirements making federal data publicly available enhance the value of the study for the broad research and policy community. And despite concerns about response burden, the federal government still tends to achieve substantially higher response rates than are achieved in private surveys.

Federal surveys also have disadvantages, many stemming from a generally long lead time from conceptualization to development to data production and analysis. Privately sponsored studies or studies conducted with federal grants avoid some of these disadvantages. On the other hand, private studies can be less likely to provide timely public use data files to allow the broader research community access for analysis.

Recommendations

The working group concluded with a summary of the implications of its report for future research on fathers. The group stated these implications as a series of recommendations.

1. Include men and fathers. Male fertility and fatherhood are complex aspects of social life that are inadequately understood. National surveys need to provide an accurate and in-depth profile of fathers that goes beyond concerns about absent fathers. In particular, the ECLS and the NSFG should consider

including fathers as respondents. In addition, studies of what nonresident fathers do should include reports from nonresident fathers -- a substantial change in research design.

2. *Improve household survey methodology.* Underrepresentation of fathers in household surveys is due partly to an undercount of fathers who are tenuously attached to households, and partly to underreporting by men who do not disclose that they have children living elsewhere. Both of these issues can and should be addressed through methodological improvements.

3. *Add expanded household and extra-household rosters to existing surveys.* Experimental surveys have increased their coverage of underrepresented groups of fathers by using an expanded set of questions and probes. Existing surveys should further test these questions and probes along with their standard restoring techniques. In-depth studies (particularly long-term longitudinal studies) should consider including fathers. The Early Childhood Longitudinal Study (both the kindergarten cohort and the planned birth cohort study), in particular, should make every effort to include a father supplement at some point in the study. In addition, some effort should be made to include men in correctional institutions in household surveys.

4. *Develop questions that are relevant to fathers and result in accurate responses.* New questions are needed to assess fathers' contributions to their children's development, as well as better methods for interviewing.

5. *Improve procedures for asking sensitive questions.* Some promising techniques for survey research have been developed, such as audio computer self-administered segments of interviews. Ethnographic studies may also provide useful guidance.

6. *Reduce response burden.* Studies are needed of ways to reduce the response burden imposed by extensive sexual histories and reproductive careers. The life-history calendar is one promising way to reduce response burden. But little methodological research has been conducted specifically on men.

7. *Conduct intensive observational studies.* The gaps in our knowledge of what fathers do suggest the importance of smaller, intensive observational studies for providing valuable insights about fathering and for generating hypotheses that can be tested in larger surveys.

8. *Use supplementary and alternative sampling strategies.* Because the standard household sample-survey appears not to find many unmarried fathers, other sampling strategies should be considered either as supplements to household surveys or as alternatives. The other strategies include use of administrative data to locate absent fathers, the addition of the incarcerated population and the military population whenever possible, and the development of alternative designs, such as sampling of births at hospitals.

9. *Recognize population diversity.* The roles of fathers are embedded in larger family processes that can differ by class, race, and ethnic groups, and differ again within these groups. Studies need to take this diversity into account.

10. *Be careful of unobserved sources of bias.* Research designs that can reduce bias should be used where possible. These include so-called panel data, studies of families that are affected by external assignments of fathers' roles such as military transfers or court orders, and statistical models that attempt to correct for incomplete and self-selected samples.

11. Carefully consider additions to existing data programs. It is not clear that completely new, large-scale studies should be undertaken at this time. There is a great deal to be learned from working with existing survey mechanisms. Important contributions can also be made with small scale work and through expansions to existing studies of family conditions and processes.

12. Conduct more methodological research. Many important facets of research on fathers need to be improved before we can be satisfied with the quality of current and future studies. These include the basic problems of finding nonresident fathers, of underreporting of fatherhood by men, and of obtaining full and accurate answers. We need to know more about how to combine and analyze responses from mothers and fathers in data in which couples are the unit. We also need to know more about what aspects of fathering are important and valuable, probably through detailed observational studies.

Final Plenary Session: Conference Recommendations

Following presentations and discussion of the working groups' reports, conference participants worked in small groups to develop specific recommendations for research and data collection. Each small group's recommendations were presented and discussed in a final plenary session. Below is a summary of their recommendations.

Build on existing research. The conference highlighted gaps and weaknesses in existing research. However, a great deal is known about fathers, and existing research provides a firm basis for future work.

Further analyze existing data. Although there is a need for new data on fathering and male fertility, several existing data sets contain untapped information. It is important to maximize the use of existing data sets to determine specifically what is known and what is needed before embarking on the development of a new survey on fathers. One important way to encourage investigators to use existing data and research is to increase their awareness of the available resources through publicity.

Conduct basic methodological research. The dual goal of methodological research is to improve existing surveys and to design a well conceived, focused study of the issues of fertility and parenting. There is a need for basic methodological research to help refine constructs and measures related to fatherhood, to look more closely at what it means to be a father, and to focus on attitudes and perceptions of fatherhood, in particular, how attitudes and perceptions may differ across race/ethnicity or family types.

Further examine specific topics related to fathering and male fertility. The groups identified several topics that various participants felt warranted closer examination with both existing and new measures. These topics, which were not prioritized, included:

- the role of moral development and character as they pertain to fertility, family formation, and fathering;
- sexual behavior and fertility and their association with union formation and dissolution;
- the definition of "intendedness" and whether a man's attachment to his partner affects intendedness;
- how the relationship between a mother and father affects father-child attachment;
- the expectations and responsibilities of fathers;

- the role of fathers as primary caregivers;
- the role of social versus biological fathers;
- family processes in general, and how activities vary by gender;
- how fatherhood and union formation affect the wellbeing of both the child and the father; and
- how a father's relationship with his child affects his participation in self-development activities like job training programs.

Focus on both the father and the child. Perspectives of the father and the child regarding the father's roles and the father-child relationship may differ markedly. Because both perspectives are important, research should encompass interviews with both fathers and children whenever possible.

Construct new models to examine union formation and dissolution. Current models that examine union formation and dissolution are based on economic models focusing on traditional marital unions. There is a need for new models that incorporate how and why nonmarital unions, including cohabiting and noncohabiting unions, form and dissolve. However, many surveys do not collect the data needed to develop alternative union formation models. Perhaps content changes can be incorporated into on-going surveys, such as the National Longitudinal Survey of Youth (NLSY-97), the National Education Longitudinal Survey (NELS) and the Adolescent Health Survey.

Revise and/or expand existing surveys. There is general consensus that existing surveys should be revised or expanded and that, for instance, a male supplement should be added to the National Survey of Family Growth (NSFG). Other recommendations are to add a fatherhood module, including more items on custody, visitation and child support, to the Survey of Program Dynamics (SPD) the Current Population Survey (CPS), and the Survey of Income and Program Participation (SIPP); to include enhanced father-related questions on the NLSY's child interview and on the Youth Risk Behavior and the Behavior Risk Factor Surveys; and to readminister the family functioning segment of the National Health Interview Survey (NHIS).

Include a core set of items on surveys. New or revised surveys should include a core set of questions to facilitate analyses and comparisons across surveys. For instance, they should include questions that identify both the mother and the father and their relationship as biological, step, or adoptive parents of the focal child. In addition, a basic question about whether there is a nonresident parent should appear consistently and with the same wording across surveys, along with items about the nonresident parent including race/ethnicity, age, education, and employment status at the birth of the child.

Design a new survey. After careful consideration of the strengths and weaknesses of existing surveys, one long term goal is the design of a new survey on fathering with a sampling frame that includes males who are often underrepresented in current data collection efforts. In addition to a new survey on fathering, another recommendation is a national survey of men's sexual behavior that includes both teen and adult males.

Identify fathers on birth certificates. Birth certificates are a practical place to identify marital and nonmarital relationships between mothers and fathers. A long-term recommendation is a fuller set of birth certificate information about the father and the parental relationship. A short-term recommendation is to require states to request the father's name and address information on the birth certificate in both marital

and nonmarital circumstances, when the father has acknowledged paternity.

Conduct more research on the undercount and underreporting of fatherhood. Part of the underrepresentation of fathers in surveys is due to an undercount of fathers who are tenuously attached to households and part is due to underreporting by men who are interviewed but do not report that they have children living elsewhere. New methods are needed for finding fathers and asking appropriate questions. Suggested sampling strategies include the addition of the incarcerated population and the military population when feasible and the use of administrative records to locate fathers whose names are not reported by respondents in household surveys. The use of smaller qualitative studies could be particularly useful in learning how to better ask specific questions. It should be noted that since finding fathers is difficult, the tendency to move more and more toward phone surveys may not be productive.

Conduct more qualitative research. Ethnographic and other qualitative studies that include a diverse representation of fathers have the potential to capture the full range of fathers' roles and activities. In addition, qualitative methods provide the opportunity to explore specific questions from large surveys in greater depth and to determine the appropriate wording of questions and the interpretation of answers. The insights gained through qualitative investigation can enhance survey methodology. For example, ethnographic findings have been used to distinguish between tenuous attachment and permanent residency in households, which has been useful for large survey construction.

Improve methods used for collecting both sensitive and subjective information. The use of audio computer-assisted self-interviewing and monetary incentives appears to increase the reporting of sensitive information. Additional methodological research is needed to determine the most effective ways to collect sensitive information and information on subjective realms, such as motivations, attitudes and values toward male fertility, family formation, and parenting.

Carefully train interviewers. Careful selection and training of interviewers is especially important in light of the sensitive and subjective nature of some of the items suggested for future studies. For instance, in the case of qualitative studies focusing on very in-depth and personal information, interviewer-respondent rapport is very important. Establishing trust and legitimacy in the community and the household is essential to gaining cooperation from respondents.

The conference ended with a commitment from the working group on Targets of Opportunity and Trade-Offs to incorporate substantive points and methodological recommendations from the conference in their report to the Interagency Forum on Child and Family Statistics.

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CHAPTER THREE

MALE FERTILITY AND FAMILY FORMATION: RESEARCH AND DATA NEEDS ON THE PATHWAYS TO FATHERHOOD

Chapter 3: Report of the Working Group on Male Fertility and Family Formation

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Introduction

The experience of fatherhood for American men has been dramatically altered in recent decades. Men are now more likely than ever before to live separately from their children and to father children outside of marriage. Many men experience fatherhood as a sequence of relationships with children, some biologically theirs and some the children of spouses or partners. These new facts of fatherhood derive from pervasive changes in fertility and marriage patterns that have reshaped the ways in which American families are formed. The Male Fertility and Family Formation Working Group was created to address the processes that lead men to becoming fathers and influence the conditions under which they do so. Its mission included reviewing the state of knowledge about fertility and union formation and dissolution among men, and suggesting needed data and research to advance our understanding of these issues and to inform policy. The Working Group included 30 scientists from universities, private research institutes, and federal agencies representing diverse interests and expertise.

This report summarizes the findings and recommendations of the Working Group. In the first section, we argue that information and research about male fertility and unions are critical to understanding fatherhood and to social policy concerned with fatherhood. In subsequent sections, we provide a brief review of what is currently known about specific aspects of male fertility and family formation, discuss what gaps exist in research and data, and suggest how these gaps might be filled. These sections focus on male fertility; union formation and dissolution; the interrelationships between fertility and unions; reproductive health; and theory and methodology. We conclude with recommendations for the establishment of indicators, the strengthening of data collection, and the support of research relating to these topics. This report draws heavily from working papers prepared by members of the Working Group for a workshop held January 16-17, 1997. The complete papers are appended in Appendices B through I.

Setting the Stage for Fatherhood: Male Fertility, Family Formation, and Fathering

Most people think of fatherhood in terms of *men who are fathers*, and ignore the vital demographic and social processes that bring men into fathering roles and influence the circumstances under which they act out those roles. We argue that a proper and complete understanding of fatherhood is impossible without recognizing and accounting for these larger processes; we argue that male fertility and union formation and dissolution are essential to understanding fatherhood. Our case rests on three points: historically,

fatherhood has changed largely because of changes in these social and demographic processes; theoretically, these processes are integrally intertwined with the nature of fathering itself, and in terms of policy, opportunities for improving the lives of fathers will be missed if these processes are ignored.

Historical changes

Historical changes in marriage, fertility, and normative attitudes toward family behaviors have played a central role in reshaping fatherhood. The "disenfranchised dad" is not a result of changes that have affected men in stable marriages but a result of changes that have moved fatherhood increasingly out of the realm of stable marriage. Among the most important of these changes has been the decline in marriage and the increase in divorce. Marriage boomed following World War II but then began a steep decline during the 1960s and 1970s. Between 1964 and 1990, the median age at first marriage increased from 22.4 to 25.9 for men; from 20.4 to 24.0 for women, returning to patterns seen in the last century (Clarke, 1995). As marriage declined, nonmarital cohabitation increased. Although increases in cohabitation nearly offset the decline in marriage (Bumpass and Sweet, 1989), the effect was to substitute less stable unions for more stable ones. Marital instability was also rising dramatically during the 1960s and 1970s, sharpening a long-term trend that had been underway for most of this century (Cherlin, 1992; Thornton, 1994). Whereas only a small fraction of marriages contracted in the latter part of the nineteenth century ended in divorce, today demographers project that well over one-half will be terminated by marital discord (Martin and Bumpass, 1989; Bumpass, 1990). The likelihood of marriage following divorce has declined as well.

These changes in union formation and dissolution are closely intertwined with changes in the circumstances and timing of fertility. Postponement of marriage was accompanied by a surge in premarital sex, and a steady increase in the proportion of teenagers who were sexually active. As the interval between the initiation of sexual activity and marriage lengthened, childbearing outside of marriage increased dramatically. The proportion of children born to unmarried women rose steeply, from about 6% in 1960 to one-third in 1994 (Ventura et al., 1995; 1996). This trend was fueled in part by rising rates of nonmarital pregnancy, and in part by declining proportions of premaritally pregnant couples who opted for marriage (Ventura et al., 1995).

These trends had a dramatic impact on the circumstances of fathers and children. The percent of family groups with children that included two parents declined from 87 percent in 1970 to 72 percent in 1990; among black families this decline was even steeper, from 64 to 39 percent. The number of female-headed families with children increased, first as a result of increases in marital dissolution, and subsequently as a result of increased out-of-wedlock childbearing (U.S. Bureau of the Census, 1992). The number of children involved in divorce each year approximately doubled between the early 1960s and the mid 1970s (Clarke, 1995). The proportion of children in single-parent families who were living with a never-married parent increased from 7% in 1970 to nearly one-third in 1990 (U. S. Bureau of the Census, 1992). Declines in marriage, increased marital instability, and increased out-of-wedlock childbearing have acted as demographic wedges, tending toward the separation of men from their children.

The demographic changes have been accompanied by changes in values and attitudes concerning marriage, nonmarital sex and childbearing, and appropriate roles for men and women. Since the mid-twentieth century, there has been a dramatic weakening of the normative imperative to marry and to stay married, although most Americans continue to value marriage and family life (Thornton, 1989), expect to marry, and view divorce in negative terms. At the same time, the normative proscriptions against premarital sex, nonmarital cohabitation, and out-of-wedlock childbearing have declined dramatically, with large numbers believing that living together before marriage is a good idea.

Contraception is widely endorsed, and most Americans approve of abortion under at least some circumstances (Blendon, et al., 1993). These changes are intertwined with structural and ideological shifts in gender norms. The increasing participation of women in work outside the home has coincided with a new revolution in norms regarding family roles. Recent evidence suggests that both men and women are now increasingly rejecting the traditional roles and obligations of a conventional family. These normative changes have tended to undermine social support for the family and have greatly reduced the control of families and societal institutions over the personal decisions of individual women, men, and couples. (Thornton, 1989; 1995).

Theoretical Linkages

In addition to being historically important, **the processes of union formation and dissolution and the processes of male fertility themselves have important theoretical implications for fathering.** The nature of fathering roles, expectations, and behaviors are linked to (1) the circumstances in which biological fatherhood occurs and (2) the nature of men's relationships with the biological mother of their children.

(1) *The circumstances of biological fatherhood.* The timing of fatherhood in relation to the development of economic self-sufficiency, maturity and personal responsibility are important predictors of the personal resources that men bring to fatherhood. Traditional notions of what it means to be a father require a man to provide resources - normally earnings from a steady job - to support his children. If a young man becomes a father before he is able to do this, he cannot carry out this role. Ethnographic research (Furstenberg, 1995) suggests that even in the presence of strong emotional commitment to support the child, the inability to provide economic support seriously undermines a man's sense of competence as a father and ultimately his involvement with his child.

In addition, the process of becoming a father is likely to affect a father's investment in the child. Most births to unmarried couples (and a substantial portion of births to married couples as well) are the result of pregnancies reported as unintended by the mother. What little evidence exists on this question suggests that the quality of parenting and child well-being are related to the extent to which births were wanted and planned (Brown and Eisenberg, 1995). When children are the unintended consequence of sexual activity, as is often the case for children born to unmarried couples, they begin life at a disadvantage.

For men, the path to an unplanned birth has unique aspects that may exacerbate the implications for fathering. Modern methods of birth control and legal abortion have given women more control over their reproductive lives, but have not done the same for men. Aside from condoms and vasectomy, men have no direct control over contraception, and they have no legally recognized part in the decision to carry a pregnancy to term. The only foolproof way for a fertile man to prevent unplanned fatherhood is to abstain, an option that is poorly supported by peer norms and social controls. Men's relative lack of control over their reproduction may contribute to a reduced perception of responsibility for the children they father, as well as low levels of investment in children.

(2) *Relationships with mothers.* Research suggests that the nature of fathering is dramatically affected by the relationship between biological father and mother. Even in a stable, coresident family, it is sometimes a challenge for mothers and fathers to collaborate in providing care, affection, and material resources to their children. When mothers and father hold primary ties to other partners or family members, these ties often create obligations and expectations that conflict with parenting responsibilities. Thus, for example, if a young father lives with his mother and earns little money, he may contribute what he has to his mother's support rather than his baby's. If a divorced mother remarries, the stepfather may take on

fathering responsibilities that marginalize the biological father's role.

Coresidence with children is closely linked with men's relationships to women and is a central factor in determining the nature of fathering roles. The amount of contact between noncustodial fathers and their children is alarmingly low, and typically decreases over time (Mott, 1993; Furstenberg, et al., 1983). Provision of child support is closely related to the amount of contact with the children. Not only do biological ties to children become less important when the children live elsewhere; any children who do reside with the father (e.g., those from a remarriage) receive more attention. Seltzer and Brandreth (1994) show that the attitudes of nonresident fathers toward paternity varies by resident child characteristics rather than biological linkages.

Even among resident or nonresident fathers, fathering is influenced by the status and history of the union with the mother. Nonresident divorced fathers have a different pattern of involvement with their children than never married fathers. Among coresident parents, it means something very different to be a stepparent compared to a biological parent (Marsiglio, 1995). We know that, in general, cohabiting couples are less committed to each other than are married couples, but know little about commitment in cohabiting couples with children, either to each other or to their children.

Relationship transitions are also important. The involvement of fathers in their children's lives shifts as families break apart, re-form, and add or subtract members. There is a large and growing body of literature which examines the consequences of relationship transitions for the development of children. If, as recent evidence (Wu, 1996) suggests, stability in family relationships is a critical factor affecting child outcomes, then it may be impossible to study the impact of fathering on child well-being without accounting for relationship transitions and their effect on the number of men who act as fathers to the child and ways in which they father.

Policy questions

The processes of male fertility and family formation are critical to policies and programs aimed at strengthening fathers in two ways. First, because they set the stage for how fathers function in their families, understanding them can help to improve and target interventions for strengthening father involvement. For example, one might apply a very different "fix" for a family formed through coercive sex than for one emerging out of a loving and committed relationship. Second, they provide additional points of intervention for fatherhood programs. Too often, current policies address problems only after families fail, an approach that is too late and often does not include the male in definitions of the family unit. Explicit attention to preventing unintended births and supporting stable unions can support fathers by improving the circumstances in which fathering occurs. Key questions for policy include:

(1) *What facilitates or deters paternity establishment when a child is born out-of-wedlock?* Recently significant strides have been made to establish formal paternity for fathers in unwed families. The paternity establishment rate is now near 50%, but welfare reform laws are exerting pressure to push the rate to much higher levels. Results of an Arkansas survey of poor pregnant women found that 80% of the women wanted to establish paternity but less than 40% did so (Welsh, 1995). We know little about the meaning of this new step in family formation and about its determinants and consequences. It is very likely that the nature of relationship between biological mother and father and the sequence of events that led to the birth play a significant role. Does paternity establishment act to foster the continuation of relationships and the stable involvement of fathers or does it act as an economic threat to men driving them away from their families?

(2) *Are there ways to strengthen men's ability to control their own reproduction without undermining women's ability to control their reproductive lives?* Is there a demand for effective reversible contraception for men? Could improved male-oriented or couple-oriented reproductive health services reduce the rate of unplanned births or strengthen men's involvement in deciding how to resolve an unintended pregnancy? What is the impact of well-designed programs encouraging abstinence among both young men and women? How could such programs be designed to strengthen social support for abstinence among peer groups? Can abstinence messages be combined with contraceptive messages? Conversely, to what extent does unplanned birth result from nonvoluntary sex (either directly or indirectly) and what can be done about this?

(3) *Are there ways to improve the stability of relationships among couples with children?* Ron Mincy (1995) has introduced the concept of the "fragile family" - an unmarried, disadvantaged couple with a child that is trying to develop and sustain meaningful and beneficial roles as parents. He makes a strong case that around the time of pregnancy and birth, the *right* kind of support could strengthen these families and greatly improve the well-being of children. Mincy argues that current policies that emphasize child support payment above all else undermine fathers' ability to sustain relationships with the mothers of their children and undermine their ability to succeed as fathers. Others point to positive associations between child support payment and father involvement found by research studies and suggest that child support policies may have beneficial effects. We need a better understanding of how policies affect the stability of relationships between mothers and fathers, and how those effects may differ in different economic and social contexts.

(4) *What kinds of policies create incentives and disincentives for couples with children to marry and to stay together?* In today's world, married people often receive different treatment by the government than single people do. Married individuals face different tax rates than they would if they were not married. In some states, poor *married* parents are not eligible for programs that are available to poor single parents. Social Security provides survivor benefits only to widows and widowers who were legally married. Age requirements limit the ability of pregnant teens to marry. Understanding how public laws and policies affect individuals' and couples' personal decisions to marry and stay married may provide an important lever for improving the lives of fathers and children. These questions are particularly important - and researchable - in light of new welfare reforms creating variation from state to state in the incentives and disincentives that policies provide for marriage.

(5) *After divorce, how do subsequent union formation and fertility affect fathers' economic support and involvement with children from previous unions, and how do child support, custody and visitation policies affect subsequent union formation and fertility?* New family configurations involving children from multiple unions are incompletely institutionalized (Cherlin, 1992). A better understanding of the consequences of divorce and subsequent family formation for children and parents, and of the effects of policies on family transitions is needed to inform the evolution of policies and norms that best serve the interests of families.

Research and data addressing these policy questions must be especially sensitive to the substantial variation in male fertility and family patterns among subgroups of our population and the processes that have contributed to this variation. It is very likely that the answers to policy questions will differ depending on the economic, social and cultural circumstances that characterize individual lives and communities. Understanding these sources of difference can make a major contribution to the formulation of effective policy.

A Model of Biological and Social Fatherhood

The distinction between biological and social fathering is critical for understanding how fertility and unions affect fatherhood. As Figure 1 illustrates, fertility is one of several pathways through which men can become social fathers. Fertility creates biological fatherhood, a status that is fixed regardless of how paternal responsibilities are defined or carried out, and revocable only through death of the child (Appendix C). Because women, not men, give birth, establishment of biological paternity in the eyes of the larger world can be problematic. In previous times, strict limitation of reproduction to marriage provided a mechanism for attributing paternity. Today, the process of paternity establishment for the growing number of births that occur outside of marriage is a critical link between biological fatherhood and legally recognized biological fatherhood.

Social fatherhood, by contrast, is not a fixed status. Social fatherhood, which is often referred to as fathering, includes all the child rearing roles, activities, duties, and responsibilities that fathers are expected to perform and fulfill. Involvement in these roles and activities will inevitably ebb and flow over a man's life. As Figure 1 shows, biological fatherhood is only one of several paths to social fathering. Unions formed and maintained with women who are mothers - whether of the man's children or of someone else's children - are another critical path, one that changes in marriage and fertility patterns have made increasingly important. Other paths might include adoption (which confers the legal status of a biological parent), and adopting fathering-like roles for children of relatives or friends. These "other" paths to social fatherhood can be important, but are outside the scope of our working paper. In the following sections, we review what is known about the processes of male fertility and union formation and dissolution, and what we need to know to have a better understanding of fatherhood.

Male Fertility

The process of becoming a biological father begins with an act of sexual intercourse and the nonuse or ineffective use of contraception⁽¹⁾. To discern how men become fathers, it is therefore critical to understand better the sexual and contraceptive behavior of males, the motivation underlying these behaviors and the factors influencing them.

Whether or not an act of intercourse is protected by contraception is the result of a complicated set of conditions involving two people. First, either partner can use a method of contraception. Men can use condoms or withdrawal; women can use a wide range of methods. Indeed both partners can use protection although this is rare in spite of public health admonitions about the desirability of dual method use to prevent both STD transmission and unintended pregnancies. More frequently, one partner uses contraception while the other does not, implying that the decision to use contraception involves some implicit or explicit bargaining between the partners. Research results indicate that among young men and women, the use of male methods of contraception is more frequent than among older men and women, and that over the course of a relationship there may be a transition from the use of condoms to the use of effective female methods of contraception (Ku, Sonenstein and Pleck, 1994).

A second important condition affecting whether contraception will be used is whether or not the partners desire pregnancy. Miller (1986) has suggested the use of the term "proception" to describe attempts to achieve conception. The conscious choice not to use contraception because pregnancy is desired should be differentiated from the non-use of contraception for other reasons. Just as contraception can involve either partner, proceptive behavior can be jointly adopted by both partners or individually by either the male or female. Underlying this distinction between non-contraception and proception are the motives of both partners. Very little is known about the proceptive behavior of either men or women in the U.S. although some research has been conducted on couples who have difficulty conceiving pregnancies

(Marsiglio, 1998).

The bulk of fertility research has focused on contraceptive behavior because its absence often leads to unintended pregnancy, which has been defined as an important social problem in the U.S. (Brown and Eisenberg, 1995). Thus in most of this research proceptive behavior is treated as an exception. Work has been conducted on the motivations of men and women to have children, but it has been limited to married couples (e.g., Beach, Campbell, and Townes, 1979; Beckman, 1984; Fried, Hofferth and Udry, 1980; Miller, 1995; Miller and Pasta, 1996). This research shows that in aggregate: married men and women have similar desires for children; most couples agree in desires but a substantial minority disagree; and disagreement leads to delays in childbearing. Regarding the proceptive behavior of unmarried males, there is very little research evidence. Some anecdotes and ethnographic research suggest that nonmarital childbearing in low income communities may be partially the result of the male partner's desire to sire children to prove their sexual potency, to gain status with their peers or to ensure a next generation when mortality and institutionalization rates of young males are high (Anderson, 1989). Since there are currently no data on the intendedness of births from the unmarried father's perspective, the generalizability of these assertions is not known.

Another process that is important in the fertility context are decisions to become sterilized. Opting for sterilization provides a permanent contraceptive guarantee that biological paternity will no longer occur. Many older couples in the U.S. turn to sterilization once they have achieved or exceeded their desired family size. During the last two decades sterilization has become the most widely used contraceptive method used by married couples in the U.S. (Miller, Pasta and Shain, 1991). While females are more likely to undergo the procedure than males, vasectomies are fairly common among men, especially older white males. Data from 1988 indicate that 31 percent of women ages 15-44 were surgically sterilized and 17 percent of their male partners had been sterilized (Mosher and Pratt, 1990). The 1991 National Survey of Men found that more than one fifth of married males ages 35-39 were sterilized. Trend data indicate that while the incidence of male sterilization has grown from the early 1970s, its increase has not been as rapid as increases in female sterilization. It is important to understand why men are less likely to undergo sterilization than women because vasectomies are less costly and physically complicated than female sterilization (Forste, Tanfer and Tedrow, 1995).

A second gate on the route to fatherhood that some men pass through involves the decision about carrying the pregnancy to term or terminating it if the pregnancy was unintended. In many instances the male partner may participate in these considerations and the decision reflects the shared wishes of both partners. When the male and female partners disagree, legal precedent has established that the decision rests with the female in consultation with her physician. In some cases the male partner is never told about a pregnancy while it is occurring, and his opinions about pregnancy options are never solicited. How a man's relationship to his child is colored by the nature of his participation in decisions leading to unintended pregnancy and birth is an empirical question: there are very few studies of unintended fertility among women and none involving men (Brown and Eisenberg, 1995). However, anecdotal evidence suggests that not wanting the child is an important factor in many men's failure to pay child support.

Information about how women negotiate the sequence of reproductive behaviors described above is available but evidence about the male partner's fertility behavior is scant. In the following section, we review what we need to know about male reproductive behaviors and the factors influencing these behaviors. Recommendations about research priorities follow.

Trends in nonmarital sex, unprotected sex, and unintended pregnancies and births.

While the National Center for Health Statistics has periodically collected data on women's reproductive behaviors and fertility outcomes through the National Survey of Family Growth, there is no comparable effort for men. Over the last 15 years a number of ad hoc, researcher-generated national surveys have been launched that provide information about male reproductive behavior--The National Health and Social Life Survey (Laumann, Gagnon, Michael and Michaels (1994), The National Survey of Men (Tanfer, 1993), The National Survey of Adolescent Males (Sonenstein, Pleck and Ku, 1989), The AIDS Surveys (Catania et al., 1992), and The National Longitudinal Study of Adolescent Health. In addition, the National Longitudinal Survey of Youth, the National Educational Longitudinal Survey, the National Survey of Children and the Youth Risk Behavior Survey included some questions about sexual activity, contraception and fertility. Many of these surveys were limited to adolescents and/or young adults, and few included fertility as a primary focus.

These studies have provided valuable information about trends in male sexual and contraceptive behavior, showing that:

age at first intercourse has decreased over the last several decades for males but the decline has not been as steep as the decline among young women. Thus the age gap between male's earlier initiation into sex compared to female's has been narrowed.

Rates of nonmarital sexual activity have increased for males as the age of marriage has increased and the age of first intercourse has decreased. Again differentials between males and females have narrowed. Among both males and females the number of lifetime sexual partners has increased.

The use of contraception has risen, and the increase is especially marked in males' use of condoms. The emergence of HIV and other STDs as major public health concerns have fueled efforts to encourage condom use. These efforts have shown some success since the reported used of condoms has risen significantly among males since the early 1980s, especially among teenage males and unmarried males.

There are no reliable data on trends in pregnancies or births to males nor about the intendedness of these pregnancies or births. Vital statistics data collected by the birth registration system could potentially provide evidence of the age and other characteristics of the fathers of children born in the U.S., however these data are biased by the incomplete reporting of information. One in six birth records contain no information about the age of babies' fathers; this proportion rises to over two-fifths for births to teenagers (Landry, 1995). Currently, there is no institutionalized survey that provides information about the fertility and fertility-related behaviors of American men.

Recommendation: In order to identify secular shifts in how men become fathers, basic descriptive information needs to be collected periodically about their rates of sexual activity, their patterns of contraceptive use, the pregnancies that they contribute to, and the outcomes of these pregnancies. Furthermore information is needed on the males' perceptions of their own and their partners' views of the intendedness of these pregnancies and births. To accomplish this objective, the National Center for Health Statistics in cooperation with other agencies should develop an approach to institutionalizing the collection of data about male fertility, either by adding to existing surveys or by launching independent efforts. As part of this approach:

methodological work should be conducted to develop reliable and valid approaches to measuring male fertility behavior and outcomes;

for topics where valid proxy information can be collected, existing surveys of women should collect more

information about their male partners;

the appropriate age range for fertility surveys of males should be considered. Surveys of women have been tied to the peak ages of reproduction, but for males the window of reproductivity is much wider;

the birth registration system needs to improve the completeness of data collected about fathers; and

an expansion of the National Survey of Family Growth to include men should be pilot tested.

Motivations and attitudes.

Very little work has examined the motivation or predispositions of males towards the reproductive behaviors we are examining: sex, procreation, contraception, and post-pregnancy behavior. Little is known descriptively about the kinds of predispositions that U.S. males have towards reproductive behaviors, the development of motivation in individuals, or the link between motivation and behavior. The largest body of research has been done on men's motivation to contracept, especially to use condoms, primarily as a result of public health concern about the AIDS epidemic (e.g., Grady, Klepinger, Billy and Tanfer, 1993; Pleck, Sonenstein and Ku, 1993). Other studies have examined perceived responsibility for contraception among men, and found that most men profess that contraception is a joint responsibility (Marsiglio and Menaghan, 1987; Sheehan, Ostwald and Rothenberger, 1986; Pleck, Sonenstein and Ku, 1993). More attention must be paid to men's own motivation to contracept and to avoid contraception, and their perceptions of their partner's motivation. Further work is needed to understand the intersection of motivation to avoid pregnancy with the motivation to avoid STD transmission. Most existing research has concentrated on teenage males or slightly older cohorts. There is a need to understand better the contraceptive motivation of adult unmarried males.

Other understudied areas include males' motivation to engage in sexual intercourse versus abstinence, to impregnate partners, to have children, to terminate an unintended pregnancy or to obtain a vasectomy. Unmarried men, both those in stable and transient relationships, are the least studied population in terms of their views of pregnancy and childbearing. Yet it is these men that are associated with the pregnancies, births and children that are viewed as social problems in the U.S. Their attitudes and predispositions regarding these reproductive behaviors are likely to influence the probability that they will become fathers either unintentionally or intentionally.

Recommendation: Males' motivation and perceptions influence males' readiness to engage in nonmarital sexual activity, to contracept, to impregnate partners and to father children. Relying solely on studies of females' motivation will only provide a partial understanding of fertility trends. To develop a more complete understanding of male motivation and its links to behavior:

Research on the motivation of males to engage in sexual activity, to contracept, to impregnate partners, to father children, to obtain vasectomies and to terminate unintended pregnancies should be conducted.

Methodological studies to develop better measures of motivation in these areas are needed.

In-depth studies of special populations which focus on theory building and a more comprehensive understanding of the motivational underpinnings of reproductive behavior should be conducted.

Measures of motivation with known levels of reliability and validity should be included in representative sample surveys of males like the National Longitudinal Survey of Youth, the National Educational

Longitudinal Survey, and other studies that could measure the fertility behavior of men.

What factors influence male reproductive behaviors?

Sources of influence on reproductive behaviors are complex, and a wide range of theoretical frameworks have been employed to characterize the precursors of reproductive behavior, primarily among females. With some adaptation these conceptual models can undoubtedly be applied to male behavior also. These frameworks selectively emphasize various influences on behavior including biological factors, individual characteristics and predispositions, partner dynamics, normative influences from family, peer group, community and religious agencies, gender role ideology, and other cultural messages from mass media, the polity and the economic market.

(1) Biological Factors. While there is recognition that human beings, like other primates, are physiologically programmed to engage in sexual behavior, there is surprisingly little work that examines the contribution of physiological and biological factors to sexual behavior in either males or females. It can be argued that a comprehensive understanding of reproductive behavior must acknowledge and incorporate the influence of innate dispositions on behavior as well as the potential for reverse causality. Very little research on reproductive behaviors factors in the influence of physiological factors, although the technology is becoming available to identify genetic markers, to measure hormone levels and obtain other bio-measures from subjects of behavioral research.

Recommendation: Basic research is needed on the links between physiological traits and reproductive behaviors for men, and also for women.

(2) Family Influences. The emergence of male and female orientations to reproduction appear early in development and seem to result from the complex interaction of physiology, individual history, family experience, and normative and cultural influences. Gender differences in orientation to nurturing children, for example, emerge at ages 4 through 6 (Miller, 1995). The characteristics of family of origin--family structure, religiosity, education levels, social class, and employment status of parents, for example--are known to be associated with age of initiation into sexual activity, contraceptive use, and experience with early pregnancies and births among teenage females and males.

Recommendation: Longitudinal studies of both boys and girls are needed that begin either at birth or soon thereafter to follow children into early adulthood to gain a better understanding of the factors leading to the development of adult expectations and behaviors regarding sex, pregnancy, childbearing and childraising.

(3) Gender role ideology. Among teenage males reproductive behaviors show a clear correlation with the views that they hold about how men should behave. Males who espouse more traditional views of masculinity are more likely to initiate sex early, to use condoms less frequently, and to have more sexual partners (Pleck, Sonenstein and Ku, 1993) More research is needed on the development of gender role ideology and its influence on reproductive and parenting behavior. Greater attention should be paid to changes in gender roles within and outside sexual relationships.

Recommendation: In sample surveys containing measures of reproductive behavior, more information should be collected about gender role attitudes. In particular, greater information about men and women's attitudes towards male gender roles need to be added to the conventional measures used to gauge attitudes towards women's gender roles.

(4) *Peer and Community Influences.* The social contexts that individuals live in provide continuous socialization into and reinforcement of the group's expectations regarding behavior. For example, the attitudes and norms of a young man's peers will likely influence his reproductive behavior. A particularly promising line of fertility research has examined the contextual effects of various normative environments on reproductive behaviors of both males and females (Billy, 1994). These studies have been facilitated by two technological advances: (1) the development of linked data sets that are multi-level and provide measures of neighborhood, school, peer group, and polity characteristics and (2) a burgeoning literature on hierarchical statistical approaches.

Recommendation: Efforts to create multilevel data sets should be supported. The feasibility of adding contextual measures to sample surveys that are currently freestanding should be explored.

(5) *Research strategies.* Existing data sets offer further opportunities to test explanations of male fertility behavior as well as to examine the links between these behaviors, relationship dynamics and parenting outcomes. Additional analyses of these data from the U.S. and other countries should be supported. This strategy takes advantage of the considerable investment that has already been made in data collection. Consideration could be given to developing a network of researchers to foster collaboration and facilitate multiple tests of research questions across data sets.

Recommendation: Existing data sets should be thoroughly mined for the insights they provide about male reproductive behavior.

It is desirable to complement large scale survey strategies with scientifically rigorous in-depth studies of smaller samples. Such studies could contribute to theory development and theory testing. They could use a range of promising methodologies including but not limited to ethnography, indepth interviewing, focus groups, or simulation games. They could also be linked to the large scale sample surveys to provide multi-method testing of explanatory theories.

Recommendation: Data collection strategies should not be limited to sample surveys. A range of studies using a variety of methods should be supported and offer the best opportunity to capture and test explanations of male fertility behavior.

Male and female reproductive behavior is the result of a long developmental process which is influenced by a complex array of biological, social and cultural forces. To understand current behavior, one must comprehend what has happened before. Therefore, we believe that a longitudinal study that follows children into adult roles would provide an important opportunity to comprehend how adult reproductive behaviors are influenced by a variety of developmental forces. It would also permit an examination of how events-- such as school completion or incarceration--influence reproductive behavior.

Recommendation: A longitudinal study of children--boys and girls--should be begun that traces their development over the course of their childhood and their transitions into adult roles. Consideration should be given to starting with a birth cohort. Although our current focus is on transitions into reproductive roles, there would be greater payoff in taking a more comprehensive view of psycho-social development.

Union Formation and Dissolution

As discussed previously, the formation and dissolution of relationships with women have a profound effect on men's roles as social fathers. Cohabitation, marriage, separation, divorce, and remarriage

influence whether a man lives in the same household as his biological children, his emotional and social interactions with them, and his economic support. These processes also lead men to become social fathers to the biological children of other men. The dramatic changes that have occurred in when and how men form sexual unions and in the stability of these unions through the child-rearing years underscore the importance of these processes for understanding fatherhood. This section reviews what we know about the meaning of different types of unions and the determinants of union formation and dissolution, and suggests needed data and research directions.

The Meaning of Marriage and Cohabitation

Marriage is characterized by a public, legally-binding, long-term commitment by an individual to another individual and to their union. The marriage contract explicitly includes sexual fidelity and mutual support, even during bad times. Virtually all married men and women say, when asked, that they expect to be monogamous and that they expect their spouse to be faithful to them (Tabulations from the National Health and Social Life Survey, 1992). Marriage vows include the promise to stay together, no matter what happens, until the union is broken by the death of one of the parties. Of course, this is not what happens to many marriages; according to the best guesses of demographers who study marriage well over half of all recent marriages will end in divorce rather than death (Martin and Bumpass 1989). But this is not the ending that people expect when they marry, and the vast majority of all married men and women think that their marriage will last.

Marriage is by its very nature a public commitment between two adults. The public commitment brings with it public recognition of the privileged and special relationship between husband and wife. Marriage as an institution is supported by social norms, by organized religion, and by laws and public policies. Almost all religions sanctify marriage and promote the establishment and maintenance of family relationships and the expression of love, intimacy, and childbearing within them. They also discourage sexual intimacy and childbearing outside marriage (Aldous 1983).

People who expect to be part of a couple for their entire lives--unless something awful happens--organize their lives differently than people who expect to be single. The marriage contract, because it is long term, encourages husbands and wives to make decisions jointly and to function as part of a team, and to develop specialized skills which benefit the couple. Marriage assumes sharing of economic and social resources and what we can think of as co-insurance. Married couples benefit--as do cohabiting couples--from economies of scale. Couples living together spend much less per capita on many of the costs of living, especially housing and food. Marriage connects people to other individuals, to other social groups (such as their in-laws), and to other social institutions which are themselves a source of benefits. Some consensus exists that marriage improves women's material well-being and men's emotional well-being, in comparison with being single (Waite, 1995).

Cohabitation has become a more popular union status but its defining characteristics are not yet fully understood. It has some but not all of the characteristics of marriage. Cohabitation does not generally imply a lifetime commitment to stay together, and cohabiting unions are much less stable than marriages. Research using data from the National Survey of Families and Households has shown that 90 percent of cohabiting couples either marry or separate within five years (Bumpass, Sweet and Cherlin, 1991). Evidence from Canada suggests that about half of cohabiting couples separate and half marry (Wu and Balakrishnan, 1995).

Cohabitants are much less likely than married couples to pool financial resources, more likely to assume that each partner is responsible for supporting himself or herself financially, more likely to spend free time

separately, and less likely to agree on the future of the relationship (Blumstein and Schwartz 1983). This uncertainty makes both investment in the relationship and specialization with this partner much riskier than in marriage, and so reduces them. Cohabitants seem to bring different, more individualistic values to the union than do those who marry (Clarkberg, Stolzenberg, and Waite, 1995). Whereas marriage connects individuals to other important social institutions, such as organized religion, cohabitation seems to distance them from these institutions (Stolzenberg et al. 1995; Thornton, Axinn, and Hill 1992).

Very little is known about other types of stable relationships between men and women who may even have children together but who live apart. In other cultures, such as in the Caribbean, these might be designated "visiting" relationships. Most surveys do not count these relationships and it is fair to say that social expectations about the mutual rights and obligations for individuals in these relationships are not commonly understood.

Changes in family law and in societal norms have changed the meaning of marriage in recent decades. Until quite recently "husband" as a legal status historically carried a different set of rights and obligations than the legal status of "wife." This view of marriage was part of a larger package of supports and restrictions. Legal marriages could generally only be dissolved, if at all, only by egregious breach of the marriage contract. In some states, consent of both parties, or a lengthy period of legal separation, was required to obtain a divorce. We have moved from this view toward a view of marriage as a contract that reflects an agreement between the individuals involved, an agreement that they are free to structure in any way they wish. This view accepts as valid prenuptial agreements that absolve spouses from any continuing financial obligation for each other in the event of divorce, and permits no-fault divorce at the wish of either spouse regardless of the other spouse's desires or adherence to the marriage contract.

The legal view of marriage as an arrangement that lasts only as long as it suits both partners undercuts the supports that allow individuals to invest themselves in their marriage. In a world in which at least half of all marriages end in divorce, a world in which both spouses are expected to be financially self-sufficient within a fairly short period after divorce, it becomes risky to put much time, money or energy into one's marriage and rational to invest in oneself or in portable skills and goods. So the structure of incentives has changed in a way that weakens marriage as an institution (Weitzman, 1985). Married couples are more likely to dissolve their marriage, all else equal, if they live in a state with relatively liberal divorce laws than if they live in a state with relatively restrictive divorce laws (Lillard, Brien and Waite, 1995).

Recommendations: Because of the shifts in the types of unions men and women form, we need better information about these relationships-- about new formulations of marriage, cohabitation and other types of relationships. Therefore we need to: Conduct both substantive and methodological research concerning the meanings of different kinds of unions today, including marriage, cohabitation, and non-coresidential unions. What do people expect from different kinds of unions and what expectations and preferences motivate their choices? How and why does this vary among subgroups of our population?

Conduct research on the historical trends in union formation and dissolution, with particular emphasis on explicating the explanations and meanings of those changes.

What influences the formation and dissolution of different types of unions?

Given the historical centrality of the institution of marriage, it should not be surprising that decisions about union formation and dissolution are intertwined with, influenced by, and consequential for numerous other dimensions of life, including the economy, employment, schooling, economic and

psychological well-being, and religious institutions. Furthermore, marriage is frequently an intergenerational process in that parents are generally influential in decisions about dating, courtship, and union formation.

Many dimensions of the parental family influence the union formation and dissolution experience of their children. Across a range of family issues, including premarital sex, cohabitation, marital timing, and divorce, the values and attitudes of parents influence the attitudes and behaviors of their children (Thornton, 1992; Axinn and Thornton, 1996; Moore et al., 1986). The union formation and dissolution experiences of parents are related to the attitudes and experiences of their children (Axinn and Thornton, 1996; Amato and Booth, 1991; Miller et al., 1987; Lye and Waldron 1993; Moore and Stief, 1991). For example, parental divorce is associated with more positive attitudes toward premarital sex and greater frequency of sexual intercourse among unmarried males and females. These intergenerational effects appear to hold for both males and females. Parental economic standing is positively related to age at marriage for both men and women. High levels of divorce and dissolution for this generation of families may imply fundamental change in the divorce and dissolution probabilities of the next generation. Although we know that the parental generation influences the union formation and dissolution experiences of young people, the causal mechanisms producing these effects are not well understood. It is not clear how genetic factors interact with social influences, and what social mechanisms are responsible for intergenerational effects. Little is known, as well, about how siblings and other family members influence union formation and dissolution.

Union formation and dissolution are also intimately interconnected with other dimensions of an individual's life. Premarital sexual experience--including its occurrence, pace of initiation, frequency, number of partners (as well as attitudes)--is strongly related to age at first dating and age at first going steady (and perhaps as well to the timing of cohabitation and marriage) (Miller et al., 1986; Thornton, 1990). It is not clear whether these strong correlations in the initiation of various steps in the courtship and union formation process are the result of genetic or social forces, and, if social, the ways in which the social forces operate.

Education and employment are very important elements in the union formation process. Young people who are performing well in high school and who have ambitious educational aspirations are less involved sexually than are young people with lower school performance and lesser aspirations in high school (Zelnik et al., 1981; Moore and Waite, 1977). School accumulation (years of schooling) increases the rate of entrance into marriage while decreasing the rate of cohabitation for men (Goldscheider and Waite, 1986; Teachman et al., 1987; Blossfeld and Huinink, 1991; Hoem, 1986; Thornton et al., 1995). The importance of employment, careers, and earning capacity in defining the ability to marry seems to be particularly important for men, although it may becoming more important for women as well (Oppenheimer, 1994; Oppenheimer and Lew, 1995; Oppenheimer et al., 1996; Lichter et al., 1991).

Other types of life experience, such as military service, incarceration, and involvement in illegal activity, may also influence patterns of union formation and dissolution. These experiences disproportionately affect the lives of men, and we know little about their effects.

Personal characteristics and attitudes are also important. High levels of personal religious involvement and commitment are associated with lower levels of acceptance of divorce, cohabitation, premarital sex, unmarried childbearing, not marrying, and remaining childless (Thornton and Camburn, 1989; Sweet and Bumpass, 1990; Lye and Waldron, 1993; Klassen et al., 1989). Religiosity--both attendance and importance--also reduces the cohabitation rate and increases the marriage rate (Thornton et al., 1992), and reduces marital instability. However, we know little about the factors producing these effects.

Union formation and union dissolution behavior are associated in important ways (Lillard et al., 1995; Axinn and Thornton, 1992). Cohabitation is strongly and positively associated with divorce. It is likely that this empirical correlation is the product both of cohabitation being selective of people who have higher risks of divorce and cohabitation itself increasing the risks of divorce. Unfortunately, we still know very little about the precise nature of either the forces selecting people into cohabitation or marriage or the ways in which cohabitation experience might change people's marital stability. Given that the correlation between cohabitation and divorce is substantial, the sorting out of the causal interconnections promises to provide substantial information about the nature and meaning of cohabitation, marriage, and divorce.

Another area where knowledge is very limited is couple negotiation and decision-making. Union formation always involves two people, who must agree to enter a partnership and what kind to form. Yet the vast majority of the research on the formation of marriages and cohabiting unions focuses on the behavior of only one of the partners, usually the woman. Single sex models--or any research focused on one half of the pair--can tell us little about the ways the couples negotiate the future of the relationship and the terms under which it will continue. Similarly, research on divorce based on the behavior of individuals tells us little about the ways that couples decide to end their marriage. Any understanding of the role of couple decision-making in marriage or cohabitation requires a fundamentally different approach than has been used to date. This might involve intensive interviewing of both partners in dating couples, as only one of a number of possible approaches. We know very little about appropriate research techniques to shed light on these inherently dyadic processes.

Recommendations:

Conduct research on the causes and consequences of union formation and dissolution. Of particular importance are the causal processes and mechanisms that lead people into unions, influence them to form different types of unions, and result in the dissolution of their unions. Among the causal factors where additional research is needed are: the legal system and public policy; parents; siblings; religion; values and attitudes; physiological and genetic factors; education; and the work place.

Study the ways in which individuals and couples make decisions about the formation and dissolution of unions. How do individuals negotiate with potential and current partners? What are the processes leading up to union formation and dissolution?

Research agenda and data needs

As union formation and dissolution have evolved in recent years, the data requirements for describing and explaining behavior and trends have become more complex and rigorous. When coresidence, sex, childbearing, and childrearing were all primarily centered around the institution of marriage, it was straightforward to limit the unions of interest to marriage and to focus attention exclusively on entrance into and exit out of marriage. However, the amount of action in these domains that is occurring outside of marriage makes it increasingly difficult to justify scholarly studies of union formation and dissolution in the United States that do not extend themselves beyond marriage and divorce. The number and types of relationships that can and do exist between two individuals is much broader and more fluid than simply marriage and even cohabitation. Focus groups conducted among adolescents indicate a range of different types of relationships, from the more traditional "boyfriend/girlfriend" with sexual monogamy, to unions described as "associates," where sexual intercourse is the common denominator that binds the two individuals (Anderson, 1989; Sugland, Wilder and Chandra, 1996). Thus, studies which solely address

unions formed by marriage or co-residence fail to address a broader context of interpersonal relationships. Such relationships have important implications for fatherhood and the well-being of children born into those unions.

Recommendation: Ensure that data collections focusing on union formation and dissolution be designed to include information about a wide range of union types. All union formation and dissolution studies should obtain full marital and cohabitation histories. For some studies it will be necessary to obtain extensive information about additional types of unions as well.

While we argue that the concept of marriage is no longer sufficient to capture the concept of union, we also believe that it continues to be a primary concept in studies of union formation and dissolution. This means that empirical studies need to study the processes leading into marriage and those leading out of marriage. It also means that as a minimum we need to obtain full marital histories in empirical studies, including dates of all marriages, separations, and remarriages.

We also believe that it is important to collect information on cohabiting unions. This is important because these unions involve several of the central dimensions historically associated with marriage, including coresidence, intimacy, and economic interchange. They also frequently involve childbearing and childrearing. In addition, they frequently are part of the process leading up to marriage itself. The growing importance of cohabitation makes it important for studies of union formation and dissolution to ascertain full histories of individual entrance into and exit out of such unions. Furthermore, the growing acceptance of nonmarital cohabitation makes it possible to collect this information successfully--something that has now been accomplished in multiple large-scale studies.

Recommendation: Wherever possible, basic studies of union formation and dissolution should ascertain complete marriage and cohabitation histories, including dates of all entrances into cohabitation and marriage, all separations from cohabitation and marriage, and all divorces.

We believe that qualitative studies can be valuable resources in increasing our understanding of union formation and dissolution. There is relatively little qualitative work on the formation of stable unions and the factors that serve to maintain such unions over time. The existing work suggests that notions about gender roles, sexual identity and ideology, cultural scripts regarding male/female relations, peer groups/family support networks and contextual factors (e.g., economic opportunities), significantly influence both the initiation of unions, the type of unions that are formed, and the stability of unions over time. Qualitative work shows that men and women (and even extended kin) often assess the worth of the male as potential spouse or long-term partner in terms of the man's ability to be a breadwinner. Less stable or transitory unions tend to form when the female (and extended family networks) sees the male as "not having much to offer" and the male feels unable to uphold his responsibility as provider (Stack, 1974; Anderson, 1990; Sullivan, 1993). Qualitative research can help to document how males (and females) define a "union" as well as the various types/range of unions that males (females) tend to form, how types of unions differ, which types are most acceptable to men (versus women), what social and cultural meaning is attributed to different unions, the specific purpose for forming certain types of unions (e.g., physical versus emotional satisfaction) and what kind of satisfaction (emotional or otherwise) men (and women) derive from certain unions. One could also explore under which types of unions childbearing is acceptable/unacceptable, appropriate/inappropriate, and whether there are unique differences across race/ethnicity or socioeconomic subgroups and the life course for all of the above.

Recommendation: Conduct additional data collection and analysis using qualitative approaches. Expand the utilization of multi-method approaches in studying union formation and dissolution.

Historically, our major efforts for monitoring trends in union formation and dissolution have focused on marriage and divorce. Our primary data sources for this purpose have been the vital registration system, the decennial census, the annual Current Population Surveys, and the occasional marital history supplements to the Current Population Survey. However, while these data sources have provided solid information about marriage, separation, and divorce, they collect limited cohabitation information and the cohabitation data they do collect do not include histories of entrance into and exit out of cohabitation. Because of this, they are not fully sufficient as monitors of levels and trends of union formation and dissolution.

Much of our knowledge concerning the determinants of union formation and dissolution comes from studies that include panel or life history components. Among the studies that have been particularly valuable for this purpose are the Panel Study of Income Dynamics, the National Longitudinal Study of the High School Class of 1972, High School and Beyond, National Study of Families and Households, the National Survey of Family Growth, National Longitudinal Survey of Youth, and the Intergenerational Panel Study of Parents and Children. These studies are maximally useful when they collect full marital and cohabitational histories from participants. Much can be learned from further analyses of these datasets; and much more from expanding them to include information that could improve our understanding of union formation and dissolution.

Recommendation: Expand and maintain data collection systems for monitoring future trends in union formation and dissolution. Current data collection efforts should be expanded and supplemented to include information that permits monitoring attitudes, values, and behavior and more information useful for studying the causes and consequences of union formation and dissolution.

While currently existing and planned data sets are valuable for studying union formation and dissolution, we believe that each of them are limited in ways that restrict their usefulness for answering many of the important substantive questions we have about the causes and consequences of union formation and dissolution patterns. Since most of these data sets were designed for other purposes, they are missing some of the key elements for definitive studies of union formation and dissolution. Serious consideration should be given to designing and fielding a new study designed explicitly for the purpose of understanding union formation and dissolution. Such a study would be longitudinal, and begin early in the life course; it would include both males and females and address the gendered nature of relationships; it would include a broad range of determinants and processes of union formation and dissolution, including genetic influences and decision-making processes; it would ideally be designed to capture intergenerational, sibling, and peer influences; and it would include a qualitative component.

Recommendation: Plan and field a new study that is designed explicitly to examine union formation and dissolution. Such a study should be designed explicitly to study causes and consequences, negotiation and decisionmaking, and the processes leading up to the formation and dissolution of unions.

The Interrelationships of Male Fertility and Unions

Male fertility is closely intertwined with the sexual relationships men have with women. Although biological fatherhood may require no more than sexual intercourse with a fecund woman, chances of a man having sex, impregnating a woman, and becoming a biological father are all influenced by the nature and dynamics of his relationships with women. These factors also affect the chances of his being legally recorded on the birth certificate, recognized informally as the child's father, or given access to the child. Similarly, the occurrence of pregnancy and birth can have an important influence on the course of

male-female relationships. Research on these interrelationships is challenging. Not only do fertility and unions affect each other, but both reflect, in part, the personal characteristics of the individuals involved -- e.g., religiosity, traditional value orientations, and socioeconomic status. We still have a very incomplete understanding of how personal characteristics, relationship dynamics, and fertility interact throughout the life course, and the gaps in our understanding are particularly wide for men.

Effect of relationships on fertility.

There is substantial evidence that nature of male-female relationships affects fertility and fertility-related behaviors, but most of the evidence has been accumulated through studies of women. Sexual relationships have both demographic and interactive dimensions. The key demographic parameters are legal status, coresidence (cohabiting versus visiting unions) and union duration. These, in turn, may be associated with interactive characteristics such as commitment, communication, emotional intimacy, power, and social embeddedness. Each of these dimensions can affect sexual behavior, contraception, abortion, pregnancy intentions, and birth:

Sexual frequency is generally higher in coresident unions (it is highest, on average, among unmarried cohabiting couples), and among noncoresident unions, it is higher among those that are more committed (Sonenstein, Pleck and Ku, 1992; Thornton, 1990; Billy et al., 1993). Coercion leading to sexual intercourse is reported by many young women (e.g., Moore, 1989) and experienced by young men as well.

Relationship commitment seems to have a positive effect on attitudes towards having a birth with that partner (e.g., Bachrach, 1987; **Zabin, no date**).

Net of intentions, effective contraception is more likely in longer-term, more committed relationships (Brown and Eisenberg 1995, pp 174-176; Marsiglio, 1993). A large body of literature on use of condoms underscores the importance of communication and partner support as positive influences on use, but demonstrates a decline in condom use as emotional intimacy increases (Santelli et. al, 1996; Edwards, 1994; Ku, Sonenstein and Pleck, 1994).

Evidence points to a higher likelihood of pregnancy and birth in more committed relationships. In first unions, rates of childbearing are higher for married than cohabiting couples (Loomis and Landale, 1994). Cohabiting women are more likely than other single women to become premaritally pregnant (Manning, 1992). Pregnancy rates for married women are higher than those for single women, but the differences in pregnancy rates are far smaller than those in birth rates, because pregnancies to unmarried women are five times as likely as those to married women to end in abortion (Ventura, et al., 1995). Even among unmarried women, those who become pregnant in less emotionally intimate relationships are more likely to choose abortion (Moore et al, 1995).

We know very little about the relationship factors that influence paternity establishment once a nonmarital birth occurs.

The importance of understanding fertility in a relationship context is underscored by studies of decision-making about contraception and childbearing in married couples. While early studies suggested that wives' influence on couple decisions was greater than that of husbands, more recent analyses suggest a more equal influence (see Appendix F). Some studies suggest that when disagreement occurs between husbands and wives, it tends to discourage change in the couples' current contraceptive behaviors.

Attitudes about relationships and gender roles are also associated with fertility-related behaviors. The dominant model for adolescent male sexuality has been that of casual or recreational sex, which implies that sex is an end in itself regardless of the relationship context (Marsiglio, 1988). Some researchers report that by adolescence, both boys and girls endorse scripts for sexuality that go so far as the legal definition of rape. For example, fully 25 percent of middle school, high school and college students say it acceptable for a man to force sex on a woman if he spent money on her (National Research Council, 1996). However, there is evidence that as relationships develop young men may adopt "scripts" that are closer to those applied to marriage. Pleck and colleagues' (1993a) analyses of masculine ideology among U.S. adolescent males show diversity in the extent to which young men adhere to stereotypical views, but find strong associations between those views and sexual and contraceptive behaviors.

Effects of fertility on relationships.

Just as relationships affect fertility, pregnancy and birth can prompt changes in relationships as well. Although the extent to which pregnancy leads to "shotgun marriage" has declined dramatically since the early 1960s, over one quarter of women experiencing a first premarital pregnancy during the late 1980s married before the birth of the child (Bachu, 1991). Research shows that the probability of marriage increases sharply in the short term in response to the occurrence of a pregnancy or birth (Bennett, Bloom and Miller 1995; Goldscheider and Waite 1986; Landale and Forste 1991). We know very little about the continuation of visiting unions after the birth of a child. In a study of adolescent women presenting for pregnancy tests (Toledo-Dreves et al, 1995), 65% of those who had carried their pregnancies to term were still in a relationship with the same partner two years later, compared with 34% of those who aborted the pregnancy. Pregnancy can also lead to conflicts and stress within the relationship, with increased risk of abusive behavior (Schechter and Ganley, 1995).

Research has shown that the presence of children deters union dissolution among married couples (e.g., Heaton, 1990; Waite and Lillard, 1991), and at least one study (Wu and Balakrishnan, 1995) has found this to be true for cohabiting couples. Recent research has suggested that the marriage-stabilizing effects of children may actually have been underestimated in previous research because it did not take into account the simultaneous influence of marital stability on willingness to have (more) children (Lillard and Waite, 1993).

Effects of prior unions and births on later family formation.

Increasing rates of cohabitation and divorce, and greater acceptance of nonmarital childbearing and childrearing mean that many if not most individuals will experience more than one union, and a substantial proportion of parents will have children with more than one partner. We are beginning to accumulate evidence that suggests that prior union and fertility experience influences the formation and stability of later unions and fertility within them. For example, Bennett and his colleagues (1995) demonstrate quite unequivocally that nonmarital childbearing reduces the likelihood that a woman will marry during her childbearing years, while Lillard and his colleagues (Lillard, Panis and Upchurch, 1994) demonstrate that children deter remarriage after divorce among white women. We know virtually nothing about these effects among men.

Further, unions formed by individuals who already have children appear to be less stable (Lillard and Waite, 1993), although existing research has not adequately distinguished unions involving both parents of a previous birth from those in which only one partner had a biological tie to the child. In the latter case, ongoing relationships with the nonresident father or mother may create conflict in the new union.

The evidence on whether births from prior unions influence fertility in later ones is mixed, but appears to suggest that husbands' fertility in prior marriages has a dampening effect on fertility in new unions (see Appendix F). We are only beginning to identify the basic demographic parameters of fertility in second marriages; have virtually no information on fertility in sequential cohabiting or visiting unions; and know extremely little about how relationships with and responsibilities toward prior-born children influence fertility in subsequent unions. What is needed here is not only the perspective of men, but also information about the marital and parenting experience of previous as well as current partners.

Gaps in research and data.

Major gaps exist in current research and data on the interrelationships of male fertility and union formation and dissolution. We know most about fertility in first marriages, less with respect to cohabiting relationships and higher-order marriages, and very little with respect to noncoresidential unions. Most of what we know, as noted earlier, we know from the female's point of view. Although it is clear that the relationship between fertility and union formation and dissolution varies substantially among different population groups (African American births, for example, are far more likely to occur outside of marriage than are births to white mothers), we still do not fully understand the forces that have shaped family-building patterns differently in different groups.

Recommendations: In addition to the recommendations provided previously for improving research and data on male fertility and on union formation and dissolution, we suggest that:

New data are needed to provide a more comprehensive view of the intersection of fertility with relationships of all types. We need to improve information about the men who are responsible for pregnancies and births in all types of relationships, possibly through improved survey methods and/or improved uses of birth and administrative records.

We need to collect information from both parties to the relationship, in order to understand gendered views of relationships, sex and contraception, and childbearing and in order to capture both parties' motivations and influence on decisions that affect the likelihood of pregnancy and birth. We need to pay particular attention to gendered power in relationships, including coercion or violence and links to gender-traditional views of men and women. In all types of unions, we need to know whether men's views of the tie between the union and children are different than those of women; how men's views of the costs and benefits of fatherhood depend on their relationship context; and whether variation in such views is associated with male fertility or union formation and dissolution. Since stepfamily experience is increasing, we need to know how men and women view the other partner's children in relation to their own childbearing desires and goals.

Relationship data should be longitudinal, so that we can disentangle self-selection into relationships from relationship effects on childbearing. We need better "fathering histories" including both the history of biological parenthood and social fatherhood. When a union forms, we need to know about both partners' union and birth histories in order to understand the force of individual life-course continuities in comparison to the influence of partners' lives and actions. We need to study the impact of pregnancy and birth on the continuation and nature of relationships, a topic particularly understudied in nonmarital unions.

Research and data are needed to better understand how and why patterns of fertility and family formation vary among groups that differ in socioeconomic status, nativity, race, and ethnicity. To answer these questions we will need both statistical data that represents minority populations as well as in-depth

analytic studies using a mix of qualitative and quantitative methods to measure the effect of economic, social, cultural and institutional influences on family patterns.

The potential of new and emerging studies for answering these research questions should be thoroughly exploited through analyses of existing data. Several studies have collected pregnancy, birth and union histories in a fashion that allows relating one to the others, and some have collected partner-specific information on sexual and contraceptive behavior. Information on partners collected by the National Survey of Family Growth, Cycle 5, the 1997 National Longitudinal Survey of Youth, and the 1995 National Survey of Adolescent Males is richer than that collected in previous rounds of the same surveys. A new study, the National Longitudinal Study of Adolescent Health (Add Health), collected substantial information about romantic relationships among adolescents, the peer, family, and community contexts in which these relationships were embedded, and information about sexual and contraceptive behavior within relationships. The National Survey of Families and Households collected complete union histories (resident unions only) for men and women, as well as information about dating and sexual experience of focal children.

Existing data should be reinforced through the expansion of ongoing data collection efforts. Currently, no longitudinal data exist to study how relationships affect fertility among noncohabiting, unmarried men and women. Several studies could be modified to address this gap. For example, the NLSY 97 could be expanded to provide stronger information on noncoresident relationships; the Add Health study could be continued to examine continuity and change in relationships and fertility behavior over the transition to adulthood.

Efforts to strengthen quantitative data should be accompanied by further qualitative studies in a broad range of communities and populations. These studies should enhance our understanding of gendered scripts for relationships and fertility-related behaviors, and of how such scripts are formed and in turn influence union formation and dissolution, fertility, and parenting. They may also lay the foundation for better theory and measurement of relationships and their dimensions.

Health Education/Reproductive Health

Much of the interest in increasing male involvement in reproductive health is driven by the premise that such involvement leads to prevention of unintended pregnancy and healthier reproductive health outcomes for men and their partners. Indeed, some studies of sex education, counseling and health outreach services for men have found delays in the onset of sexual activity and improved contraceptive use (Kirby et al, 1994; Frost and Forrest, 1995; Danielson, 1990; Terefe and Larson, 1993; Ku, Sonenstein, and Pleck, 1992). Here we review what is known about males' receipt of reproductive information from schools and other sources and their utilization of reproductive health services.

Sex Education/Information.

Information about reproductive knowledge levels and the receipt of sex education by school age males are collected periodically by the Youth Risk Behavior Survey (YRBS). There are also other survey data that have measured sex education via the respondent's knowledge of pregnancy and STD prevention. The National Surveys of Adolescent Male (NSAM), the National Survey of Men (NSM), Add Health, and the National Health and Social Life Survey (NHSLs) are all prominent examples. In 1988, for example, over 90 percent of teenage males reported receiving some formal instruction on a reproductive topic. Seventy-nine percent were instructed about contraception, 73 percent received instruction about AIDS, and 58 percent were taught how to say no to sex (Ku, Sonenstein and Pleck, 1992). However there is a paucity of detailed information about the kinds of instruction that occur. This information is best provided by the instructors. Data from teachers or

administrators on the extent of teaching of sexual education in the schools, and the content, by grade level was last collected in a national survey of teachers in 1987 (Forrest and Silverman, 1989). Given the rise in awareness about HIV and the changes in the sex education curriculums during this period, another study is due. Such a study could be expanded beyond health. For example, it would be useful to know the degree to which reproductive topics are integrated with broader themes about preparation for parenthood.

Beyond formal instruction there is also a wide array of other information sources related to reproductive health about which we know very little. Sexual health information from peers, parents, the schools, the media and other informational sources should be included in measures of how men learn to maintain their reproductive health across the life course. Some of these measures are available in the National Survey of Adolescent Males, but they are currently not collected by any institutionalized surveys. Furthermore, very little is known about the sources of information that adult males use to gain information about reproductive issues.

An abiding question in the prevention field is what kinds of programs reduce the risk of early sexual involvement, unintended pregnancy and STD transmission? Reviews of the evaluation literature have identified relatively few programs that have rigorously demonstrated improved outcomes for their participants (Kirby et al, 1994; Frost and Forrest, 1995; Moore et al, 1995). There is a need to identify promising program approaches and to conduct well designed evaluations of whether they produce changes in behavior. Recently there has been a flurry of interest in developing prevention programs targeted to males (Levine and Pitt, 1995; Sonenstein, Stewart, and Lindberg, 1996). There are a number of innovative programs around the country, but none have been rigorously evaluated.

Recommendations:

Surveys of teenagers and adults should collect data about the sources of information that are used to gain knowledge about reproductive issues and to support the examination of the relative effectiveness of different information sources in increasing knowledge and influencing behavior.

Trend information is needed about the types of instruction about reproductive issues that schools are providing. The survey of teachers last conducted in 1987 should be updated.

Promising prevention programs need to be identified and to undergo rigorous evaluation. We know very little about what components of sex education and intervention programs actually lead to delays in sexual activity or improved use of contraception.

Reproductive Health Services.

Despite the long existence of male reproductive health services, a consensus on what constitutes these services has only recently started to emerge (Green, Cohen and Belhadj-El Ghouayel, 1995). In the United States, Title X guidelines that detail reproductive health services for women have been in existence for some time, but only in the last year has work begun to develop such guidelines for men under the auspices of AVSC. These services are likely to cover a wide array of services including contraception, vasectomy, STD prevention and treatment, infertility screening and treatment, impotence treatment, and testicular and prostate cancer screening.

Men use reproductive health services at a considerably lower rate than women. An important reason for this may be that medical methods for pregnancy prevention are almost exclusively designed for women.

No fully reversible medical method exists for use by men in the U.S. However, research on the development of reversible hormonal methods which lower sperm counts and nonhormonal methods which plug the vas deferens has been proceeding in the U.S. and other parts of the world, and preliminary research suggests that men find these methods acceptable (Ringheim, 1995). Both biomedical and behavioral research is needed to continue the development of these methods and to maximize their acceptability and use.

No comprehensive source of information about the use of reproductive health services by men currently exists. Some information is provided, however, by administrative records and surveys.

(1) *Administrative Records.* There is a very limited amount of administrative data available about health behavior and men. Title X grantees are required by the Office of Population Affairs to submit annual service data tabulating the number of family planning visits. Three tables stratified by sex are available for 1995 visits, including tabulations of age by race, age by Hispanic/Latino origin and service delivered (STD tests excluding HIV and HIV tests). The data indicate that out of 4.5 million Title X visits in 1995, only 94 thousand or 2 percent are by men (Manzella and Frost, 1996).

(2) *Surveys.* Although a few national surveys provide some estimates of men's receipt of reproductive health services, their range of service coverage is quite limited and none are regularly scheduled to occur. Therefore trends in men's receipt of reproductive health services cannot be monitored. The 1995 NSAM follow up survey includes some measures of health services during the past year including physical exams, STD testing, counseling to prevent pregnancies and counseling to prevent STDs and AIDS. Because men's use of health services is low, limiting the time frame to 12 months will mask the number of men who have **ever** received medical services related to reproductive health. The NHSLs concentrates its questions in two topic areas: sexual dysfunction and STD incidence and treatment. The NSM collects information about STD screening and treatment. None of these surveys provide the range and depth of information about reproductive health services that are routinely collected in the National Survey of Family Growth for women. The NSFG questionnaire could serve as a useful model for beginning to design survey questions related to male reproductive health services. These questions would need to be modified to address services particular to males, and to monitor a wide array of health services ranging from school athletic physicals and general physicals to more direct reproductive health visits made by men or visits where men accompany their partner to a family planning, abortion, prenatal, delivery, or post-natal care visit. In addition to developing such service use modules for surveys of men, the NSFG could be expanded to include questions for women about whether their male partners accompanied them to reproductive health visits.

Recommendations:

Surveys of men are needed to collect information about their receipt of a broad array of medical and health services and to assess their awareness, attitudes towards, use of, and experiences with male reproductive health services, alone or in the company of partners.

Studies are needed of the determinants of males' use of reproductive health services, including provider characteristics and social or structural barriers that may deter use.

Studies are needed of the problems presented to the public health system of presenting STD and pregnancy prevention options to men and couples at different points in the life cycle.

Indicators of Male Fertility and Family Formation

In the U.S. there are no institutionalized mechanisms for collecting data on male fertility or union formation. Yet, having indicator data reported about males to monitor trends would be useful for both policy and research purposes. As we have noted, the major shifts in family formation and fertility that have occurred in the U.S. are as much a result of males' behavior as they are of females' behavior. To interpret these trends by relying on periodic reports about the behavior and attitudes of females predisposes us to partial explanations. Yet this is exactly the nature of our current monitoring system.

It is useful to begin with a definition of what we mean by indicator data. An indicator is a measure of a behavior or attitude that traces the status or well-being of population groups over time, across groups, and/or across geographic areas. Indicators are descriptive and are not intended to be explanatory. Indicators of male fertility should meet several criteria (see Moore, 1995, for a discussion). They should:

assess male fertility and union formation across a broad array of outcomes, behaviors and processes;

provide wide coverage of the population or the event being monitored and data collection procedures should be rigorous and consistent over time;

cover both teenage and adult males;

have consistent meaning across socioeconomic and cultural subpopulations;

be made available in a timely way, so that trend information is up-to-date and useful;

anticipate future trends and social developments, and provide baseline data for subsequent trends;

be geographically detailed, at the national, state and/or local levels;

be comparable in meaning over time; and

facilitate the tracking of progress in meeting societal goals regarding male fertility and family formation.

Figure 2 provides an illustrative set of high priority indicators; a more extensive set is included in Appendix I. The indicators reflect a broad range of domains including: relationship status (marriage and cohabitation), sexual behavior and contraceptive use, pregnancy and pregnancy resolution, births by marriage and cohabitation status of the parents, paternity establishment, divorce and other union dissolutions, reproductive health services, and fatherhood. The indicators include measures of both behaviors and attitudes related to male fertility and family formation. The connection between attitudes and behaviors is not clear-cut; nevertheless, there have been tremendous changes in attitudes about marriage, fertility and fatherhood (Thornton, 1995), which have tracked closely with behavior, making it advisable to gather information on males' attitudes and opinions. We note that while information about reproductive and union behavior may be targeted to males of particular ages, information about attitudes can be solicited from men of all ages. For example, attitudes about fatherhood could be directed to children and adolescents as well as adult men.

Recommendation: Establish a set of indicators to monitor key aspects of the fertility and union processes that influence fatherhood. The indicators should include both attitudes and behaviors and be drawn from a variety of relevant domains.

Data for indicators on sexual behavior and fertility often come from household surveys. Currently, most of the indicator data we have on fertility and family formation is provided by women informants; very little is obtained directly from men. However, there are exceptions. The General Social Survey (GSS) interviews adults, both men and women, on their attitudes towards abortion, cohabitation, and the ideal number of children. The GSS also contains questions on number of sex partners during various time periods, the gender of those partners and whether they were steady or non-steady partners. Both the National Survey of Families and Households (NSFH) and the National Longitudinal Survey of Youth (NLSY) include items such as the timing and number of births, whether births were unwanted or unintended, and data on marriage and cohabitation histories. The National Survey of Adolescent Males (NSAM) includes both general and partner-specific sexual and contraceptive histories, pregnancy histories and some information about fatherhood, as well as measures of attitudes towards contraceptive responsibility, sex, cohabitation, abortion, children and gender role identity for a sample of young males. Importantly, none of the above-mentioned surveys can be relied upon as continuing sources of indicator data. The GSS modules change over time; the NLSY is a longitudinal study not designed to monitor trends; and the NSFH and NSAM are special-purpose studies that may or may not be conducted again in the future. Three surveys that are institutionalized as regular data collection activities of the federal government include the Youth Risk Behavior Survey, the National Survey of Family Growth, and the Current Population Survey. The YRBS includes a small number of sexual behavior indicators for in-school adolescents. The NSFG is a survey of women, although it can be used as a proxy source of information on male demographic characteristics and wantedness of pregnancies by males. The CPS collects information on the current marital status of men, but has only attempted to collect information on marital and fertility histories once, an attempt that was judged unsuccessful.

Administrative data represent another crucial source of indicator data. The vital statistics system collects data on births, marriages and divorces. However, even these data provide little information about men: currently, only aggregate counts are being produced from vital records on marriage and divorce; and reporting of father characteristics is incomplete on birth registration data, especially for births occurring to young unmarried women.

Other potential sources of administrative data include paternity establishment and child support enforcement records. These data could be more easily compared to birth data in the aggregate if the birth year of the child was entered into the paternity establishment/child support enforcement data. Current efforts to monitor trends in paternity establishment use the number of paternities established in a given year over the number of non-marital births in the previous year. Since paternity can be established for a child up to age 18, the current yardstick is a very rough measure of trends in this area.

Recommendation: Existing data collection efforts should be strengthened to provide valid and timely monitoring of key indicators of male fertility and family formation. This may include: continuing YRBS and NSFG, expanding NSFG to include sample of men asked to complete a interview, improving recording of information about fathers on birth certificates, collecting better information about fathers and children in paternity establishment records, collecting complete data from men on cohabiting and marital relationships and fertility on CPS, SIPP, or other household surveys. Promote the continuation of indicator data on GSS.

Theory and Methodology

Theoretical approaches.

In our review of research on male fertility and family formation, our working group identified a broad

range of theoretical perspectives that have motivated and framed studies (see Appendix B). The choice-theoretic framework of neoclassical economics has been extensively used to study fertility and marriage behavior, and recently has provided the basis for a creative new model that purports to explain current patterns of nonmarital paternity among disadvantaged men. Like many economic studies, social-demographic studies of marriage have tended to rely on structural-functionalist models of role specialization within families, and the factors, such as women's economic independence and men's earning capacities, which have reduced the value of role specialization and therefore the incentives for marriage. These models underlie models of the "marriage market", which is traditionally seen as functioning in a way that maximizes role specialization.

Many social-psychological models of fertility behavior rely on decision frameworks in which the costs and benefits of potential behaviors are weighed, and intentions for behavior are formed. Social-psychological models of fertility motivation have similarly conceptualized motivation as a function of the perceived costs and benefits of having and rearing a child. Miller has suggested the biological factors and early experience may also have an important influence on the development of motivation (see Appendix D). Social capital theory has been used recently to elaborate on the value of the social ties that children generate for their parents. This perspective suggests why, despite the economic costs of children, men and women continue to want them. Other social psychological theories that are useful in understanding fathering, fertility, and unions include identity theory, theories of generativity, and social learning theory (see Appendix C).

Other research has drawn on conflict or bargaining theories in which sexuality and children are seen as resources that both men and women manipulate to pursue goals, subject to structural and cultural constraints. An example, provided by Eli Anderson's study of sexuality in an inner city community, portrays young men and women as using sexuality and parenthood to advance disparate goals for, on the one hand, status in the peer group, and on the other hand, the security of a committed relationship or the benefits of motherhood. Other important theories for understanding male-female interactions include scripting theory and theories of gender and gender display (see Appendix C).

Clearly, there is currently no unified and accepted theory that explains union and fertility behavior among men and women; rather there are many useful perspectives drawn from a variety of disciplines and research traditions.

Recommendations:

The data we collect should permit the testing of a broad range of hypotheses drawn from relevant theoretical perspectives.

Theoretical frameworks should incorporate the perspectives of both men and women, and take account of the dyadic nature of fertility and family formation.

Theoretical advances need to address issues of gender explicitly. They need to address declines in gender-role specialization; gender differences in the value of children and marriage and in motivation to invest in child quality; the different, and potentially conflicting, motivations and constraints faced by men and women, including differences in economic and marriage market opportunities; changes in gender roles within and outside of unions, including subgroup variations in gender role attitudes and norms; and the relative influence of men and women in fertility decision-making, and factors associated with variation in each gender's relative influence. Theoretical models of union formation and fertility need to more explicitly address the separate, but intertwined, roles of men and women, and to explain less traditional

family formation behaviors, such as non-marital childbearing and cohabitation.

Methodological issues.

The development of theory must be accompanied by methodological research to facilitate valid tests of hypotheses. The working group identified a wide range of methodological challenges, reflected in our recommendations below. We believe, however, that adequate methodologies are already within reach to pursue much of the research agenda we have outlined, and that research and data collection on most issues should proceed simultaneously with research to improve our tools for understanding male fertility and family formation.

Recommendations:

Survey methods must be developed that facilitate the inclusion of "missing populations" in studies - incarcerated and homeless men, men loosely attached to households, men in the military, and, in studies that sample couples, partners who are loosely attached to relationships.

Research must be done to identify and correct sources of bias in men's reports about their fertility and family formation experience.

Development of measures is needed in several domains, including the study of nonmarital relationships, motivations for sexual, contraceptive, fertility, and union-related behaviors, and the meanings of and attitudes towards gender, unions, and parenthood across different population groups.

Further development of statistical methods that permit analyses of dyadic decision-making and behavior while accounting for selection effects is needed.

Steps for the Future: Indicators, Data Collection and Research on Male Fertility and Family Formation

In their deliberations, working group members developed a large number of recommendations for improving data and research on male fertility and family formation. Many of these have been discussed above, and further recommendations are found in the appended working papers (Appendices B through H). In this section, we summarize our key recommendations for federal agencies concerned with research and data collection related to fatherhood. These include three areas of effort: the development of *indicators* to monitor change in male fertility and family formation; the strengthening of surveys and institutionalization of *data collection*; and the mobilization of *research* to improve our understanding of these processes and their impact on fathering.

Indicators.

A core set of indicators should be developed to monitor key aspects of the fertility and union processes that influence fatherhood. These would include measures of relationship status (marital and cohabitational), sexual behavior and contraceptive use, rates of marriage, divorce, male fertility within and outside of marriage, cohabitation, number of recent sexual partners, nature of current relationship, paternity establishment for nonmarital births, reproductive health services, and attitudes towards out of wedlock childbearing, marriage, cohabitation, and fatherhood. Specific measures to be included in the "core set" should be determined as a follow-on activity of the Fatherhood Initiative; choice of measures should be based on the criteria for indicators given in an earlier section of the paper and on considerations

of data availability and quality. Consideration should be given to including this set of indicators in the statistics on child well-being compiled annually by ASPE, to including one or more key items in the "short list" of national "Indicators of Children's Well-Being", and, possibly, to developing goals for the Nation against which monitoring can occur.

Data Collection.

Data collection efforts should be strengthened, and, in some cases, institutionalized, to provide a reliable basis for producing indicators and to provide data for analytic studies. NCHS, in collaboration with the Census Bureau and other agencies, should take the lead in expanding or modifying current data collection systems to provide indicator data on a timely (approximately once every three years) and reliable basis. For example, NCHS should consider either adding appropriate items to the NHIS, adding a male component to the NSFG, and/or developing data based on the vital registration system, such as improved marriage and divorce data and relationship status information on birth certificates. The Office of Child Support Enforcement should improve the data it keeps about fathers and children in its program. The Census Bureau should develop ways to expand its collection of marital and fertility history data to include valid and representative data from men, and to include cohabitation. This could be done in connection with the CPS or SIPP, depending on projected sample sizes, coverage of men, and quality of data. The potential role of the American Community Survey should also be explored. CPS questions could be adapted to allow direct identification of cohabiting couples. GSS should be encouraged to continue monitoring attitudes. Unless specifically contraindicated, data collections should include both men and women, and methodological research should be undertaken to address issues of data quality and completeness.

There is also a need for new longitudinal data to provide the basis for analytic studies of the processes involved in male fertility, union formation and dissolution, and the interrelationships among fertility, unions, and parenting. These data should include both men and women (and possibly also couples), and should permit the testing of a broad range of hypotheses, including those concerning the effects of social and policy influences. Ideally, all types of unions should be studied, including "visiting" sexual relationships as well as cohabitation and marriage.

The most cost-effective options for developing these data include expansion of existing data collections that follow samples now approaching or in the early years of union formation and childbearing. Expansions could include single items, questionnaire modules, or design features such as add-on qualitative components. Several studies should be considered for expansion. NLSY 97 is just beginning, will and already will collect much of what is needed. NELS could also provide information although limited information on sexual behavior was collected for the teen years of this sample. The Add Health study has a rich baseline on the formation of romantic relationships and the characteristics of youth and their families; its sample could be followed through early adulthood. NLSY-Children, SIPP or PSID should also be considered. If it is not feasible to expand existing studies appropriately, or if expansions leave important analytic questions unanswered, a new study should be developed, probably under the auspices of NICHD.

Research.

Various agencies, including ASPE, OPA, NICHD, and ACF should promote and stimulate research on male fertility and union formation and dissolution. The research agenda encompasses both basic research and policy-oriented research; encourages studies of both men and women; encourages research that examines how these processes differ across and within racial, ethnic, and socioeconomic groups, and

encourages studies that use a broad range of qualitative, quantitative, and mixed-method studies as scientifically appropriate. Existing and soon-to-be-released survey data should be mined exhaustively. Developmental studies should be conducted to develop theory and measurement, and their lessons applied in the design of both large-scale and focused studies.

Major substantive areas include:

Research on gender roles and attitudes, and the influence of gender on the processes of family formation and fertility. It is important to learn how gender-related attitudes, values and behaviors are formed and modified over the life course, and how they vary among different racial, ethnic, and socioeconomic groups. Studies of the links between gender-traditional views of men and women and views of coercion and violence in relationships, and fertility and union processes are also needed. It is also important to study how the meaning of and attitudes towards the processes involved in fertility, union formation and dissolution, and parenting differ between men and women, and vary depending on union and parental status. Research is needed to study how such attitudes interact with other factors in affecting fertility and relationship outcomes.

Research on union formation and dissolution, including studies of the causal processes associated with the formation, maintenance, and dissolution of unions, and the meaning of different union types, and studies that explain and interpret historical changes in union formation and dissolution. Couple-based or dyadic studies that examine the relative roles of men and women in family decision-making are also needed.

Research on the factors influencing male fertility and fertility-related behaviors, motivations, and attitudes, including those relating to sexual behavior, contraceptive use, pregnancy and pregnancy outcome, paternity establishment, and fathering; and including influences at the individual, family, peer, institutional and community levels.

Research that examines the intersections of fertility-related behavior, childbearing, and childrearing with union formation and dissolution. Questions here include the influence of different types of unions on the risk of unintended pregnancy, the influence of pregnancy and birth on the marriage and cohabitation choices of an unmarried couple, the impact of parenting and the presence of children on union stability or decisions to remarry after divorce, and the influence of blended family situations on subsequent family transitions and fertility.

Research on the intersections among fertility, union formation and fathering, including the effect of planned or unplanned fatherhood, paternity establishment, and transitions in union status on fathering, and the influence of changing meanings of fatherhood on fertility and family formation behaviors.

Research on the nature, availability, use and effectiveness of reproductive health education and services that help to prevent unintended pregnancy and contribute to the health and well-being of men. Continued research is needed on the development and acceptability of reversible male methods of contraception.

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Figure 2

Illustrative High Priority Indicators of Male Fertility and Family Formation Behavior and Attitudes

Behaviors	Attitudes
<p>Sexual Behavior</p> <p>age at first intercourse</p> <p>number of partners in past year</p> <p>number of lifetime partners</p> <p>victim/perpetrator of forced sex</p>	<p>Sexual Attitudes</p> <p>when sex is acceptable or allowable</p> <p>allowable levels of persuasion/coercion</p>
<p>Contraception</p> <p>contraception used at first sex for teens</p> <p>- by male</p> <p>- by female</p> <p>contraception used at last sex</p> <p>- by male</p> <p>- by female</p> <p>receipt of reproductive health care</p>	<p>Contraceptive Attitudes</p> <p>male methods</p> <p>male's responsibility for preventing pregnancy</p> <p>vasectomy</p>
<p>Pregnancy & Pregnancy Resolution number of pregnancies</p> <p>timing of pregnancies</p> <p>resolution of each pregnancy</p> <p>birth rate for men</p> <p>legal paternity acknowledgement for nonmarital births</p>	<p>Pregnancy & Pregnancy Resolution</p> <p>attitudes about impregnation</p> <p>attitudes about abortion</p> <p>pregnancy intendedness</p> <p>circumstances under which pregnancy is desirable</p>
<p>Marriage, Cohabitation & Non-cohabiting Sexual Relationships</p>	<p>Marriage, Cohabitation & Non-cohabiting Sexual Relationships</p>

<p>number of marriages</p> <p>current marital status</p> <p>age at first marriage</p> <p>current marriage followed conception</p> <p>current marriage followed birth</p> <p>currently cohabiting</p>	<p>best age to marry</p> <p>acceptable circumstances to marry</p> <p>ideal circumstances to marry</p> <p>acceptable circumstances to cohabit</p>
<p>Fatherhood</p>	<p>Fatherhood Attitudes</p> <p>best age to become a father</p> <p>importance of becoming a parent</p> <p>value of children</p> <p>attitudes about nonmarital childbearing</p> <p>father's responsibility</p> <p>mother's responsibility</p> <p>child support</p>

1. Exceptions include the use of assisted reproductive technologies such as in vitro fertilization, artificial insemination, and embryo transfer. Although still a relatively uncommon route to biological fatherhood, the use of these methods is thought to be expanding rapidly (Marsiglio, 1998).

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CHAPTER FOUR

SOCIAL FATHERHOOD AND PATERNAL INVOLVEMENT: CONCEPTUAL, DATA, AND POLICYMAKING ISSUES

Chapter 4: Report of the Working Group on Conceptualizing Male Parenting

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Introduction

As one of several working groups charged with the ultimate task of promoting research on fathers, we recognize that scholarly and social policy initiatives are linked to decisions about how fatherhood is defined. Our conceptual treatment of fatherhood focuses on both the social and legal definition of "father," (Marsiglio, forthcoming) and the cognitive, affective, and behavioral aspects of male parenting as an ongoing interpersonal process (Palkovitz, 1997). Addressing these complex and interrelated conceptual issues is essential if researchers and policymakers are to improve the quality of data and research on fathers (Fox and Bruce, 1996). Simply put, the research community must attend to these issues if we are to develop a better understanding of fathers' involvement⁽¹⁾ with, and influence on, their children.⁽²⁾

Fatherhood, and its many aspects, can be conceptualized in diverse ways. Numerous questions frame the sometimes controversial and often perplexing issues that need to be explored in this regard. Some of these include the following:

1. How should fatherhood be defined? What is the basis for advocating one definition over another? In short, who are fathers?
2. What dimensions or domains define the core and ancillary aspects to men's roles as fathers?
3. How can fathers demonstrate their commitment to their children and their involvement in their lives?
4. How do fathers' varied forms of involvement relate to children's well-being?
5. What does it mean to be a "responsible" father?
6. How do family processes influence fathers' opportunities to enhance their children's well-being?
7. What are the research and policymaking implications associated with the competing ways of conceptualizing these phenomena?

8. How do ideological issues shape the marketplace of ideas about fathers?⁽³⁾

Defining fatherhood in the United States is a difficult task, in part, because many factors shape the way fathers are perceived and behave. These difficulties are accentuated by the varied disciplinary and theoretical perspectives that are brought to bear on this task. We attempt to capture some of this complexity in our interdisciplinary report. In addition, we show how four general interrelated themes or foci enrich our definition of social fatherhood and paternal involvement. These themes include: a) family structure, b) cultural diversity, c) the notion that aspects of parenting are fundamentally shaped by dynamic and gendered social roles, and d) the idea that developmental trajectories, expressed at various points throughout the life course, influence fathers' involvement with their children.

Framework

In this interdisciplinary report, we address the compelling questions noted above and propose a framework for conceptualizing "social fatherhood" that focuses on key aspects of male parenting. We use the term "social fatherhood" throughout this report to underscore the wide net we cast when we address fatherhood issues. Thus, we are not merely interested in men who are biological progenitors, although they clearly represent the most important group of men we consider (we exclude men who are anonymous sperm donors). For our purposes, being a social father includes many dimensions. It includes, for example, the range of activities outlined by Palkovitz (1997) that expand upon earlier conceptualizations of paternal involvement (Lamb, Pleck, Charnov, and Levine, 1987). This more comprehensive vision of paternal involvement is consistent with our objective of developing a framework that captures the diverse ways fathers help to raise their children and influence their well-being. We underscore the notion that fathers' contributions often go beyond their hands-on care of children. As such, we take into account the resources fathers can provide for their children including human capital (e.g., skills, knowledge, and traits that foster achievement in U.S. society), financial capital (e.g., money, goods, and experiences purchased with income), and social capital (e.g., family and community relations that benefit children's cognitive and social development) (Amato, 1998; see also Coleman, 1988, 1990; Hagan, MacMillan, and Wheaton, 1996). Of these resources, we focus primarily on aspects of fathers' economic provider roles and their contribution of social capital as expressed through coparental and father-child relationships.

Four interrelated issues. We present our framework as the basis for collecting more meaningful data on fathers in order to generate theoretically informed research and policymaking agendas that address issues associated with fathers' involvement with their children and their contributions to their well-being. As such, we take a practical approach to conceptualizing and reviewing literature that addresses four interrelated issues associated with social fatherhood and paternal involvement (including the various forms of capital described above). First, we discuss issues associated with the conceptualization and assessment of *fathers' involvement*. We highlight the range of activities and dimensions related to fathers' roles, with particular attention to the way fathers spend time with their children and fathers' economic provider roles. Second, we examine some of the factors that underlie men's personal *motivation* to express themselves as social and "responsible" fathers. Third, we emphasize how paternal involvement is often shaped by the complex web of relationships between fathers, their children, and children's mothers. We use the shorthand phrase "*family process*" to refer to this set of relationships and the interpersonal exchanges they entail. Within this domain, social capital associated with a healthy coparental relationship provides children with the opportunity to model dyadic skills such as providing emotional support, establishing open communication, and implementing effective conflict resolution strategies. It also exposes them to a united authority structure (Amato, 1998). Fourth, we highlight some of the key *social*

policy issues germane to fathers. This discussion considers the structural barriers/facilitators that either constrain or enhance a fathers' ability to assume active and responsible roles in their children's lives, and, in some ways, is linked to our comments about paternal involvement, motivation, and family process issues.

Based on previous reviews of the literature, we assume that a fathers' positive involvement and resource provision can enhance children's well-being (Lamb, 1997; Amato, 1998). Consequently, we assume that a fathers' negative involvement and inability or unwillingness to provide certain types of resources to their children can hinder children's healthy development. Our discussion of social fatherhood and paternal involvement emphasizes the positive ways fathers can influence their children's lives, though our discussion clearly has implications for the adverse effects that children may experience when their fathers exploit, neglect, or are unsuccessful in contributing to their children's development.

Definitional Issues and Rationales

Researchers, policymakers, and the general public continue to grapple with the definition of "father." Not surprisingly, this question is addressed from a wide range of disciplinary and ideological perspectives (Marsiglio, 1995a, forthcoming; Blankenhorn, 1995; Gershenson, 1983; Popenoe, 1996). Consequently, much of the debate hinges on the legal/policy, genetic, and social distinctions interested observers and stakeholders emphasize. These distinctions are justified in terms of moral, pragmatic, and theoretical rationales. The most typical response points to biological paternity as the defining characteristic of fatherhood, but this approach has increasingly been challenged by scholars and the general public alike for being overly restrictive, and in some cases too simplistic.⁽⁴⁾ For many, the more intuitively appealing answer is: It depends. A man may be a father in the eyes of geneticists and the law but not in those of a child; or the reverse may be true. The distinction between the genetic father and the social father has been reinforced because high rates of both out-of-wedlock childbearing and divorce involving children have led to more men assuming father-like roles with children who were not their biological offspring (Da Vanzo and Rathman, 1993). The increasingly large percentage of men who have voluntarily or reluctantly disengaged themselves from their nonresident children's lives also contributes to this pattern (Furstenberg, 1988; 1995). Likewise, the emerging appreciation for the cultural diversity in familial arrangements highlights nontraditional definitions of fatherhood (Gershenson, 1983). These ongoing debates about the definition of fatherhood have grown even more complicated with the advent of asexual reproductive technologies which have muddled traditional notions of paternity and fatherhood roles (Marsiglio, forthcoming).

A man may be genetically related to a child but have no social or legal ties to his genetic offspring, or a man may have no genetic bond with a child but be perceived by individuals and the legal system to have social, and in some cases legal ties to the child. This latter scenario includes many of the millions of men who assume formal or informal step and adoptive father roles. In sum, the definition of fatherhood varies according to the personal and cultural reference points being used.

Obviously, then, the definition of fatherhood is shaped simultaneously by scholarly, political, and cultural forces. Thus, sober discussions about the nuances of fatherhood definitions are essential if we are to develop better research designs and social policies targeted at fathers.

We propose a broad conceptual framework that goes beyond defining fatherhood a priori along biological lines. Instead, we focus on the more general concept of social fatherhood. In many respects biological fathers will remain at the forefront of research and policymaking efforts, but these efforts should not thwart attempts to study and support forms of male parenting that involve men who are not genetically

related to "their" children. A more inclusive approach such as ours provides researchers and policymakers with greater latitude in understanding the full range of issues involving men's negotiation and expression of fathering roles (Fox and Bruce, 1996). It also provides scholars with a clear incentive to explore the symbolic and practical significance of biological paternity versus men's purely social ties to children, as well as the legal implications associated with these distinctions.

Social father. As such, we justify focusing on social fatherhood by pointing to both theoretical and pragmatic rationales. From a theoretical point of view, much can be gained by studying the dynamic processes that shape individuals' (e.g., fathers, mothers, children) perceptions about how their sense of fatherhood personally affects them.⁽⁵⁾ Biological paternity is clearly not always perceived as the only defining characteristic of who fathers are in contemporary society (Furstenberg, 1995; Gershenson, 1983; Marsiglio, forthcoming). In some cases it may be completely irrelevant (e.g., sperm donors). Furthermore, there are consequences associated with how people define a situation -- whether that definition is consistent or not with commonly recognized objective criteria (e.g., blood or legal ties). Put differently, if individuals define situations as real, they are likely to have discernable consequences for fathers, mothers, and children. Our conceptualization of fatherhood, by emphasizing the social dimensions to fatherhood, takes these issues into account.

We also emphasize the need to view men holistically as procreative beings (Marsiglio, forthcoming). We stress the importance of recognizing the continuity of men's roles beginning with their procreative decision-making choices prior to conception, moving on to the pregnancy process itself,⁽⁶⁾ and culminating in fathers' involvement with their children. Unfortunately, little research has explored prospective fathers' feelings and behaviors prior to the birth of their children (May, 1980; May and Perrin, 1985).⁽⁷⁾ Because of the limited scholarship in this area and the mission of our working group, we primarily focus on issues directly related to fathers' involvement with their children. Nonetheless, men's pre-birth experiences need to be addressed more systematically by future researchers because some men have the opportunity to affect child outcomes during this period as well as develop their sense of commitment to particular father roles.

Generative fathering. From a practical point of view, our conceptualization is appealing because it encourages policies that reward men's positive and active participation in children's lives. Our approach is consistent with a growing scholarly movement to define fathering in terms of proactive behavior rather than from a 'deficit model' (Hawkins and Dollahite, 1997; Palkovitz, 1997; Snarey, 1993). From this *generative fathering* perspective, researchers can avoid the temptation of looking at father influence as a phenomena characterized by a father's absence. The concept of generativity views fathering as a complex and emergent process that accentuates men's personal growth vis-a-vis the child's well-being. Understanding the reciprocal nature of interaction between parent and child is the key; as both extend and invest in the relationship, both are enriched. The deficit model suggests, on the other hand, that only the child suffers when fathers are absent and that this absence is rather bi-modal (ie., the father is either there or not).

Responsible fathering. Our general definition of "responsible" fatherhood, which is closely linked to generative fathering, acknowledges the need to discuss motivational factors associated with men's desire to be "responsible" fathers as well as their actual paternal involvement. Our conceptualization is therefore consistent with Levine and Pitt's (1995, p. 5-6) description of a "responsible man" as someone who does the following:

1. He waits to make a baby until he is prepared emotionally and financially to support his child.

2. He establishes his legal paternity if and when he does make a baby.
3. He actively shares with the child's mother in the continuing emotional and physical care of their child, from pregnancy onwards [or is willing to assume these responsibilities on his own if the mother does not wish to be involved].
4. He shares with the child's mother in the continuing financial support of their child, from pregnancy onwards [or is willing to assume these responsibilities on his own if the mother does not wish to be involved].

Our General Thematic Framework

Fathers' attitudes and actions are affected by many factors including their immediate social surroundings. In this regard, family structure variables and residential arrangements are quite important. The growing diversity of life course and residency patterns for men and children have fostered new perceptions about fathers' roles (Gerson, 1993; Griswold, 1993; Marsiglio, 1995b). One consequence of these patterns is that, compared to a few decades ago, a decreasing proportion of all children today live in households with their biological fathers, and in no time in U.S. history have so many children had biological fathers living elsewhere (Bianchi, 1995; Mintz, 1998). Moreover, many children have stepfather figures living with them on a regular or irregular basis, and growing numbers of men are assuming the role of custodial single father (Brown, 1996; Eggebeen, Snyder, and Manning, 1996; Larson, 1992; Marsiglio, 1995c). These patterns translate into expanding images of who fathers are and what they do.

Family structure. These socio-demographic patterns complicate researchers' efforts to understand divorced fathers' commitment to and involvement with their nonresident biological children. Researchers may need to consider whether stepfather figures alter biological fathers' relationships with these children. Similarly, social fatherhood issues are relevant to never married fathers' relationships with their young, nonresident biological children if former partners mediate their chances for being involved in their children's lives.

Diversity. Our approach highlights how sub-cultural diversity issues are relevant to both definitions of fatherhood and men's experiences with expressing themselves as fathers. We briefly discuss the interrelated factors associated with race and social class. Many of the insights we have gleaned from the research in this area remind us that father roles are quite diverse within the U.S., and that they frequently involve negotiated arrangements between various family members, and in some cases other individuals or groups. This research also highlights how these negotiations occur within a larger ecological context that is fundamentally shaped by economic and culturally based factors (Burton and Snyder, 1996, Daly, 1995; Furstenberg, 1995; Sullivan, 1989).

Gender. Gender issues significantly affect the way many men experience their everyday lives as procreative beings (Marsiglio, forthcoming) and fathers (Coltrane, 1996). These issues influence how men think about the prospects of paternity and fatherhood, how men view themselves as fathers, the way men are viewed and treated as fathers, and how fathers perceive their children and are involved in and/or affect their lives. As a fundamental organizing principle of social life, gender influences fathers' lives in numerous ways. For example, it is implicated in the way institutional arrangements are structured (e.g., labor markets, corporate culture, judicial system). In addition, when gender is viewed as a performed activity that is constructed in specific interaction settings (West and Zimmerman, 1987; Thompson, 1993), it provides individuals with opportunities to display and interpret symbolic images of masculinity and femininity that are closely tied to value laden meanings associated with the economic provider and

caretaker roles. Moreover, the process of "doing gender" underlies patterns of interpersonal communication (e.g., negotiations about child care). In short, many men and women experience tremendous anxiety and conflict sharing parental responsibilities, due in part to their gendered expectations and competing perceptions of family life (Fox and Bruce, 1996, see also Hawkins, Christiansen, Sargent, and Hill, 1993).

From a macro perspective, conservative and liberal social commentators have each lamented cultural changes in how adulthood masculinity is defined (Blankenhorn, 1995; Ehrenreich, 1983). The basic thrust of these arguments is that cultural and social changes have weakened the connection between masculinity norms and expectations about being a good "family man." Accordingly, adult men have in recent years been able to pursue their individual interests more easily as single men without jeopardizing their sense of masculinity.⁽⁸⁾ In other words, they are able to sustain their masculine sense of self without being a married family man. Some observers believe that men's expanded options for achieving adulthood masculinity have led to negative outcomes for many women and children (Blankenhorn, 1995; Popenoe, 1996).

The gender theme is also intimately related to cultural diversity issues. Masculinity norms and images, and the way these cultural elements are associated with marriage and family life, may differ between men from different racial, social class, and religious backgrounds. Determining how men in different types of settings are able to express their manhood, and the importance they place on doing so, is an important aspect to understanding fathers' level and type of commitment to and involvement with their children.

Developmental/life course trajectories. It is generally assumed (Klein and White, 1997) that developmental/life course trajectories are inevitable. As time passes, the complexities of family structure, issues in gender, and larger community/cultural norms about behavior merge together to describe a person's and/or family's journey as their roles and responsibilities change over time. The essence of this perspective is that life is not static nor is it defined by simplistic role definitions that can only capture a father's (for example) involvement level at one time point, when he and his spouse/partner are at certain ages and the children are at a particular stage of life. Further, this perspective also encourages us to examine a family life form using multiple levels of analysis. That is, we need to recognize that families are a type of social group but that within that group are potential dyadic interactions, and further, the dyads are made up of individuals who are passing through a life course. Therefore, the description of family life is one of *aggregate* clusters of families, communities and individuals. We further assume that all of these levels of analysis have a significant impact on which of life's strategies to choose.

Father Involvement: Assessment and Measurement

By employing a broad definition of father involvement, as we do, three features are particularly striking. First, fathers can be involved with their children in many ways. Palkovitz (1997), for example, identifies fifteen general types of paternal involvement (e.g., doing errands, planning, providing, shared activities, teaching, and thought processes, see Figure 1 for a complete list). Second, there is a diverse array of potentially overlapping dimensions or aspects associated with the numerous ways fathers are either involved with their children and/or make contributions to their well-being (Amato, 1998; Hanson and Bozett, 1987; Fox and Bruce, 1996; Palkovitz, 1997; Lamb, Pleck, Charnov, and Levine, 1987). Third, there are vast individual and sub-cultural differences in how persons define and invest in these dimensions. By contrast, because the core features of mothering (nurturance and protection) are more universally recognized, much greater consensus exists about "good mothers" than about "good fathers." Men committed to being "good fathers" may perform in vastly different ways, with the same performances sometimes being viewed as successful or unsuccessful depending on the implicit definitions

held by those making the evaluations. These facts confound efforts to examine fathers' involvement and to articulate the motivations related to it. Ideally, we are interested in determining the factors that lead to positive ways fathers are involved with their children (Pleck, 1997).

Domains of paternal involvement. Efforts to develop a theoretically meaningful and tidy categorization scheme for the varied forms of paternal involvement is fraught with difficulties. Fathers' assorted forms of involvement can be grouped together in various ways. The most rudimentary approach reveals that men's experiences as fathers can be categorized within one of three overlapping domains of functioning: cognitive, affective, and behavioral (Palkovitz, 1997; Doherty, 1997; Hawkins and Palkovitz, 1997). In other words, when we think about what fathers do with and for their children, we are able to place them within one of these three domains. What becomes apparent is that any behavioral expression that can be described as paternal involvement also contains cognitive and affective components. To date, however, researchers have concentrated on measuring and studying fathers' behaviors.

In addition to these conceptual tools, researchers might want to emphasize the key substantive themes or dimensions associated with paternal involvement. These would include fathers' nurturing and provisioning, moral and ethical guidance, emotional, practical, and psychosocial support of female partners, and economic provisioning or breadwinning (Figure 1).

The nurturance and provision of care to young children has typically been assessed using time use data on fathers' activities and it has been referred to in the literature as "paternal involvement" (Lamb et al., 1987; Pleck, 1997). While most observers view fathers' nurturance as a desirable form of fathering, there continues to be widespread disagreement about the importance of this dimension relative to other aspects of fathering. When it is evaluated positively, its importance may still vary depending on the age and gender of the children. Even though (or perhaps because) this dimension approximates "mothering" in many respects, it is almost universally viewed as secondary--less important than mothering by mothers, and less important than the other dimensions of fatherhood.

Second, moral and ethical guidance is viewed as a core feature of fatherhood within most religious traditions even though, in reality, most such guidance or socialization within the family is performed by mothers. Furthermore, when fathers are involved in socialization of this sort, their impact may be indirectly mediated by children's identification with and imitation of their fathers, regardless of any efforts on the fathers' part.

A third aspect involves the emotional, practical, and psychosocial support of female partners (biological mothers or stepmothers). When this third aspect of father involvement is loosely defined, it can also refer to aspects of social capital derived from coparental relations noted earlier.

Finally, economic provisioning, or breadwinning, is the dimension of fatherhood that is probably viewed by many of the stakeholders who define fatherhood as one of the most central aspects to fatherhood and paternal involvement. This dimension has clearly been one of the focal points of many social policy and programmatic efforts during the past two decades.

While fathers and evaluators in most subcultural groups tend to acknowledge each of these dimensions of fatherhood to some extent, they may have different views about their relative importance. Thus, it is not very informative to ask individuals about the personal significance of fatherhood without first ascertaining what it means to them and their children. Unfortunately, few researchers have done this; consequently, the motivational bases of fatherhood or paternal involvement remain poorly understood. When studies have been conducted, it is not always clear that the researchers' conception of fatherhood matches the

respondents'. In addition, different metrics are needed to assess the fulfillment of each dimension of fatherhood, and performance is easier to measure in some areas (e.g., economic provisioning) than others (e.g., moral guidance). Outside narrow research contexts, the easiest data to gather involve fathers' time use and economic provisioning, though in neither case do the available statistics directly and clearly tap either fathers' involvement or motivations. Moreover, these and other measures of fathers' involvement and subjective phenomena related to fathers are fraught with complex measurement issues resulting from different family members providing competing assessments of relevant variables (see Braver, Wolchik, Sandler, Fogas, and Zvetina, 1991; Seltzer and Brandreth, 1995; Smith and Morgan, 1994). Nevertheless, numerous studies indicate that a considerable amount of similarity exists between fathers' assessments of their involvement and their wives' reports (see Pleck, 1997).

Time Use Data and "Paternal Involvement" Measures

Much of the research on paternal involvement has examined how much time fathers spend with their children and what sorts of activities occupy that time (Lamb, Pleck, Charnov, and Levine, 1985; 1997; Pleck, 1983; 1997). Many of these studies involve small and often unrepresentative samples--a perennial problem in developmental research. Fortunately, this area of research has recently been augmented by several studies based on nationally representative samples of individuals (both mothers and fathers, e.g., NSFH) who have been asked what fathers do and how much they do.

Given the availability of these data, it would seem easy to determine what contemporary fathers really do. Sadly, the task is not as easy as it sounds because the results of different surveys vary dramatically. One problem is that different researchers have invoked very different implicit definitions of parental involvement, using different activities as aspects of paternal involvement. Thus, it is very difficult to compare results.

Components of involvement. One way to make sense of these data is to first group the studies according to the implicit definitions of paternal involvement they use. For analytic purposes, it is useful to consider the three components of parental involvement as they were originally outlined by Lamb et al. (1987). The first and most restrictive type is time spent in actual one-on-one interaction with a child (whether feeding her, helping him with homework, or playing catch on the sidewalk). This form of time use, which Lamb and his colleagues labeled engagement or interaction, does not include time spent in child-related housework or time spent sitting in one room while the child plays in the next room. This latter type of time use represents a second category comprised of activities involving less intense degrees of interaction. These activities imply parental accessibility to the child, rather than direct interaction. Cooking in the kitchen while the child plays in the next room, or even cooking in the kitchen while the child plays at the parent's feet, are examples.

The final type of involvement is the hardest to define but is perhaps the most important of all. It taps the extent to which the parent takes ultimate *responsibility* for the child's welfare and care. It can be illustrated by the difference between being responsible for child care and being able and willing to "help out" when it is convenient. Responsibility involves knowing when the child needs to go to the pediatrician, making the appointment, and making sure that the child gets to it. Responsibility involves making child-care and babysitting arrangements, ensuring that the child has clothes to wear, and making arrangements for supervision when the child is sick. Much of the time involved in being a responsible parent is not spent in direct interaction with the child. Consequently, survey researchers can easily overlook this type of involvement.

Quantifying the time involved in the responsibility component to involvement is difficult, particularly

because the anxiety, worry, and contingency planning that comprise parental responsibility often occur when the parent is ostensibly doing something else. Unfortunately, and as noted earlier, while the mental work associated with parenting is quite important, and most salient to this third type of time use, researchers have focused little attention on how and the degree to which fathers actually think about their children (Palkovitz, 1997). One notable exception is Walzer's (1996) qualitative analysis of the gendered patterns associated with parental care of infants. Not surprisingly, this study revealed that new mothers are much more likely than fathers to think independently about and plan for their infant's care.

Problems in Consistency

When the three different types of parental involvement covered in the more recent studies are differentiated, greater consistency is found from study to study than was apparent in earlier studies (Rebelsky and Hanks, 1971; DeFrain, 1975), but a considerable degree of inconsistency remains. In part, this is because the distinction between the three types of involvement has been applied retrospectively to the results of independent studies conducted years earlier. Thus, there are still differences across studies in specific definitions of engagement, accessibility, and responsibility. For example, in one study using a major national survey, "watching TV together" was grouped with activities of the interaction type, whereas in another study, it was included as a component of accessibility.

To integrate and compare the findings of different studies, each researcher's idiosyncratic definition of involvement must be allowed to stand, but relative rather than absolute measures of paternal involvement must be used to compare results. Instead of comparing those figures purporting to measure the amount of time that fathers spend "interacting with" their children, proportional figures must first be computed (i.e., compared with the amount of time that mothers devote to interaction, how much time do fathers devote to it) and these proportional figures can then be compared. When this strategy is used, the picture becomes much clearer. Surprisingly similar results are obtained in the various studies, despite major differences in the methods used to assess time use (diary versus estimate), the size and regional representation of the samples employed, and the date when the studies were conducted.

Time proportions. Lamb et al.'s (1987) review of data for two-parent families in which the mother is unemployed, suggested that the average father spent about 20% to 25% as much time as the mother did in direct interaction or engagement with their children, and about a third as much time being accessible to their children (see also Pleck, 1983; 1997). The largest discrepancy between paternal and maternal involvement was in the area of responsibility. Many studies show that fathers assume essentially no responsibility (as previously defined) for their children's care or rearing. In two-parent families with an employed mother, the levels of paternal compared with maternal engagement and accessibility are both substantially higher than in families with an unemployed mother (Lamb et al., 1987; Pleck, 1983; 1997). Lamb et al. (1987) reported figures for direct interaction and accessibility averaging 33% and 65%, respectively, whereas Pleck's later review reported that the averages had increased to 44% and 66%. As far as responsibility is concerned, however, there is no evidence that maternal employment has any effect on the level of paternal involvement. Even when both mother and father are employed 30 or more hours per week, the amount of responsibility assumed by fathers appears as negligible as when mothers are unemployed.

In light of the controversies that have arisen on this score, it is noteworthy that fathers do not appear to spend more time interacting with their children when mothers are employed; rather the proportions just cited go up only because mothers are doing less. Thus, fathers are proportionately more involved when mothers are employed, even though the depth of their involvement in absolute terms, does not change to any meaningful extent. The unfortunate controversies in this area appear attributable to a difference

between proportional figures and absolute figures. On the other hand, studies focused on time use pay scant attention to the quality of maternal and paternal behavior. Maternal employment has probably led to changes in the types of activities in which fathers engage and new studies may show increases in the extent of paternal responsibility.

Although spending time with children may or may not represent an important aspect of fatherhood to the individuals concerned, time diary studies have shown that the amount of time fathers spend with their children is associated with socioeconomic class membership (lower class fathers tend to spend more time with their children), age (fathers spend more time with younger than with older children), and gender (fathers spend more time with boys than with girls).

Positive paternal involvement.

A recent development in the conceptualization and measurement of paternal involvement includes a series of efforts that focus on the positive content of fathers' behaviors (for a review, see Pleck, 1997). Thus, in the past decade or so, a growing number of scholars have begun to systematically think about and measure the content of paternal involvement (e.g., Amato, 1987; McBride, 1990; McBride and Mills, 1993; Radin, 1994; Snarey, 1993; Volling and Belsky, 1991). For example, using her Paternal Index of Child Care Involvement (PICCI), Radin (1994) has been able to tap five different dimensions of positive paternal involvement which she labels; statement of involvement, child-care responsibility, socialization responsibility, influence in childrearing decisions, and accessibility.

Some of the most promising new work on conceptualizing positive paternal involvement draws upon the generative fathering perspective. In particular, Palkovitz's (1997) expanded conceptualization of paternal involvement should be appealing to those researchers and policymakers who have become more sensitive to the myriad ways fathers affect their children's development and well-being. By restructuring and expanding its treatment of the involvement concept, this *preliminary* framework may generate a new wave of research on fathers. In addition to his expanded interpretation of the ways fathers can be involved with their children, and his interest in the specific domains in which this involvement operates, Palkovitz explores how paternal involvement can be understood by considering a series of simultaneously occurring continua (described below). Palkovitz, by drawing attention to the continua theme, reminds researchers from various disciplinary backgrounds that thinking of fathers as being either more or less involved in their children's lives in a global sense does little to advance our understanding of paternal involvement, or how fathers' involvement affects children's well-being and development. Instead, it is more meaningful to assess the specific ways fathers are involved with their children in terms of various co-occurring continua.

We briefly discuss five of these continua (time invested, degree of involvement, observability, salience, directness) and mention two others (proximity and appropriateness). The most obvious continuum, and one that we discussed earlier, involves the amount of time fathers invest in any particular form of paternal involvement. When conceptualizing paternal involvement, it is important to keep in mind that the time fathers invest in their children's lives does not always reflect their degree or depth of involvement. Some fathers, for instance, may spend little time playing with their children, but their degree of involvement in this area may be quite high if they make important decisions about how their children's playtime is structured. Other fathers may spend a great deal of time doing certain things with or for their children, but they may invest little of their heart and soul into these situations. They may simply be going through the motions of being involved.

We would also want to be aware of how observable fathers' involvement may be in certain situations (a

consideration that is relevant to research and debates that deal with how parenting patterns are influenced by cultural factors, developmental trajectories, and gender differences). Fathers' thoughts about monitoring, planning, or worrying about their children's lives may not represent observable behaviors, but this cognitive activity may significantly influence how they interact with their children in different settings. Those fathers who think at length about how they might help their children deal with personal problems or developmental issues are much more likely to be well-prepared to be involved with their children in a positive manner than fathers who respond to their children without such deliberation.

Another continuum relates to the degree of saliency the paternal function or task has for fathers and their subjective interpretation of this activity. This continuum appears to be closely related to the "degree of involvement" continuum. In some instances, tasks may be highly relevant to fathers because they are aversive or pleased with them. Situations where fathers are completely indifferent to some form of paternal involvement represent one of the extreme poles of the saliency continuum.

The final continuum we mention here is the extent to which involvement is direct or indirect. Given the longstanding importance of the traditional male breadwinner role, much of what fathers have done for their children can be viewed in this way. Resident fathers who work overtime to provide financially for their children are engaged in indirect forms of involvement. Likewise, nonresident fathers who pay child support or monitor their children's lives through third parties are indirectly involved.

While it is beyond the scope of our report to describe or critique this particular approach in more detail, we suspect that scholars with allegiances to various disciplines or methodologies would stand to benefit by becoming more familiar with at least some of this framework's central themes. This work reminds us that efforts to better understand paternal involvement as a multidimensional construct are clearly warranted. Fox and Bruce (1996) provide us with a good beginning by developing an inventory of constructs depicting fathering that is organized according to three categories they label, evaluative, attitude/belief, and behavior. After reviewing the literature on men's parenting behavior, they conclude that the conceptualization of fathering behaviors is thin in several areas that involve: a) the potential for child-specific parenting, b) role sharing and role spelling between father and mothers, c) role cycling or the rotation among fathers' varied activities as disciplinarian, nurturer, etc., d) the distinction between fathers' investments in the status of father versus the process of fathering, and e) the potentially different perceptions of fathering experiences among men from different sociocultural backgrounds. Their largely social psychological approach is relevant to many of the points we make in this report and can serve as a springboard for refining the conceptualization of paternal involvement and proposing future areas of research.

Father's Role as Economic Provider.

As noted above, the role of economic provider is fundamental to most persons' definition of fatherhood and is a critical form of paternal involvement, broadly defined. For these reasons, and given its policy significance, we specifically discuss in this section fathers' provision of money for food, clothing, shelter and other consumption items. While the economic provide role is also linked to symbolic aspects relating to power, intergenerational transmission of values (e.g., work ethic), and the family connections to the larger community (e.g., social capital), we defer our discussion of some of these issues to our subsequent section on family process.

Economic resources. To assess the importance of the economic provider role for children, we first need to ask whether increased economic resources enhance children's well-being. As Brooks-Gunn and Duncan (1997) decisively show in The Consequences of Growing Up Poor, economic resources are

particularly important during early and middle childhood, especially for cognitive outcomes. Specifically, higher income is associated with a richer learning environment.⁽⁹⁾ In addition, it is suggested that economic resources matter in part because economic instability (e.g., unstable work, income loss, etc.) can lead to marital conflict which itself has negative consequences for children (Conger and Conger, 1997).

Although the results cited above are suggestive of several mechanisms through which economic resources can influence child outcomes, many unanswered questions remain. For example, what is the tradeoff between time and money? Fathers who provide more money to the family often do so at the cost of spending less time with their families. Is the choice of money over time beneficial for children and for other aspects of father involvement with children? Some literature suggests that there is an interaction between being perceived as a good provider (and thus spending a substantial amount of time in the labor force) and the quality of time that fathers spend with their children.

Decisions about money. A second question relates to whether fathers spend money in different ways than do mothers, and which parent has more power over spending decisions. The recent household bargaining literature in economics presents evidence that children are better off (higher calorie intake, lower mortality rates, more education) when mothers have more autonomy over spending decisions. This evidence may suggest that mothers spend money in ways that are more "child friendly" than do fathers. However, there is little direct evidence on spending patterns for specific individuals within the household. To address the kinds of questions posed above, we need data that combine information on family spending patterns, time allocation, and measures of child outcomes.

A related question is how much of the family income is spent on children as opposed to adults? There is a large literature on this topic (see Betson, 1990 for a review). Estimates of the proportion of family income spent on one child range from 16% to 33%. Estimates for two children range from 27% to 49% of income. Thus a substantial proportion of family income is consumed directly by children. Lazear and Michael (1988) find that the proportion spent on children varies by characteristics of the household. More highly educated and older parents spend a larger proportion of income on children. Households with two working parents also spend more.

Nonresident fathers and economic provisioning. The literature on the "cost of children" has been used by policymakers to assess how much absent parents (predominantly fathers) should pay to support their children. As part of the Family Support Act of 1988 all states were required to implement numerical formulas called child support guidelines specifying how much child support an absent parent should pay. These guidelines were intended to mimic the amount of income a nonresident parent would have spent on a child had he/she been living with that child. These guidelines have been criticized both by women's groups as being too low and by fathers' groups as being too high. However, there is some evidence that guidelines may make it easier for parents to reach cooperative agreements by creating a sense of fairness about the process (Argys et al., 1997). When child support agreements are cooperative, fathers are more likely to pay (Nord and Zill, 1996a).

Payment of support. Despite legislative efforts during the 1980s to increase the frequency and size of child support awards and reduce delinquency in child support payments, many nonresident fathers still do not pay any formal child support. In 1991, 66% of ever married custodial mothers had a child support award compared to only 27% for never married mothers. Half of the nonresident fathers (51%) who owed child support paid the full amount; 24% paid a partial amount, and the remaining 25% paid nothing. Overall, about 38% of custodial mothers received any formal child support, and the mean amount received was \$3,011 (U.S. Bureau of the Census, 1995).⁽¹⁰⁾

Data and research on the provider role of nonresident fathers usually focus on formal child support awards and payments. However, nonresident fathers may also provide support for their children informally through monetary or nonmonetary contributions to the mother. Data from the National Longitudinal Survey of Youth (NLSY) shows that even in the absence of a legal child support award agreement, some fathers voluntarily provide informal financial support. For instance, among a child support-eligible sample in the NLSY with no awards, 24% of divorced or separated mothers and 47% of mothers of children born outside of marriage reported receiving at least some monetary child support from fathers since their eligibility (Argys, Peters, Brooks-Gunn and Smith, 1996).

Even fathers in marginal or economically unstable conditions are found to contribute food, diapers, clothing, and some financial assistance informally (Hardy, Duggan, Masnyk, and Pearson, 1989; Sullivan, 1993). Interviews with 155 young unmarried fathers enrolled in a pilot project indicated that many of these fathers preferred to purchase items and services for their children rather than to pay money directly to the mother or the child support office (Achatz and MacAllum, 1994). Fathers pointed out that buying needed items allowed them to directly provide support and maintain control over how their money was spent. In addition, they viewed these tangible contributions as symbols of responsible fatherhood that gained them respect in their community. A study of 214 mothers on AFDC (Edin, 1994) revealed that fathers assumed more financial responsibility for their children informally than through the formal child support system. One-third of the women in the sample reported regular financial support from the fathers, while only 14% received this support through the formal child support enforcement system. An additional 30% of mothers reported that in lieu of monetary support, fathers provided items, such as disposable diapers, school clothing and shoes, and/or Christmas and birthday gifts. Similarly, Greene and Moore (1996) examined early descriptive data from the Jobs Opportunities and Basic Skills Child Outcomes Study and found that while about 17% of fathers provided child support through the formal system during the past year, 42% provided informal support, such as money, groceries, clothes, or other items directly to the mother.

Child support and well-being. There is a growing literature on the relationship between child support and child well-being (see Garfinkle and McLanahan, 1994; Nord and Zill, 1996b). Generally, studies find that child support has positive effects on children's cognitive achievement and educational attainment that cannot be accounted for solely by the financial contribution of child support. The reason for this positive correlation is complex. One hypothesis is that success in fulfilling the economic provider role may free fathers to become involved with their children in other beneficial ways. Another theory suggests that fathers who pay child support may want to continue to see their children as a way of monitoring that investment (Weiss and Willis, 1985). Alternatively, the causation could go in the other direction. Fathers may agree to pay child support only as a means to maintain access to their children. Finally, it is possible that there is a third factor that would lead some fathers to have high levels of both time and money involvement (e.g., altruism towards children).

Stepfathers' and male partners' economic provisioning. Very little is known about the economic contributions stepfathers and male partners in cohabiting relationships make to the household and to their partner's children. Generally speaking, stepfathers' income is included in total family income when determining eligibility for welfare benefits, whereas in many states male partners' incomes are not included. Similarly, an important policy debate in formulating child support guidelines is how (or whether) to account for the additional economic obligations a nonresident father may incur if he remarries. These policies are based on certain assumptions about the degree to which stepparents or male partners provide economic resources to children, but, at present, there is little data on which to base these assumptions.

Motivation

Having briefly reviewed some of the types and potential consequences of fathers' involvement, it is useful to discuss the key conceptual issues concerning fatherhood, paternal involvement, and motivation. Men may have somewhat separate, yet interrelated views about biological paternity, aspects of social and "responsible" fatherhood, and specific ways of being involved with their children. Obviously, then, different conceptions or definitions of concepts are likely to be associated with different sets of motivations. We must also recognize that in many respects men's desires to procreate are often intimately related to their perceptions about assuming specific social father roles (e.g., economic provider, nurturer), and their commitment to being "responsible" fathers (Marsiglio, 1995a; forthcoming; Tanfer and Mott, 1997). Furthermore, our discussion of motivation issues is affected by our decision to incorporate men's prenatal roles into our conceptualization of social fatherhood.

Reasons for involvement. We are mainly concerned with men's motivations to become "responsible" social fathers who are committed to enhancing their children's well-being through their positive involvement with them. Conceptions of fatherhood, as well as the extent to which individual fathers are motivated to behave in a responsible manner, appear to be shaped by cultural images of fatherhood represented in the media and other outlets, as well as men's socio-cultural background, their current social circumstances, and their earlier experiences, particularly the behavior of their own parents. More specifically, some of the principle reasons men are motivated to become social fathers are because they want:

1. the experience of caring for and raising children,
2. an opportunity to strengthen their bond with their romantic partners,
3. to ensure that they are not lonely or financially vulnerable in their later years of life, or,
4. to feel more connected to their extended family and/or friends.

Likewise, men's motivation to be responsible fathers who are positively involved with their children may stem from some of the aforementioned factors as well as:

1. their genuine love for their children,
2. societal and familial pressures to act like masculine adult males (the "shame" factor in the extreme), and
3. their perceptions of how much their children need their involvement or financial resources owing to their perception of their sexual partner's (or former partner's) financial and relationship circumstances.

As we consider how these or other motivations may prompt fathers to strive to be responsible fathers, we should be aware that this task is made more difficult when we acknowledge the multiple ways in which paternal involvement can be expressed. Moreover, the diverse views held by the various stakeholders about what constitutes "good fathering" adds to this complexity.

Instead of trying to rank motivations in order of importance or associate them with specific expressions or dimensions of fatherhood, it may be more productive to enumerate the most important motivational or

explanatory categories that have been hypothesized, recognizing that the empirical research in this area is scanty, at best. As expected, scholars with ties to anthropology, developmental psychological, life course perspectives, social psychology, sociobiology, and sociology each tend to address motivational issues from a different perspective.

Socio-biological motivations. Sociobiologists, for example, emphasize that both men and women strive to maximize the representation of their genes in future generations. Several implications flow from their observation that males (unlike females) can be biologically involved in many pregnancies simultaneously and do not need to make major physiological contributions to the physical survival of their offspring after insemination. The 'down side,' according to these same theorists, is that men can never really be sure of paternity, and thus always face the risk of investing resources in someone else's children (genes). Several predictions flow from these simple (if controversial) observations:

1. Men invest less in individual offspring because the opportunity costs are so much lower and the risks of mis-investment are so much higher than they are for women.
2. Men support their partners and offspring economically and socially (rather than physiologically).
3. Biologically determined differences in male and female investment may continue after delivery.
4. Like mothers, fathers invest time in the care and rearing of their children in order to bring children to reproductive maturity. Unlike mothers, their behavior does not appear to be hormonally facilitated.
5. The more men invest in partners and their children, the more they want to be sure of paternity; the extent to which they provide economic and socio-emotional support may affect the extent to which their partners' later children have the same fathers.
6. The fewer the children, the greater the motivation to invest time and resources in the success of each.

The clarity of some of these predictions is offset by the fact that the motivations are unconscious and must therefore be studied, not by probing attitudes and values in interviews, but by studying the effects, often at the level of population groups rather than individuals. Fortunately, the desire to be a father isn't driven solely (or even consciously) by the desire to propagate one's genes, and sociobiological explanations in terms of ultimate causes involve a different level of analysis than psychological and sociological explanations.

Generativity. Theorists who stress developmental issues and the generativity theme contend that some fathers are motivated to be involved with their children because such involvement is related to healthy adult development (Hawkins and Dollahite, 1997; Palkovitz, 1997; Snarey, 1993). Many individuals find fulfillment in shaping the growth and development of another person, and this type of experience represents a motivating force for some fathers. Such participation is hard to quantify empirically, but time-use measures come closest, especially when they illuminate both what and how much fathers do for or with their children. Moreover, large scale studies do not measure how well fathers perform these roles or tasks -- that is the focus of smaller scale studies that are informed by direct observation.

The type and extent of individual involvement in fathering may also be affected by recollections of the fathering men experienced as children as well as their interpretation of other men's fathering behaviors in specific social situations. Some men (particularly those who embrace higher levels of hands-on involvement and avoid being defined solely by breadwinning) are motivated to emulate the behavior of

their fathers while others who behave in this way are apparently driven by a desire to be better fathers than their own fathers (Fox and Bruce, 1996). Meanwhile, Daly's (1995) recent qualitative work suggests that fathers may be less likely to turn to concrete figures to model their behavior and more likely to pick and choose actions, values, and standards that are displayed by various parents they encounter in their everyday lives.

Maturity and status. Meanwhile, theorists who focus on life course, identity, and gender issues shed light on some men's motivations by suggesting that being a father denotes maturity and confers status in many societies and subcultures. Fathers can reap the benefits of social status when their partners and children are well-provisioned and successful (as denoted by school performance, sports achievement, college admissions, and career attainment). Attitude surveys may indicate the relative if not absolute importance of these motivations, as well as differing perceptions of the ways in which these desired outcomes can best be hastened by coaching, supervision, warmth, play, and physical provisioning.

In a related social psychological vein, identity theory (Marsiglio, 1995d; Ihninger-Tallman, Pasley, and Buehler, 1995) has been extended to address issues associated with men's paternal identity and involvement. This model emphasizes fathers' commitment to role identities that are negotiated within the context of structured role relationships. As such, it implicitly deals with motivational issues in that fathers' commitment to being a particular type of man, partner, and father may affect their desire to be involved with their children in specific ways. This perspective is valuable because it draws attention to the interpersonal and social context within which men develop their individual dispositions to think, feel, and act toward their children. Moreover, it provides a theoretically meaningful link between fathers' perceptions of themselves and their actual paternal involvement. By emphasizing identity within a complex relational context, this theory also points out how coparental issues may condition men's involvement with their resident and nonresident children (Fox and Bruce, 1996). We deal more explicitly and at greater length with these concerns in the next two sections.

Moderating factors. To conclude this section, we build upon the work of Palkovitz (1997) and Lamb and his colleagues (1987) to summarize the types of factors that condition or moderate fathers' positive involvement with their children. We discuss three broad types: individual, interactional context/process, and macro/meso. As seen in Figure 2, these diverse factors range from developmental and life course considerations for both fathers and their children, to factors associated with the context and processes that shape fathers' interactions with their children (e.g., mothers, school officials), to more macro/meso types of factors that affect fathers' rights and opportunities to be involved with their children in particular ways. Together, these types of factors shape the overall context within which paternal involvement is expressed and evaluation occurs.

FAMILY PROCESSES AND FATHERING

As was mentioned in the beginning of this report, fundamental social changes in family structure and generalized definitions of gender roles have raised many questions about the significance of fathers and their interactions with children. In this section, we expand on the dyadic and triadic interactions (with a focus on paternal-child interaction) used to describe "family process" (sometimes called family dynamics) and their relationship to important child well-being outcomes.

Definition. Family process informs us about how family members think, feel, and act toward each other in their relationships (Brodrick, 1993; McKenry and Price, 1994). By definition, family process is measured by assessing the shared relationships of multiple family members. This level of analysis is interactional and the focus is the family group instead of individual or macro-levels. For example, two or

more family members' perceptions about how individuality and intimacy are tolerated in a family represents a family process measure (Gavazzi, 1994).

Family process and social capital. One promising model of how family dynamics are employed to enhance the lives of children can be found in the theoretical work of Coleman (1988). He suggests that the co-parental relationship and the dyadic relationship between parent and child represent a resource and these resources are inherently dyadic. He further posits that the level of social capital available from the father that could be transmitted to the child can only be transferred in the context of higher quality dyadic relationships. Higher quality might be, for example, spending time together (a primary feature of the interaction theme in Lamb's work) but is more likely to be found in the nature of the interaction. In particular, higher quality interaction exists when the father is more supportive, has higher levels of effective communication, understands appropriate distance regulation, and is appropriately flexible, his resource base (either human, financial, or social capital) is more likely to be transferable to the child.

The effects of being able to transfer resources is critical and varies by ethnicity and gender. Additionally, the processes are different depending the life course phases of family members and family structure features (i.e. the age of the child, age of parent, number of siblings at home, etc.).

Steelman and Doby (1983) and Rumberger (1983) have found strong links between parental resources and high school completion rates as well as offspring's cognitive skills. These results are modified by the parent-child relationship and vary by race (black/white). Further, when children are young at the time of parental separation, fathers' human capital is more influential when they have close contact with their children (Amato, 1998). Future research in this area needs to examine the effects paternal and maternal income *vis a vis* family process variables.

Such work is valuable as researchers continue to explore the links between important issues such as poverty and children's well being. Financial capital, distributed in the context of a caring and appropriately supervised parent/child relationships, may be substantially more effective in reducing the effects of lower education, poverty, and higher crime rates than the dispersing of money only. By understanding family processes, we may improve our ability to unravel the question of what fathers potentially contribute to the family besides provisioning and limited child care.

Assumptions About Family Processes

To understand how fathers fit into the discussion of family process, four assumptions need to be examined. First, family process describes the non-static ongoing dynamics of interaction found within a family unit. Second, it is often assumed that most of what happens in families is hidden or latent even to the family. It is only through multi-perception research that researchers can begin to have some understanding about those dynamics. Third, it is assumed that family process interactions are recurring, repetitive patterns of interaction. Therefore, over time, family members (or an observer) can begin to notice and record these redundant patterns of interaction and then induce from them attendant rule structures and belief systems that drive the redundancies. Fourth, family processes usually reflect hierarchically structured rules and interactions. The rules and patterns of interaction tell us who is in charge, who should do what at certain times, who can change the rules, and who can administer them. Often these rules of hierarchy tell us about gendered power differences or cultural imperatives that shape domination patterns within the redundancies.

Examples of Family Processes

A perusal of scholarly family process literature manifests only a few recurring family process ideas. From the larger list of family processes only three examples will be discussed in depth here and they are: (i.e., enmeshment, individuation, boundary definition, triangulation, and family intrusiveness), (i.e., adaptability, coping), and *support*. A short list of other family process constructs not discussed here are: supervision/ monitoring (which includes rule setting, rule communication; and ritualization).

children, unfortunately, research explaining how fathers contribute to these processes is relatively underdeveloped. The selected family processes discussed below have a research tradition and clear

little research on these processes has been conducted that focuses specifically on fathers. Perhaps the exception to this notion is the work on power differences in families. Differentials in power between resource allocation, and goal attainment.

Distance regulation contains two primary dimensions: (1) the parent's tolerance for individuality, or the family, and (2) the parent's tolerance for intimacy, or the relative tolerance that the system displays for members to be connected emotionally and psychologically to the family (Gavazzi, 1993).

Individuality and intimacy.

and intimacy within the family create a well-differentiated family system. If the distance regulation patterns display high tolerance for only one dimension of family differentiation -- individuality or intimacy

intimacy but do not tolerate individuality well have been labeled "enmeshed," whereas families that tolerate individuality among its members without retaining a sense of intimate belonging have been

individuality claims and do not tolerate intimacy within the family are thought to be poorly differentiated (Gavazzi et al., 1994).

Individual family members contribute to family differentiation through their multiple interactions with other members of the family, and each member does have their own personal experiences of their family

differentiation. Further, the level of family differentiation is not the mere summarization of each member's contribution to the family, but a latent construct derived from the response of each family member.

Adolescence and distance regulation.

and clinical attention in recent years, especially regarding families with adolescents (Allison and Sabatelli, 1988; Anderson and Sabatelli, 1990; Sabatelli and Mazor, 1985). While most of these researchers focus

regulation may differ for each. Nevertheless, distance regulation strategies between parent (father and/or mother) and child vary greatly by family with differing outcomes.

The ways in which the father and mother regulate individuation and familial intimacy affect the adolescent's ability to make a successful transition into adulthood status (Carter and McGoldrick, 1989;

Farley, 1979; Kerr and Bowen, 1988; Lapsley, 1993; Lopez and Gover, 1993). Basically, this family process is the mechanism by which parents promote or retard the development of appropriate child autonomy. One researcher (Broderick, 1993) speaks of family distance regulation as the primary mechanism that defines the bonding and buffering processes associated with healthy functioning in the family with adolescents. Family distance regulation is defined as the amount of individuality and the amount of intimacy that are tolerated within a family system.

Empirical Work on Family Distance Regulation

Recently, studies have generated an empirical foundation for these theoretical and clinical writings, especially with regard to families with adolescents. For instance, Gavazzi (1993) discussed how severity levels in a variety of presenting problems (e.g., school-related difficulties, peer relationship problems, individually oriented difficulties, and illegal activities) could be predicted by differentiation levels in the family. Also, Gavazzi (1994a) reported that distance regulation levels were predictive of Child Behavior Checklist (Achenbach and Edelrock, 1983) total problem scores. Other studies have noted similar links between levels of family differentiation and more specific problematic behaviors in adolescents. Bartle and Sabatelli (1989) reported a link between family differentiation levels and alcohol-related difficulties in adolescents. Sabatelli and Anderson (1991) found a relationship between family differentiation and adolescents' levels of depression and anxiety. Finally, Gavazzi, Anderson, and Sabatelli (1993) reported that both psychosocial development and problematic behaviors in adolescents were significantly predicted by family differentiation levels, a finding replicated by Gavazzi, Goettler, Solomon, and McKenry (1994).

Gender differences. While this research has a promising theoretical and empirical record, little has been done to look at parent gender differences. For example, we do not know if different levels of intimacy tolerance by fathers (versus mothers) has differential familial effects. Nor do we know if it is better (or not) for both parents to agree on a "family" level of tolerance and individuation. Also, little is known about the child outcomes when there is only one parent or only one physically present parent (and the other one is psychologically or physically absent). Neither do we know if there are cultural differences that promote different levels of distance regulation.

Problems in distance regulation. However, families with distance regulation problems (for fathers and mothers) report more pathological indicators, including depressive disorders (Asarnow, Goldstein, et al., 1993), disruptive behavior and obsessive-compulsive disorders (Hibbs, Hamburger, et al., 1991; Hibbs, Hamburger, et al., 1993), eating disorders (Grange, Eisler, et al., 1992), and aggressive and non-aggressive attention deficit hyperactivity disorders (Marshall, Longwell, et al., 1990). Additionally, these families are more likely to report that their teen is involved in "at risk" psychopathological conditions (Albers, Doane, and Mintz, 1986; Cook, Kenny, and Goldstein, 1991; Schwartz, Dorer, et al., 1990; Valone, Goldstein, and Norton, 1984). In general, these studies have linked higher levels of expressed emotion in the family to lower levels of intrapsychic and interpersonal functioning in both clinical and non-clinical adolescent samples. Initial results by Gavazzi (in press) indicate that the distance regulation style of the father may have a greater impact on pre-teen and teenage children than the mother's style. Certainly more research is needed to understand these processes better.

Father and distance regulation. In a recent study by Bartle and Gavazzi (1994), it was found that by analyzing the influence of the father's distance regulation behaviors, one could significantly predict better adolescent outcomes such as behavior problems and ease of on-time developmental transitions. When analyses were conducted in which fathers' and mothers' data were combined, the effect was still there, but when run with mothers' data only the effects disappeared. In other words, when the relationship between father and adolescent (irrespective of gender of child) was strong (i.e., appropriate levels of distance

regulation) the child was much less likely to be in trouble with school and/or the law. When that relationship was poor they were much more likely to report problems with both school and local police.

In another study, Gavazzi (in press) reports that father's scores on family distance regulation (in a sample of involved and active fathers) is very different than that of the mother's and/or the teen in a family. In other words, the father's perception of what happens in the family does not statistically resemble the mother's or the teen's and yet the mother's and teen's perception statistically converge. Even when he is there and contributing in a positive way, his view of what is going on inside the family is quite different than other family members. His view is so remarkably different that the statistical models rejected the father's scores as coming from the same family to which he belonged.

Such studies create a research imperative in which multiple views of family events,

feelings, and goals are measured. Only when these family process measures are done with representative large scale studies will we have the confidence to suggest specific policy recommendations about the role of the father in enhancing children's well-being.

Flexibility

An increasingly large amount of family-based literature has been devoted to the study of the amount of flexibility families display in response to internal and external demands for change. In essence, it is believed that families able to demonstrate greater flexibility in the face of demands for change will respond in more healthy ways thereby meeting the needs of its individual members (Terkleson, 1980). This literature contains a number of constructs related to flexibility in the family, including similar constructs which have been used in family research. Among these are adaptability (Olson, Sprenkle, and Russell, 1983; Lewis, Beavers, Gossett, and Phillips, 1976) family problem-solving ability (Aldous et al., 1971; Reiss and Oliveri, 1980) and family coping styles (McCubbin et al., 1980; McKenry and Price, 1994).

Definition. Flexibility assesses the degree to which members are able to change the power structure, relationship rules, and roles in relation to developmental and/or situational stressors (Anderson and Gavazzi, 1990; Olson, Sprenkle, and Russell, 1979). Problem-solving abilities in the family involve the ability of its members to gain resolution to both instrumental and affective difficulties (Epstein, Bishop, and Baldwin, 1980). Coping in the family concerns the degree to which members are able to respond to calls for change by taking direct action, reframing a difficult situation in ways that become more manageable, and/or controlling the amount of stress and anxiety generated by the difficult situation (Boss, 1988; McCubbin and Patterson, 1982).

Empirical Work on Family Flexibility

While few studies have focused on mother/father differences with regard to flexibility, some researchers (McCubbin and Patterson, 1982) have suggested that there is a greater chance for a family to have appropriate levels of flexibility when there are two parents present. They suggest that having two adults (regardless of gender) balances and regulates the stresses and strains of daily living. Better flexibility, it is hypothesized, is created when the two adults can call upon one another for suggestions, creative solutions, and respite from the stress of parenting. However, we know nothing of differences in the process that men and women use to ameliorate or attenuate levels of familial flexibility.

Flexibility and well-being. At a more general level, however, research has shown a strong and generally

linear relationship between variables associated with family flexibility and indicators of the well-being of family members (Anderson and Gavazzi, 1990; Beavers and Voeller, 1983; Cluff, Hicks, and Madsen, 1994). For instance, studies have linked lower levels of family adaptability to destructive parent-child interaction (Garbarino, Sebes, and Schellenbach, 1985), the presence of a juvenile offender (Druckman, 1979; Rodick, Henggeler, and Hanson, (1986), sexually abusive behavior (Alexander and Lupfer, 1987), level of psychopathology (Lewis, Beaver, Gossett, and Phillips, 1976) and chemical dependence (Freidman, Utada, and Morrissey, 1987; Olson and Killorin, 1985).

Other studies have linked decreases in problem-solving abilities to families seeking clinical help (Epstein, Baldwin, and Bishop, 1983; Fristad, 1989; Miller, Bishop, Epstein, and Keitner, 1985), families with a juvenile offender (Vuchinich, Wood, and Vuchinich, 1994) as well as the level of risk factors present (Byles, Byrne, and Offord, 1988; Kabakoff et al., 1990).

Additionally, a wide variety of interventions are based on increasing the problem-solving abilities of families who are dealing with a range of disorders (Patterson, Dishion, and Chamberlain, 1992; Kazdin, Siegel, and Bass, 1992). Finally, studies have reported significant association between family coping behaviors and physical health (Ross, Mirowsky, and Goldsteen, 1980), depression (Armsden et al., 1990; Arnold, 1990 Barrera and Garrison-Jones, 1992; Kandel and Davies, 1982; Puig-Antich et al., 1993), and a wide variety of other outcome variables associated with individual and interpersonal functioning (Olson et al., 1989; McCubbin et al., 1980; Perlin and Schooler, 1978).

Parental Support

Definition. Parental support, whether conceptualized as general support, physical affection, acceptance, or companionship, is a diverse category of behavior communicating warmth, affection, rapport, and feelings of being valued (Barber and Thomas, 1986; Peterson and Hanna, in press; Rohner, 1986; Stafford and Bayer, 1993). Parental support is viewed as an expression of the "loving" dimension of relationships in families. Such loving relationships are at least partly rooted in altruistic motives that seem to foster such things as bonding, security, harmony, protection, and opportunity for optimal human development in families (Burr, Day, and Bahr, 1993). In the case of the parent-child subsystem, nurturant or emotionally supportive relationships encourage the young to identify with parents and incorporate their attitudes, values, and expectations.

Outcomes. Consequently, parental support often contributes to moral internalization and conformity to parent's expectations (Hoffman, 1980; Peterson and Rollins, 1987; Stafford and Bayer, 1993). Other positive outcomes for children include autonomy and self-esteem. Consequently, parental support seems to foster seemingly opposite developments -- both responsiveness to or connectedness with parents as well as progress toward autonomy or individuality. Parent-child relationships characterized by considerable nurturance appear to provide a secure base (bonds of connectedness) from which children and adolescents develop confidence to explore outward and meet challenges that exist beyond family boundaries (autonomy or individuality) (Bowlby, 1988; Peterson and Hann, in press; Peterson and Leigh, 1990. Failure to receive sufficient levels of support, in turn, fosters feelings of separation, expressions of hostility and aggression, diminished self-esteem, as well as antisocial and risk behavior (Felson and Zielinski, 1989; Gecas and Schwalbe, 1986; Peterson and Rollins, 1987; Rohner, 1986; Stafford and Bayer, 1993; Young, Miller, Norton, and Hill, 1995).

Empirical Work on Support

Fathers' role in fostering the best outcomes for children has often been portrayed as one of showing

children (even at early ages) how to become autonomous. In past research, the father was characterized (Shulman-Klein, 1993). Additionally, the traditional view of the father is that he was summoned to, on occasion, reinforce stern rules, reaffirm boundaries, and administer harsh discipline (Sterns, 1991). Some preparing the young person for the harsh world (Collins and Luebker, 1991).

. Contrary to previous research that highlighted the benefits of fathers' when they contribute to youthful autonomy within the context of relationships characterized by closeness, mutuality, and (Baltes and Silverberg, 1994; Baumrind, 1991; Grotevant and Condon, 1983; Peterson, 1994; Quintana and Lapsley, 1990). That is, adolescents become more self-directed when validation, and realize a sense of security.

higher academic achievement, better mental health, and ease of transition in adult roles) in children as they mature and grow into adulthood. Limited research about the role of the father (Peterson and Day, in press) in this type of family process has greatly hampered efforts to understand the complexity of the

POLICY ISSUES

For public policy to be effective in promoting responsible fathering, it will need to be proactive, theoretically informed, and research based (Furstenberg, 1988; Marsiglio, 1995b). Recent government violence and child support issues. While these strategies and issues remain relevant to the prevailing social policy agenda, there is growing sentiment that the search for better policy results will depend on

Increasingly, policymakers and the general public acknowledge that many fathers want to be more situations where fathers are physically estranged from their children, many observers believe that fathers can still be involved with their children in productive ways and provide social capital to them. These individuals seem eager to support social policy that promotes the desirable aspects of fathering, while at the same time minimizing the barriers that limit fathers' options for making a positive contribution to their

At present, there is a paucity of information about men's positive contribution to their families, and how development of social policy is therefore based on an incomplete understanding of how men behave in response to policy stimuli. The stakes are high and social policy regarding fatherhood may be much more development than has been widely believed.

public policy. One trend involves the bi-polarization of fatherhood. This trend is evidenced by the simultaneous growth in the proportion of fathers who are interested in playing a more active role in their

children's lives and the increasingly visible segment of fathers who are disengaging (or are pushed) themselves from their paternal responsibilities (Furstenberg, 1988). The other trend involves the growing diversity and dynamic nature to men's life course patterns and paternal roles as they find themselves in step, blended, cohabiting, and fictive families. These family types require men (and others) to visualize and negotiate new roles. To the extent that social policy is constructed through the lens of the traditional nuclear family model, new forms of responsible fathering by biological fathers or stepfathers are likely to be constrained.

General Policy and Research Issues

In this section, we briefly explore some of the key features of social policy and research germane to our conceptualization of responsible fatherhood and positive paternal involvement. Unfortunately, our understanding of fathers from a policy perspective is impeded because they are often considered in a piecemeal manner, usually within the context of narrowly defined policy-related questions.

Father's attachments to their children. The first issue to consider is how biological fathers establish relationships with their children. Fathers (biological and step) often develop attachments to their children and become committed to them, at least in part, because they have established a sexual relationship with their children's mother (Furstenberg and Cherlin, 1991; Marsiglio, 1995c). As a result, when men's romantic relationships with the mother is interrupted through a divorce or informal breakup outside of marriage, men's relationships with their children often deteriorate (Furstenberg and Cherlin, 1991). A key question, then, is: How can fathers sustain a relationship with their children in spite of their severed romantic ties to the mother of their children? Additionally, are men capable of rekindling a relationship with their children after it has waned? Can fathers establish relationships with their children even if they failed to do so when their children were much younger?

Divorce and coparental situations. As noted above, the unraveling of a marriage often leads to attenuated relations between fathers and their children. Intervention efforts to help fathers (and mothers) deal with the emotional turmoil induced by separation and divorce processes involving custody and visitation rights are warranted.

Despite some legal scholars' strong reservations about the feasibility of professional mediation for partners undergoing separation and divorce (Levy, 1993), it seems prudent to give serious consideration to public policies that would provide couples with easy access to mediation during their divorce negotiations as well as subsequently when they may need to address new family situations (Arditti, 1991; Arditti and Kelly, 1994; Lamb and Sagi, 1983; Thompson, 1994). Thompson convincingly argues that policymakers should move away from "clean break" perceptions about divorce and instead encourage new types of postdivorce relationships that are in children's best interests. Voluntary or perhaps mandatory mediation classes for parents who are applying for a divorce could enable parents to understand existing or potential co-parenting issues more fully. Mediation sessions, and other pre/post divorce intervention strategies, should encourage mothers to realize that promoting access and positive interaction between fathers and children is a worthy goal. In addition, these programs could help fathers understand the unique features of their particular circumstances as nonresident, single, and perhaps even stepfathers. In general, it is essential that a concerted effort be made to ensure that fathers feel connected to their children and maintain a feeling of obligation toward them--without relying exclusively on punitive strategies. Evaluation research is therefore needed to assess the program features of interventions, particularly ones with a two-parent focus, that are most effective in promoting responsible fathering and children's well-being.

. Another general issue focuses on how the act of

their lives. The relationship between men's family roles and their roles in other spheres of life (e.g., work, school, religion, community) are reciprocal in many respects. One question is: how do different forms of paternal involvement promote male responsibility with respect to future fertility, labor force participation, and community involvement? This question is particularly relevant to socioeconomically disadvantaged men who are often marginalized from the paths to "success" typically deemed appropriate by the mainstream public. Most of these men are poorly educated and have limited job skills. Some are also shadowed by a history of criminal behavior and other self-destructive patterns. What do these men want

Ethnographic research hints that many desire the traditional formula for success as a man -- a stable job, the sense of belonging to a family, and a respected place in the community. Charles Ballard's innovative

low-income fathers establish an emotional commitment with their children can provide an enormous incentive for men to develop their own human capital and community involvement (Levine and Pitt,

Perhaps the recent reforms to the AFDC program will enhance men's commitment to family roles and spark an increase in disadvantaged men's economic productivity and pro-social behavior. Research evaluating the effects of welfare reform should therefore consider how these innovations affect men's lives as fathers and in other spheres of life (e.g., education, work, community, church).

Father/mother differences. Do fathers differ from mothers in their family behavior during the course of a child's life? We have a better understanding of mothers because research has disproportionately focused attention on their intense involvement with their children in the early years of their lives. Fathers are often seen as mothers' helpers in these early years, but do their contributions and involvement in children's lives change as children grow up? Are there life course and developmental processes that require different levels and types of father involvement and support? Do these potential needs vary by the age and gender of children? These questions require us to consider men as individuals rather than as merely supports for mothers. We do not know what to expect from fathers in general, and estranged fathers in particular, as they age with their children. It may be the case that fathers play a poorly appreciated role as the adolescents transition to productive, independent adults. If so, fathers' disengagement early in a child's life must be evaluated in terms of its impact on children that may manifest later in their lives. These issues loom large in questions of custody and living arrangements subsequent to a divorce.

Family transitions and instability. One consequence of the instability of modern family life is that many fathers find themselves disengaged from their families and searching for a new family experience. Cherlin (1978) has suggested that we are in a cultural transition in which the plethora of emerging family types and situations has created a phenomena that could be described as an "incomplete institution." By this, he means that the changes in our culture have occurred so rapidly that the new emerging family forms have not had time to become "institutionalized." When family transitions (e.g., marriage, engagement, and death of spouse) are institutionalized, members are aware of norms to guide their behavior, ie., they have some sense of placement, the procedures to follow, and what to expect. In the case of remarriage, families are left to invent their own norms and transitional procedures. There are no well-defined "standards" one can easily adapt to the new situation. Consequently, individual family members must decide, with little guidance from cultural scripts, what the new parent should be called, how distance should be regulated, who should discipline and when, and how money should be transferred.

While men in remarriage situations are generally older and perhaps wiser as they prepare to establish a new family, their circumstances are complicated because they often have family obligations from a previous family. These obligations can collide with future fertility behavior in a subsequent marriage, cause role confusion, and create a sense of detachment from one or both families.

Also, if the new marriage or non-marital union involves a mother with children from a previous relationship, then a stepfather may be forced to negotiate a relationship with his stepchildren within a context marked by the presence of a living, active biological father. A stepfather must ask: How does forming a serious romantic union affect my new and pre-existing paternal roles? How should I treat my stepchildren relative to my biological ones? Where do my loyalties ultimately reside with respect to children?

In some ways, the law treats paternal involvement in remarriages as a secondary commitment. Biological fathers, irrespective of their new marital status and family circumstances, are expected to fulfill their child support obligations to their nonresident children. This often causes conflict within both families to the detriment of each. Also, the law is quite vague about stepfathers' relationships with stepchildren. Indeed, social and legal perceptions of stepfathers are still evolving and worthy of continued study, especially in light of current demographic patterns that suggest that a large percentage of children will at some point live with a stepfather figure.

Dual aspects of fatherhood. A final issue involves the competing ways in which fathers may influence children's lives. Fathers obviously may help protect children and teach them how to negotiate the difficult experiences they will encounter as they make the transition to adulthood. In stark contrast to these acceptable roles, fathers sometimes present a danger to their families and trigger their children's self-destructive behavior. Fathers have the potential to bring about real harm when they are physically or mentally abusive, or when they induce children to leave home before they are able to sustain themselves in a risky world.

How can we fashion laws and public policy to encourage the protective aspect of fathering while discouraging fathers' potentially harmful actions? Attentive and caring fathers bring safety and stability to the home, and communities filled with these types of fathers add an extra measure of security to children's lives. Unfortunately, modern public policy has tended to discourage men's participation in families which has led to interpersonal instability within households and dangerous communities where concentrations of households without coresiding fathers are high. As we contemplate strategies for assisting high risk families, no one knows for sure how to arrive at the optimal balance between promoting fathers' positive participation in their children's lives and restraining their negative influences. This represents an important area where future research needs to inform policymaking.

The Role of Public Policy, Law, and Business Practices

How does government constrain and/or promote responsible fatherhood and positive paternal involvement? We highlight what we believe to be the most important ways that public policy, law, and business practices currently influence fathers' behavior, either positively or negatively. While social initiatives are relevant to fathers' paternal involvement in a wide range of situations, most deal with fathers who are either struggling because they are poor, or their paternal rights and obligations have become a focal point due to a divorce or a nonmarital birth. Obviously, many men are affected by both sets of circumstances.

Welfare reform. As mentioned previously, the provider role is a central construct in fathering. The

structural transformation of the U.S. economy away from manufacturing and extractive industries to an information and service economy, coupled with the displacement of jobs from inner city areas, has disproportionately diminished the ability of economically disadvantaged fathers to provide for their families relative to what mothers can provide, especially when mothers are aided by government transfer programs. From a national policy perspective, many fathers have been marginalized in their role as provider and this has coincided with a marked increase in family instability. For example, government support programs that require mothers to remain single in order to receive benefits offer more attractive alternatives to the traditional notion of fathers as providers when the eligible men are poorly educated and have few work skills. In addition, administrative rules that require that fathers' child support be used to reimburse the government for welfare support provided to the mother and her children, and incentive programs that prod welfare mothers to target child support enforcement actions at fathers, have sometimes discouraged fathers from playing a more active role in their children's lives.

The advent of welfare reform provides an excellent opportunity to reconsider these policies and many states are experimenting with ways of realigning government policies to be more father-friendly. For example, many states have received permission to allow nonresident fathers of children on welfare to enter the JOBS program which currently provides the mothers of these children access to job training and education opportunities. By making these services available to fathers, policymakers hope to improve fathers' ability and desire to provide for their children. Some states (e.g. Virginia and Maryland) have embedded specific fatherhood programs in either child support and/or maternal health programs (Brenner, 1996).

"Man in the house" rules have also been a prominent feature of public housing and other types of welfare transfers. These rules have had the effect of producing large concentrations of households in which fathers are "around" but not living with their children. This may have the unfortunate effect of undermining fathers' roles and preventing fathers from being responsible fathers. Some states have started to abolish these policies. In Connecticut, for example, parents can receive public assistance when both parents live in the home. Moreover, the Hartford Housing Authority and the Child Support Enforcement program have joined to create a program giving nonresident fathers jobs related to the maintenance of a public housing project. These men also receive special help in resolving child support related issues. Programs such as these increase fathers' ability to contribute to their children's lives and encourages their positive involvement with them. Such efforts are expanding and must be evaluated rigorously with respect to all aspects of fathers' involvement as well as children's and families' well-being (Brenner, 1996).

Complexities of divorced families. The debates about fathers' degree of commitment and involvement with their children post-divorce are volatile and complex (Griswold, 1993; Marsiglio, forthcoming). One side of the debate focuses on the emotional crises many fathers experience because of the formal and informal impediments they must deal with as they struggle to maintain close relationships with their children after the dissolution of a romantic relationship--often marriage. For many men, the pain is real and long lasting. Despite the obvious anguish some fathers feel in this area, harsh critics of some efforts to expand nonresident fathers' rights present the other side of the debate in compelling fashion (Bertoia and Drakich, 1995). Among other points, they suggest that many fathers are less concerned about the day-to-day care of their children, the "moral labor" of parenthood, than they are in controlling their former partners. These critics warn against being duped by some men's "rhetoric of equality." As is often the case in debates such as these, there is an element of "truth" associated with each position. What must not be forgotten is that the processes that feed into this perplexing situation occur within a society that remains highly gendered.

Having alluded to the complexity of these issues, it is useful to point out that research has recently

revealed a surprising array of structural barriers to father involvement in divorced families (Arditti and Kelly, 1994; Thompson, 1994 p. 39, 11). While it was previously thought that fathers in such families remained uninvolved because they simply didn't care about their children (deadbeat dads or runaway dads), research is accumulating that suggests that this portrayal is vastly oversimplified. In many instances, government policies (state and national) combine to deny fathers a more important -- and more beneficial -- role in their children's lives.

Joint custody. One specific post-divorce policy challenge is to deal with multi-household living environments that arise out of joint legal or legal/physical custody arrangements. The advent of controversial joint custody arrangements has prompted researchers to consider how these arrangements affect post-divorce parenting; their research has produced mixed results. Interestingly, Maccoby and Mnookin's (1992) research on California families, and Seltzer's noncustodial fathers' income, did not find that joint legal custody was related to child support, visitation, and child-related decision-making (see also Fox and Kelly, 1995). However, Maccoby and Mnookin did find that joint legal/physical custody was related to positive post-divorce parenting. Some recent research also shows that joint legal custody appears to be associated with more positive forms of paternal involvement such as child support payments than with parental conflict (Seltzer, 1996). Braver's (1994) research with families in Arizona has shown that when joint custody is awarded father involvement is at very high levels. Moreover, the U.S. Census Bureau has found that 97% of joint custody fathers pay child support, as opposed to about a 2/3 rate for the population as a whole (US Bureau of Census, 1991; Braver, 1996).

Fathers without custody. While some men want and gain either joint or sole custody, some observers contend that our current court system mitigates toward disproportionate custody awards to mothers (Braver et al., 1993). Braver and his colleagues found that fathers indicate strong preferences (over 70%) for a joint legal custody award, and only a distinct minority (11%) preferred the mother to have sole legal custody. However, in 77% of these families the ultimate award was indeed for sole maternal legal custody. Warshak (1988) has made compelling data-based arguments that joint custody is in the best interests of children in many cases.

Why fathers so seldom receive the full custody or joint custody they say they would prefer is a matter of some dispute. Weitzman (1984), for example, reports that mothers believe that the fathers don't really want custody, they just raise the possibility as a threat or a bargaining chip, and relinquish their bid when they wring financial concessions. Others (Levy, 1990) argue that attorneys discourage fathers from pursuing their preferences because of a biased legal system, and usually only those with unassailable cases, such as those involving the mother's severe mental illness, persist.

Father-child visitation. Some divorced fathers without custody don't receive the legal right to visit their children and this, of course, can be viewed as a severe structural barrier. In many cases, there are clearly legitimate reasons for denying fathers access to their children (e.g., history of abuse). Although fathers are seldom denied legal visitation rights, greatly restricted rights are far more common. This is particularly true when allegations of spouse or child abuse are made. One difficult policy issue is deciding how government programs should balance the safety of mothers and children when bona fide violence is present, while at the same time not confusing an allegation with proof of abuse. While strong incentives for spurious claims of abuse clearly exist, there are few disincentives for such claims.

The most frequent visitation problem involves fathers who are legally entitled to spend time with their children, but are either completely or sporadically denied access by the mother. According to several studies (*cf* Braver et al, 1993), this occurs in between 25% and 40% of divorced families. There can be little dispute that there is minimal enforcement of visitation rights, especially in comparison to the vast

legal machinery that exists to enforce non-payment of child support. We are not proposing that a federal Office of Visitation Enforcement be created with a parallel budget. However, the imbalance in efforts to protect visitation rights vs. the enforcement of child support obligations no doubt conveys a message to fathers that the "system" doesn't care about them nor about whether they are active in their children's lives.

Pilot research is currently underway to explore the feasibility and effectiveness of visitation enforcement (Braver et al., 1993). The Dads For Life Program currently being conducted and evaluated in the Phoenix area attempts to teach divorced fathers how to be a positive force in their children's lives irrespective of the constraints a divorce may impose on their family relationships. Preliminary reports from participating fathers, mothers and children suggest the program is having profound and apparently long-lasting benefits. Perhaps the best remedy is educating mothers on how healthy father-child relationships can benefit children -- as well as the mother herself.

Mothers as gatekeepers. As the previous discussion suggests, mothers often serve as gatekeepers in divorced families (and in informal unions leading to nonmarital births). This can hamper fathers' motivation to remain involved. In the most definitive research, using a representative sample, and a longitudinal design, Braver et al. (1993) found that the factor best predicting fathers' long term involvement was the fathers' feeling "parentally enfranchised." Many fathers felt that issues related to their divorce, especially concerns about their children, were out of their control. When divorced fathers felt they shared control with the mother over child rearing issues they were less likely to feel alienated. When fathers did not feel they shared parental control, they felt as if their children were not theirs anymore. Many reported that they felt the society, the legal system, and their ex-wives had conspired to fracture their connection with their children while expecting them to fulfill their financial obligations as fathers.

Geographic relocation. A barrier of another kind is when one divorced parent moves to another geographic area. Clearly, if the child stays with the mother, fathers can not retain the same day-to-day involvement that is possible when both parents remain in the same location. This type of relocation is also associated with a significant decrease in child support payments and enforcement is far more difficult. This hotly debated area finds feminists arguing that no restrictions should be placed on mothers' (or fathers') mobility, while opponents argue that custodial parents who want to relocate and take their child should be forced to demonstrate that such a move is necessary, for either health or employment reasons. Additional research on the consequences of relocation on all involved parties is needed to inform policy in this area.

Child support enforcement. Child support enforcement is related to circumstances stemming from either divorce or a nonmarital birth. It also is a difficult public policy area because it stresses a strict financial discipline on nonresident parents who are usually fathers.

An important component of child support enforcement is paternity establishment. States are using a variety of methods to establish paternity in cases of nonmarital births as soon after the birth as possible. While this is done to maximize the ability of the state to enforce child support claims against the father, this procedure may encourage fathers to develop a stronger commitment to their children. To the extent this objective is achieved, fathers may be more involved in their children's lives.

One of the key issues associated with child support enforcement policy is the extent to which the resources of the program will be used to mediate conflicts arising over visitation. At least one state, Utah, will suspend a mother's drivers license if she refuses to cooperate in allowing visitation access. Policymakers face a major challenge in finding an optimal child support enforcement policy that

maximizes the financial commitment of nonresident fathers while ensuring that fathers have ample opportunity to spend quality time with their children.

Experience with attempts to enforce child support obligations has revealed that fathers' visitation patterns are related to child support payment, and greater contact may be related to better outcomes for children (Zill and Nord, 1996; Argys, 1996). While researchers are uncertain about the complex causal direction of these statistical associations, the apparent relationship between father-child contact and child support payments should serve as an incentive for researchers to examine these issues more carefully.

Health insurance. Health insurance for children is a major consideration for poor families. The advent of a service economy has meant that many fathers must work more than one job, many of which are without health insurance benefits. Medicaid, like AFDC welfare, has posed problems for fathers in the past because these programs were formally linked. Medicaid will not pay for any Prepared Childbirth training for fathers and this may hinder the bonding between fathers, mothers, and children in poor families which are already often very fragile. The beginning of welfare reform offers an opportunity to consider ways in which health insurance can be provided to poor families without discouraging fathers from co-residing with their children and/or being responsible fathers (Staff, 1995).

Early childhood education programs. Early childhood education programs including developmental day care, Head start, and preschool programs have largely ignored how fathers might be connected to their children in these formative years. While these early childhood programs were initially developed to assist mothers, ongoing experiments such as Early Head Start are examining ways to connect fathers to their children (Levine, Murphy, and Wilson, 1993).

Criminal justice system. Officials within the criminal justice system have taken notice that many prisoners are fathers and that there is a substantial intergenerational transmission of experience about the subculture of crime. This has stimulated a new awareness that intervention programs that help imprisoned fathers be better fathers might break the intergenerational transmission of institutionalization. Some states (e.g., Louisiana and California) are experimenting with intervention programs in the juvenile justice system and states such as California, Illinois, Arkansas, Delaware, and New Jersey are doing the same in adult corrections facilities (Staff, 1997). Policymakers are thus faced with the prospects of figuring out innovative ways of promoting styles of fathering that will break the intergenerational transmission of anti-social behavior.

Workplace barriers. The debate about how to balance work and family roles has generally focused on women, because women have traditionally taken the primary responsibility for child rearing while participating in the labor market as secondary earners; men have been considered the family breadwinner. Debates in recent years, however, have begun to incorporate discussions about the "new" father who is expected to be more involved with children (Hyde et al., 1993). For these reasons, a discussion about workplace barriers to participation in family life is important for both men and women.

Parental leave. In 1993 President Clinton signed the Family and Medical Leave Act (FMLA) that allowed parents to take up to six weeks of unpaid leave to care for a newborn or adopted child or another family member who is sick. The federal law further restricted these benefits to those working in establishments with 50 or more employees, employed for a full year, and working at least 1,250 hours during the year prior to taking the leave. Before the passage of FMLA, 11 states had similar family leave policies (Klerman and Liebowitz, 1997).

Paid parental leave in the U.S. is fairly rare. In 1993 only 3% of medium and large establishments and 1%

of small establishments offered parental leave (Blau, Ferber, and Winkler, forthcoming). Other countries have much more generous family leave provisions. For example, parents in Sweden can take up to a total of 15 months in paid leave to be shared between the mother and father.

Despite the availability of these benefits, fathers are much less likely to take parental leave, or they take leave for much shorter durations than do mothers. In the U.S. it has been estimated that fathers take about five days of leave when their child is born. The good news is that 91% of fathers took at least some leave (Hyde, Essex, and Horton, 1993). When fathers take time off from work, they are much more likely to use paid vacation or sick leave than parental leave which is most often unpaid.

The availability of parental leave in the U.S. is a fairly recent phenomenon. Comparisons with studies of parental leave in Sweden provide us with what is likely to be a "upper bound" estimate of how U.S. fathers' paternal leave tendencies might change over time. Haas and Hwang (1995) report that in 1974, the first year that parental leave was available, only 3% of Swedish fathers took parental leave. Over time that number increased gradually, and by 1994 about one-half of fathers took parental leave. Even in Sweden, however, fathers of children born in 1989 took far fewer days of leave than mothers (43 vs. 60) (Haas, 1993). Two reasons for this difference are 1) the importance and prevalence of breast feeding during the first year of a child's life, and 2) the fact that men generally earn more than women. Thus, unless income replacement is 100%, the income loss to the family is greater when men take a leave and is likely to act as a disincentive for fathers to take leave at the same rate as do mothers.

Surveys of workers and employers also find that fathers are concerned that taking parental leave will reduce their chances for promotions and raises (Hyde, Essex, and Horton, 1993). Employers state that those fears may be justified. Although women of child-bearing age have traditionally faced these same prejudices, some employers are beginning to make allowances for family responsibilities because so many women are now in the labor force. The idea of men taking paternal leave, on the other hand, is still largely viewed as unacceptable in the corporate culture (Hass and Hwang, 1993).

Jobs. The structure of jobs and workplace policies may facilitate or hinder working parents' ability to spend time with their children. The key to parental care when both parents work is flexible hours, including flextime, irregular work schedules, part-time employment, job sharing, and home based work. In addition, the parental leave policies mentioned above allow a parent to be at home full time during critical periods in a child's life without the fear of losing a job or losing seniority in that job.

Flexible hours. One measure of co-parenting fathers' involvement with their children is the frequency that they provide child care while the mother works. For married couples with children under age 15, it has been estimated that about 13% of fathers serve as the primary child care provider when the mother works outside the home (O'Connell, 1993). Most of these fathers are employed. Studies have found that fathers are more likely to provide this child care if 1) the mother works part-time or a non-standard shift or 2) the father works part-time or a non-standard shift (Casper and McConnell, 1996; Averett, Gennetian and Peters, 1997). Part-time or non-standard shift work allows parents to work at different times from each other and for each parent to provide some care while the other works. Presser (1995) estimates that 54% of men and 56% of women work a fixed day schedule, Monday through Friday only. Presser has also found that women are more likely to respond to family responsibilities by choosing non-standard work schedules. Specifically, 27% percent of women who had children under age 14 reported better child care as the reason for working a non-standard shift compared to almost 5% of men (Presser, 1995).

Part-time work. Part-time work is also more prevalent for women than for men. In 1995, 34% of

women, but only 18% of men worked part-time (Blau, Ferber, and Winkler, forthcoming). Although part-time work has the advantage of allowing parents to share child care and spend more time with the family, it also has costs in the form of lower earnings, lower pay per hour, fewer opportunities for promotion and fewer benefits such as health care and retirement savings plans.

CONSTRUCTS USED IN DATA COLLECTION

Another way we can begin to understand father involvement is to examine how survey researchers have measured this construct in large scale data sets such as the National Survey of Families and Households (NSFH), Panel Study of Income Dynamics (PSID), National Longitudinal Survey of Youth (NLSY), High School and Beyond (HSB), the National Survey of Children (NSC), and the forthcoming Adolescent Health Survey (Add Health) from the University of North Carolina Population Center. In this section of the report, we review what we found when we canvassed these and other data sets and categorized the types of measures that were included. The collection of massive data sets is an obviously expensive and time consuming undertaking. Therefore, the constructs that survive that scrutiny are deemed essential to the data collection effort. By performing an audit on some of these larger data sets we are able to determine how fatherhood issues have been measured and, therefore, what many researchers deem significant. This exercise contributes to the conversation about what information still needs to be collected about father involvement in large-scale data sets, most of which are longitudinal in nature.

Our search was guided by the categories, topics, and domains suggested earlier in this report where we discussed conceptualizations of father involvement. At the most basic level, we appraised each data set with regard to general father presence/absence issues. Next, in each of the 14 data sets, we looked for any of Palkovitz's (1997) suggested categories of involvement. Table 1 is a distillation of what was found in the data sets. Further, Tables 4 through 15 give examples drawn from particular data sets of how questions were asked in reference to an involvement category. (see Appendix J)

Data Sets. We chose data sets based on two criteria. First, we selected those which featured family-related variables (e.g., Add Health, NSFH, NSC). Second, we chose data sets if they represented an area of study for which information about fathers would seemingly be important (e.g., Baltimore Study of Unplanned Teen Pregnancy, High School and Beyond). This selection process is in no way meant to be exhaustive or even representative of secondary data sets. Instead, our purpose is to demonstrate the kind of father-related research variables that have been used to date.

Findings. We provide a short analysis of what we found when we examined father measures. First, as an historical note, recent data sets that have been collected (or are being collected, e.g., Add Health, PSID Supplement, NSFH II) have many more items that can be construed as fitting into the father involvement categories. Surprisingly, some of the more widely used data sets such as the NLSY, have very few father related variables. The HSB, for example, has practically nothing a researcher can use to consider the effect of differing levels of father involvement on school performance. Nevertheless, we conclude that many researchers are beginning to attend to father involvement issues. Of particular note is the recent extensive work done on the PSID. In the past, this survey has focused heavily on income dynamics as its name suggests. New data are being collected (1997) using this supplement and the resulting information should provide a wealth of opportunities to research father involvement issues.

Also, in the recent panel wave of the NSFH, much more attention was paid to involvement categories like *activities, emotional support, and monitoring*. In the new Add Health Survey, a specific effort has been made to assess quality and substance of communication between fathers and teen children. Additionally,

these researchers have paid careful attention to other father involvement variables like teaching, monitoring, availability, and levels of affection. Unlike several of the other data sets, the Add Health also examines in more detail the types of shared activities that fathers and children experience. Our guess is that this data set will be used extensively by researchers interested in father involvement issues.

We recognize that organizers of large data sets often include measures for the parents who are in or out of the immediate environment. Some go to great lengths to assess where that parent is and what his/her contact is with the family. However, the usual pattern is to ascertain a general dichotomous reading of family structure (i.e., is the father there or not) and then to let his absence stand as a token marker variable. Again, this deficit model of research suggests a simple two-variable linear connection that father absence leads to poorer family well-being.

None of the data sets began with the notion of examining a father involvement construct central to ongoing family processes. However, there are some data sets (e.g., Add Health, NSFH, PSID, and NSC) that have a few scattered family process variables in them. These usually reflect an effort to collect some information about monitoring, communication, or affection. Family process variables such as flexibility and distance regulation have not been assessed in these types of data collection efforts. Additionally, very few of the data sets attempt to collect information from multiple respondents within the family. Therefore, even when a family process measure happens to be included, it is usually appraised from only one person's perspective. As such, the latent family process constructs remain poorly measured and under-researched.

The new supplement to the PSID offers researchers a better look at fatherhood issues by using a diary system. The respondents are given a time diary in which they are to record time use and some interactions with family members. One challenge facing large data collection efforts is how to move away from having data about attitudes, beliefs, and perceptions that are reported from one respondent. By using video recordings, time diaries, and other observational techniques, researchers can begin to respond to the common critique that assessing marker-like variables from one person's perception tells very little about the inner dynamics of a family.

We also learn from a perusal of these data sets that only one or two items are typically used to measure a construct. For example, several data sets have some measure of monitoring. Often, however, there is only one item that could be considered a monitoring question. The richness and texture of that construct is therefore compromised. It is understandable that they are limited in this way given the expensive nature of data collection and that these collection efforts were not directly targeting fatherhood issues.

The most common categories of questions that have been covered (at least superficially) in this sampling of surveys are questions about teaching, monitoring, caregiving, availability, and affection. Also, several of the surveys focused on the negative involvement aspects of fathering and proposed some measure of conflict and harsh punishment.

We hasten to add, however, that in some cases such as measures of communication, the smattering of questions asked ranges from in-depth exchanges about sexual issues to frequency of letters received from fathers during the year. This leads to an important lesson we can gain from this exercise. There is apparently very little consensus on how these constructs are defined and operationalized from one researcher to next. The secondary data researcher who employs these data sets must make do with the items that were chosen. One outcome of this rather chaotic approach is that it is practically impossible for researchers to compare findings across data sets. Only on rare occasions (such as measures of depression) is there a consensus on how to measure an idea.

The least common father involvement categories that were measured were sharing interest, protection, emotional support, child maintenance, and other family processes. Virtually no studies have ventured into the realm of ritualization, distance regulation, and flexibility for example. Surprisingly, very few ask questions about protection which is a fathering stereotype that is almost universal. Also, it is surprising that few have asked fathers about what activities they wish to or do share with their children (NSFH is one exception on the latter point). This is particularly odd given that many researchers have characterized fathers as being notably interested in play activities.

In sum, recent data collection organizers (e.g., Add Health, PSID, NSFH) are to be applauded for including survey questions that help us better understand father involvement as a complex and intricate construct. They should also be recognized for moving away from the sterile environment of presence/absence questions. However, much work is yet needed. As more conceptual work proceeds and researchers/policymakers begin to agree on central constructs, we will need to wrestle with designing and using measures that provide the broadest picture of father involvement. Ideally, these measures should also appeal to a research community with diverse disciplinary interests.

Summary and Applications

We began this report by discussing our preference for using the term "social fatherhood" to underscore our perspective on conceptualizing fatherhood issues. Thus, we are not merely interested in men who are biological progenitors, although they clearly represent the most important group of men we consider. Being a social father involves a diverse set of ways "fathers" can be involved in their children's lives that may or may not be tied to biological paternity.

An understanding of several general issues is essential as researchers and policymakers approach the task of conceptualizing social fatherhood and paternal involvement. Our broad conceptualization of these issues is informed by four overarching themes:

First, one needs to consider *family structure* issues in light of recent sociodemographic changes in family composition.

Next, by attending to *cultural diversity* we direct our attention to divergent ethnic and cultural patterns that shape fathers' parenting experiences.

Gender, as a primary organizing principle of social life, is an important consideration at various levels when examining men's and women's social parenting roles. Gender issues continue to shape the social context for parenting as well as how males and females view and experience their parenting roles. In particular, gendered parenting exists to the extent that parents' involvement in their children's lives is affected by their use of different parenting paradigms which may include potentially different skills, interests, motivations, strategies, and resources.

The *developmental trajectories* perspective reminds us that fathers, mothers, and children have different needs, goals, and interests which they express at various points throughout their overlapping life courses.

Domains of fathering. Drawing on the thematic framework noted above, we emphasize an inclusive approach to paternal involvement that emphasizes the value of considering cognitive, affective, and behavioral ways that fathers can be involved with their children. Thus, our

conceptualization of paternal involvement incorporates far more than simply fathers' hands-on parenting experiences.

Resources. A particularly important feature of our definition of social father is an assessment of what resources he shares with the assembled family. This is not to imply that mothers are somehow deficient or cannot bring similar resources to the family. However, it is precarious to assume that resource contributions will necessarily be equal in amount or type. We suggest that in most cases there will be differences in resources (for better or worse) and that research needs to attend to resource type, amount shared, and mechanisms for transference. To understand the conceptualization of social father it is necessary to delineate these resources *vis a vis* the mother and others who may be contributing. From Coleman (1992) we learn that the resources fathers provide for their children include:

Human capital (e.g., skills, knowledge, and traits that foster achievement in U.S. society)

Financial capital (e.g., money, goods, and experiences purchased with income)

Social capital (e.g., family and community relations that benefit children's cognitive and social development)

In this report, we focus primarily on aspects of fathers' economic provider role and the contributions of social capital as expressed through coparental and father-child relationships. More research on how all three types of capital influence children's well-being is essential.

Generativity. We also suggest that conceptualizations of social fatherhood should be sensitive to the *generative fathering* perspective. Researchers are likely to make better contributions to this literature when they view fathering as an emergent process that accentuates men's personal growth vis-a-vis their children's well-being. In contrast, a deficit model suggests that the topic of fathering be approached from the position of what fathers do not do or what happens when they are absent.

Responsible fathering. A conceptualization of responsible fathering needs to recognize men *holistically as procreative beings* (Marsiglio, forthcoming). We stress the importance of recognizing the continuity of men's roles beginning with their procreative decision-making choices prior to conception, moving on to the pregnancy process itself, and culminating in fathers' involvement with their children. We therefore follow Levine and Pitt's (1995) lead who propose that the "responsible man" does not participate in the conception process until he is prepared emotionally and financially to support his child, establishes legal paternity when a child is conceived, shares in the continued emotional and physical care of his child, and shares in the continuing financial support of his child, from pregnancy onwards. Policies and/or research agendas about fathers in families will be better served when the above starting points are recognized and highlighted.

Paternal involvement. Fathers' involvement with their children includes a diverse array of potentially overlapping dimensions. Furthermore, vast individual and subcultural differences exist among persons' definitions and willingness/ability to invest in these dimensions. Men committed to being "good fathers" may perform quite differently, with the same performances sometimes being viewed as successful or unsuccessful depending on the implicit definitions held by those making the evaluations. A primary purpose of this report is to further develop an understanding of the factors that lead to positive forms of fathers' involvement with their children. Some of the essential

elements of paternal involvement include:

Nurturing and caregiving: This is an often recognized aspect of fatherhood but there is disagreement about the importance of this dimension. Its relevance and effectiveness may vary depending on the age and gender of the children.

Moral and ethical guidance: While this aspect of fatherhood is often viewed as central to what fathers should do for their children, in reality, most such guidance or socialization within the family is performed by mothers. The influence of paternal guidance may be indirectly mediated by children's identification with and imitation of their fathers, regardless of fathers' own efforts.

Emotional, practical, and psychosocial support of female partners (i.e., mothers or stepmothers of men's children): This refers to aspects of social capital derived from coparental relations. That is, when the relationship is stronger the transmission of social capital will be more likely to occur.

Economic provisioning or breadwinning: This dimension of fatherhood is probably viewed by many as the central aspect to fatherhood.

Time use. A large number of studies have examined how much time fathers spend with their children and what sorts of activities occupy that time. While there are numerous problems with father/child time use data, the extant research in this area suggests the following:

Quantifying the time involved is difficult. The anxiety, worry, and contingency planning that comprise parental responsibility often occur when the parent is ostensibly doing something else.

Problems of ***measurement inconsistency*** remain. When researchers use Lamb et al.'s (1987) three-fold typology of involvement (i.e., engagement, accessibility, and responsibility) they usually do so retrospectively using results of independent studies conducted years earlier which were never collected with those ideas in mind.

Fathers do not appear to be spending appreciably more ***time interacting*** with their children when mothers are employed; rather the proportions increase because mothers do less interacting (because they are working outside the home more). Thus, fathers are proportionately more involved when mothers are employed, even though the depth of their involvement in absolute terms, does not change to any meaningful extent.

Maternal employment has probably led to changes in the types of activities in which fathers engage and new studies may show increases in the extent of paternal responsibility.

Time diary studies have shown that the amount of time fathers spend with their children is associated with ***socioeconomic class*** (lower class fathers tend to spend more time with their children), age (fathers spend more time with younger than with older children), and gender (fathers spend more time with boys than with girls).

Researchers have recently devoted more attention to developing new ways of ***measuring involvement***. Palkovitz (1997) provides an expanded view of paternal involvement from

His conceptualization expands Lamb's earlier typology and he elaborates on a diverse set of ways fathers can be involved with their children, including economic provisioning. In addition to highlighting the behavioral domain of paternal involvement, this framework accentuates the cognitive (e.g., planning) and affective domains as well. Palkovitz also suggests that a complete conceptualization of paternal involvement needs to take into account a series of co-occurring continua (time invested, observability, salience, degree of involvement, directness, proximity, appropriateness).

Economic provider. In this report, we focus specific attention on fathers' role of economic provider because it is fundamental to most persons' definition of fatherhood, it is a critical form of paternal involvement, and it is associated with important public policy issues. Provisioning is meant to include the supplying of money for food, clothing, shelter and other consumption items. The following points were made with regard to provisioning behavior:

Economic resources matter because *economic instability* (e.g., unstable work, income loss, etc.) can lead to marital conflict which itself has negative consequences for children.

Fathers who provide more money to the family often do so at the *cost of spending less time* with their families.

Evidence suggests that mothers spend money in ways that are more *child friendly* than do fathers.

Many nonresident fathers do not pay *formal child support*. In one recent study it was reported that about half of the nonresident fathers (51%) who owed child support paid the full amount; 24% paid a partial amount, and the remaining 25% paid nothing.

A relatively new concept in the provisioning literature suggests that nonresident fathers may provide heretofore unreported support in the form of *contributions* to the mother. Indeed, one study found that fathers assumed more financial

Generally, studies find that child support has positive effects on children's *and educational attainment* that cannot be accounted for solely by the financial contribution of

act of transference is more powerful than when the same resources come from non-paternal sources.

Very little is known about the economic contributions to the household and to children of *stepfathers or male partners in cohabiting relationships*

Motivation The motivations that bear on a man's decision to be a father and to fulfill the associated roles in a responsible way appear to be shaped by cultural images of fatherhood

social circumstances, and their earlier experiences, particularly the behavior of their own parents. Some primary motivations that were mentioned were 1) the experience of caring for and raising

they are not lonely or financially vulnerable in their later years of life, and 4) to feel more connected to their extended family and/or friends. We also suggested that there is a growing thread of

research in which sociobiologists emphasize that both men and women strive to maximize the representation of their genes in future generations. Other motivations to parent were suggested as follows:

The *generativity* theme contends that some fathers are motivated to be involved with their children because such involvement is related to healthy adult development.

Some men are motivated by *recollections* of the fathering men experienced as children as well as their interpretation of other men's fathering behaviors in specific social situations.

Some are motivated by a desire to seek or *enhance a level of maturity* and receive a confirmation of social status.

A *commitment model* highlights the notion that identities are negotiated within the context of structured role relationships. As such, a key feature of motivation is that fathers' commitment to being a particular type of man, partner, and father may affect their desire to be involved with their children in particular ways.

We summarized our review of paternal involvement by noting that individual, interactional, and macro/meso level factors combine to shape fathers' motivations and opportunities to express themselves as fathers toward their children in particular ways.

The role of *motivation* in the search for a conceptualization of men's parenting role is complex and rich with research opportunity. Very little is known about why men choose to parent and how those choices vary by age, ethnic, cultural, or class background. Further, we know little about why some men are more motivated than others to magnify particular ways of involving themselves in their children's lives.

Family process. Family process informs us about how family members think, feel, and act toward each other and is measured by assessing the shared relationships of multiple family members. This level of analysis is interactional and the focus is the family group instead of individual or macro-levels. One application that helps us understand how the quality of family process operates can be found in the work of Coleman. He posited that the level of social capital available by the father that *could* be transmitted to the child can only be transferred when the quality of the dyadic relationships are of higher capacity. Such ideas have prodded family researchers to consider the inner dynamics of families and their impact on children's well-being.

There are several important family process constructs that have recently emerged as seminal descriptors of those inner dynamics, including *distance regulation, flexibility, support, supervision/monitoring, affection, communication, and ritualization*. We focused on three of these constructs to illustrate how parent interaction can facilitate children's well-being. A main point of that discussion was that very little of the family process research has explored how the parent's gender may affect these processes. Further, there is evidence to suggest that when father's and mother's contribution to the family interactional process is examined separately the differences predict in discrete ways, and tell us more about family outcomes than when research only examines the process from one parent's point of view or combines the perspectives.

Distance regulation. Distance regulation contains two primary dimensions: tolerance for individuality and the parent's tolerance for intimacy.

Effective distance regulation influences the child's ability to make a successful and effective transition to a post-adolescent status. Families with distance regulation problems (for fathers and depressive disorders, disruptive behavior and obsessive-compulsive disorders, eating disorders, and aggressive and non-aggressive attention deficit hyperactivity disorders. These patterns are also conditions. Also, the distance regulation style of the father may have a greater impact on pre-teen and teenage children than the mother's style. It has also been found that the influence of the father's problems and ease of on-time developmental transitions.

is defined as the degree to which members are able to change the power structure, relationship rules, and roles in relation to developmental and/or situational stressors. Research on two parents present. Better flexibility is linked to lower levels of destructive parent-child interaction, the absence of a juvenile offender in the home, lower reports of sexually abusive

Parental Support is defined as general support, physical affection, acceptance, or companionship, and includes the communication of warmth, affection, rapport, and feelings of being valued.

Research shows that parental support often contributes to moral internalization and conformity to parent's expectations, autonomy and self-esteem, a sense of connectedness, and if absent may lead antisocial and risk behavior. As was mentioned above, while little research has focused on fathers' role in promoting support, research has shown that adolescents become more self-directed when experience validation, and realize a sense of security. Individual autonomy can best be fostered through mutuality and support.

Future research clearly needs to spotlight fathers' roles in family processes. Researchers are beginning to move away from the assumption that men's and women's contribution to family

know very little about how each gender (within different family structure types or cultures) approaches these strategic interactional tasks.

Policy issues.

proactive, theoretically informed, and research based. Past policy directives with regard to fathering have primarily focused on punishing and/or coercing fathers when they do not support

two-pronged focus and begin to consider how to encourage fathers' positive participation in family life.

A new assumption is awaking our interest in this arena. That is, we are learning that many fathers want to be responsible and involved. However, unintended barriers created by well-meaning

to take a more proactive posture toward their family commitments. Furthermore, it is becoming clear that encouraging fathers to attend to these commitments (especially where children's welfare

is concerned) has high payoff in the long and short term. When families are stronger (accomplished in part through better and more positive father involvement) they place a smaller financial burden on local, state, and federal governments. Two trends related to fathers' experiences are particularly significant for public policy:

First, while the proportion of fathers who are interested in playing a more active role in their children's lives has been increasing, the proportion of fathers who are disengaging (or are pushed) themselves from their paternal responsibilities has also been rising (Furstenberg, 1988).

Second, there is an evolving diversity and dynamic nature to men's life course patterns and paternal roles as they find themselves in step, blended, cohabiting, and fictive families. The increased frequency of these diverse family types require men (and others) to visualize and negotiate new roles. To the extent that social policy is constructed through the lens of the traditional nuclear family model, new forms of responsible fathering by biological fathers or stepfathers are likely to be constrained.

As the above trends are considered, policymakers need to remember that the decisions about parenting are usually made within the context of an adult dyadic relationship (i.e., husband and wife). These trends have drawn observers' attention to obvious questions: How can fathers develop and sustain a relationship with their children in spite of their severed romantic ties to the mother of their children? Additionally, are men capable of rekindling a relationship with their children after it has waned? Can fathers establish relationships with their children even if they failed to do so when their children were much younger?

During divorce processes. With regard to the process of divorce, we suggested that continued positive father interaction is important to more favorable outcomes for children. Consequently, we suggested that:

Policymakers should give greater attention to policies that would provide couples with easy access to mediation during their divorce negotiations as well as subsequently when they may need to address new family situations.

Policymakers should move away from "clean break" perceptions about divorce and instead encourage new types of postdivorce relationships that are in children's best interests.

Mediation classes for parents who are applying for a divorce could enable parents to understand existing or potential coparenting issues more fully.

Mediation sessions, and other pre/post divorce intervention strategies, should encourage mothers to realize that promoting access and positive interaction between fathers and children is a worthy goal.

Programs could help fathers understand the unique features of their particular circumstances as nonresident, single, and perhaps even stepfathers.

Evaluation research is needed to assess the program features of divorce interventions, particularly ones with a two-parent focus, that are most effective in promoting responsible fathering and children's well-being following dissolution.

With regard to procreative responsibility, researchers and policymakers their children's lives, promote male responsibility with respect to future fertility, labor force participation, and community involvement. This question is particularly relevant to men who are

Mother/father difference. Another policy issue centers on father/mother differences. Do fathers differ from mothers in their family behavior during the course of a child's life? The implication is that fathers are often seen as mothers' helpers in the child's early years, but do their contributions and involvement in children's lives change as children grow up? Are there life course and developmental processes that require different levels and types of father involvement and support? Do these potential needs vary by the age and gender of children? Perhaps fathers play a poorly appreciated role during adolescents' critical transitions. If so, fathers' disengagement early in a child's life must be evaluated in terms of its impact on children that may manifest later in their lives.

Incomplete institutions. Many of the transitions families face today occur within "incomplete institutions." Our culture has changed so rapidly that the new emerging family forms have not had time to become "institutionalized." For example, in the case of remarriage, families are left to invent their own transitional procedures. There are no well-defined "standards" one can easily adapt to the new situation. As a result, individual family members must decide, with little guidance from cultural scripts, what the new parent should be called, how distance should be regulated, who should discipline and when, and how money should be transferred. Policy ideals need to be sensitive to these fundamental changes in our society and assist families as they try to adjust during these critical transitions.

Duality. Fathers also experience a duality in their role as parent. First, fathers may help protect and provide for their children while teaching them how to negotiate the difficult experiences they will encounter as they make the transition to adulthood. However, there can be a darker side to fathers' presence in their children's lives. Fathers sometimes present a danger to their families and trigger their children's self-destructive behavior. Fathers have the potential to bring about real harm when they are physically or mentally abusive, or when they induce children to leave home before they are able to sustain themselves in a risky world. Attempting to balance these sometimes competing realities is an important policymaking dilemma that should be informed by additional research.

Public policy. In this report we highlighted several proactive roles that public policy, law, and the private sector can develop to assist fathers to engage in responsible fathering.

Policymakers must be sensitive to structural changes in the U.S. economy that have disproportionately lessened economically disadvantaged fathers' ability to provide for their families relative to what mothers can provide, especially when mothers are aided by government transfer programs.

For example, "man in the house" rules need to be re-examined. These rules, which have required women to remain single in order to receive certain government benefits, have had the effect of producing large concentrations of households in which fathers are "around" but not living with their children. This may have the unfortunate effect of undermining fathers' roles and preventing fathers from being responsible fathers. Some states have started to abolish these policies.

Policymakers should re-evaluate the latent consequences of administrative rules that require fathers'

child support to be used to reimburse the government for welfare support provided to the mother and her children. These rules have helped foster a climate of underground fatherhood while making it difficult for some fathers to be more involved with their children.

In a similar vein, care needs to be exercised when developing incentive programs that prod welfare mothers to target child support enforcement actions at fathers. Such programs have sometimes discouraged fathers from developing a sense of commitment to their children.

State and federal programs can become more father-friendly by allowing nonresident fathers of children on welfare to enter the JOBS program which currently provides the mothers of these children access to job training and education opportunities.

States can be encouraged to embed specific fatherhood programs in either child support and/or maternal health programs.

Divorce and fathers. Policymakers should heighten their understanding of the complexities that characterize divorced families. The debates about fathers' degree of commitment and involvement with their children postdivorce are volatile and complex. Many fathers experience emotional crises resulting from the formal and informal impediments they must deal with as they struggle to maintain close relationships with their children after the dissolution of a romantic relationship. Yet, harsh critics of some efforts to expand nonresident fathers' rights argue that many fathers are less concerned about the day-to-day care of their children than they are in controlling their former partners. What must not be forgotten is that the processes that feed into this perplexing situation occur within a society that remains highly gendered and the welfare of millions of children are at stake.

Fathers and custody issues. While the data are mixed, the joint custody arrangements may be associated with more positive forms of parental involvement such as child support payment rather than with negative paternal behavior or parental conflict. Joint custody variations should be researched thoroughly because they are likely to increase fathers' options for crafting meaningful roles with their children (typically after divorce or in the context of a nonmarital birth).

While some men want and gain either joint or sole custody, some observers contend that our current court system continues to mitigate toward disproportionate custody awards to mothers. The processes associated with custody decision-making need to be examined carefully in light of informed research.

One difficult policy issue is deciding how government programs should take into account the safety of mothers and children when bona fide violence is present, while at the same time not confusing an allegation with proof of abuse. While strong incentives for spurious claims of abuse clearly exist, there are few disincentives for such claims. Additionally, little is known about the most frequent visitation problem which involves fathers who are legally entitled to spend time with their children, but are either completely or sporadically denied access by the mother.

Mothers as gatekeepers. As the preceding comments suggest, there is a great deal of concern about how mothers often serve as gatekeepers in divorced families and how this can hamper fathers' motivation to remain involved. Some research suggests that fathers who feel "enfranchised" are more likely to engage in long term involvement. Many fathers feel that issues related to their divorce, especially concerns about their children, are out of their control and that policies and other

legal barriers prevent them from continuing to be committed and responsible caretakers.

Geographic barriers. Some fathers (and mothers) face the prospects of a former partner taking their children and moving to another area. Clearly, if the child(ren) stays with the mother, fathers can not retain the same day-to-day involvement that is possible when both parents remain in the same location. This hotly debated area finds many feminists arguing that no restrictions should be placed on mothers' (or fathers') mobility, while opponents argue that custodial parents who want to relocate and take their child should be forced to demonstrate that such a move is necessary, for either health or employment reasons. Additional research on the consequences of relocation on all involved parties is needed to inform policy in this area.

Paternity establishment. An important component of child support enforcement is paternity establishment. States are using a variety of methods to establish paternity in hopes of maximizing the ability of the state to enforce child support claims against the father and encourage fathers to develop a stronger commitment to their children. One of the key issues associated with child support enforcement policy is the extent to which the resources of the program will be used to mediate conflicts arising over visitation, for example the suspension of drivers licenses (Utah) if the mother refuses to cooperate in allowing visitation access is being explored. Policymakers face a major challenge in finding an optimal child support enforcement policy that maximizes the financial commitment of nonresident fathers while ensuring that fathers have ample opportunity to spend quality time with their children. Experience with attempts to enforce child support obligations has revealed that fathers' visitation patterns are related to child support payment, and greater contact may be related to better outcomes for children.

Starting places. Health insurance determinations and policies about such programs as Head start were also mentioned as places where strong father/family friendly programs could be built. Additionally, there is a new awareness that intervention programs that help imprisoned fathers be better fathers might break the intergenerational transmission of institutionalization. Some states are experimenting with intervention programs in the juvenile justice system with the hopes of figuring out innovative ways of promoting styles of fathering that will break the intergenerational transmission of anti-social behavior.

Other barriers. We reiterate here the plea by many researchers and policymakers that we need to consider how policies targeted at the work place can be used to promote more positive father involvement. For example, it was mentioned that:

The balance between work and family roles has generally focused on women, because women have traditionally taken the primary responsibility for child rearing while participating in the market as secondary earners; men have been considered the family breadwinner. The "new" father is expected to increase in his caretaking role and share in that responsibility. This will mean changes in the expectations that men have for themselves at work, not to mention the expectation business has for the involved father.

In 1993 President Clinton, signed the Family and Medical Leave Act (FMLA) that allowed parents to take up to six weeks of unpaid leave to care for a newborn or adopted child or another family member who is sick. Such policies seek to eliminate workplace barriers and allow either parent to participate in child care. While this is a good beginning it should be contrasted with parents in Sweden who can take up to a total of 15 months in paid leave to be shared between the mother and father.

The advent of more flexible working hours may serve to facilitate paternal involvement. For example, one measure of fathers' involvement with their children is the frequency that they provide child care while the mother works. This may be possible when work schedules are more flexible.

A ground swell of support has emerged for researchers and policymakers to reexamine how we view children's well-being. Research agendas and policy decisions need to be sensitive to the positive ways fathers might be involved in family life. Government programs need to include ways to enhance (not limit) the ability of fathers to engage in their primary responsibilities, that of co-caring for the well-being of their children. As we learn more about fathers' potential to affect children's fragile world, it behooves us to (re)consider how to alter those barriers that preclude fathers from being involved with their children in positive ways while enhancing the necessary incentives to prod them to take up their important roles in earnest.

Recommendations

Throughout this report, we have suggested that any (re)conceptualization of father involvement should attend to several interrelated themes and contexts. As part of this discussion we have emphasized that we need to be mindful that father-child issues are:

shaped by particular structural or familial contexts,

embedded within a larger ecological context influenced by social class and race factors,

intimately related to developmental trajectories and life course considerations (with particular attention to children's experiences).

1. Our most general recommendation, then, is that researchers and policymakers interested in father involvement and children's well-being/development attend to these themes in a systematic way.

2. Researchers should continue to show how conceptual and theoretical concerns, measurement and data questions, and policymaking issues overlap and mutually inform each other. These efforts

understanding of why and how fathers are involved with their children, and contribute to their well-being and development.

3. At the outset of this report, we mentioned that there are some general ways of thinking about fatherhood from a social or legal perspective that in essence considers "father" as some type of

question: Who are fathers? Decisions about the basic definition of "father" are critical and should be examined from various disciplinary perspectives. Thus, attention should be given to developing

conceptions of fatherhood throughout the life course (pre-birth through grandparenting). As researchers we should be interested in how individuals, subcultural groups, interest groups, the

4. Following from #3, researchers and policymakers should attempt to understand individuals'

perceptions of the varied meanings associated with biological and social fatherhood and the consequences of these perceptions. Under what circumstances does biological paternity entitle men to certain rights or elicit certain obligations? What should those rights and obligations be as defined by the various stakeholders?

5. In addition, we need to explore how individuals distinguish between fathers' investments or perceptions of their status as father versus their views and involvement in the process of fathering. As researchers we need to be clear on these two different meanings associated with fatherhood. These distinctions are related to disciplinary perspectives and ideological views to some extent, but they also play themselves out in the way individuals think, feel, and act when they're "doing fatherhood" or interpreting others as they're "doing fatherhood."

6. In addition to looking at fatherhood as a social or legal status, research and social policy needs to focus on fathering as a process. We also need to develop a better understanding of individuals' motivations for fathering that takes into account individuals' views (and their commitment to others' views) of different ways to be involved.

7. More attention should be given to the specific context and family-related processes that either facilitate or impede specific expressions of fathering, and shape children's well-being and development. While there have been some attempts to collect data about these important facets of family life, data are rarely collected from multiple perspectives and almost never focus on the inner dynamics of family life. Research and policymaking should take a cue from the emerging dialogue about generative fathering and positive paternal involvement. Thus, future research needs to continue to move beyond the deficit model approach where fathers' influence is assessed in terms of absence and/or negative involvement. There is a serious need for greater understanding of how fatherhood is negotiated, directly or indirectly by various parties (mothers and children in particular, and grandparents in nonmarital birth to young persons). Focusing on mothers/partners' roles as gate-keepers is an essential element to this effort.

8. Researchers should strive to develop a more systematic and richer portrait of how men, women, and children (from different class and race) backgrounds view aspects of fatherhood. This would clarify the cultural norms associated with fatherhood. Researchers have only begun to identify this portrait and still know very little about such obvious aspects of the parenting role as protecting and breadwinning.

More specifically:

We need to explore what being a biological and/or social father means to men, prior to conception, during pregnancy, and during the child's life.

What do each of these ways of distinguishing fathers mean for fathers, mothers, and children?

What are individuals' (fathers, mothers, and children) views of "good" fathering and how are they conditioned by individual, interpersonal, and more macro or cultural level factors?

How do these interpretations affect how fathers are involved in children's lives? How are these meanings affected by children's developmental stage, children's personality, children's gender, family structure situation, perceptions about the value of particular ways fathers might be or are involved, interpersonal ties and negotiations with the mother of the children?

Recommendations Focusing on Data Collection and Policymakers

involvement is best done in an interdisciplinary context. For example, those who worked on this report and committee brought diverse interests and disciplines as we focused on the many different

minimum, demonstrate a sensitivity to the research community comprised of family social demographers, developmental psychologists, family relations and human developmentalists, social

2. Research and funding communities need to increase their efforts to improve large scale data

the federal and foundation-based funding agencies initiate a data collection effort in which men's/father's issues are the theme rather than an afterthought.

3. Additionally, we recommend that funding agencies promote smaller scale studies that feature fatherhood topics. The series of NICHD sponsored conferences on fathering during 1996-97 have

understand the process of parent-child interaction. Indeed, there are many important topics which simply cannot be approached with larger data efforts.

4. By necessity, research and funding agencies should focus a great deal of our limited resources on studying the processes associated with key transitions that affect fathering. At the same time,

potentially useful in some ways when it comes to stable well-functioning families, is largely not as relevant during these stable times. To the extent possible, we should explore the interpersonal

lives in stable households.

involvement and its expression during *crisis or transitional periods*

nonmarital births, divorce and custody issues, men making the transition into or out of prison, the competing demands associated with work and family transitions when children are infants, and job

Footnotes

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Figure 1. Ways to Be Involved in Parenting (Adapted from Palkovitz, 1997)

<i>Communication</i>	<i>Thought Processes</i>	
Listening	Worrying	Picnicking
Talking	Planning	Movie going
Writing notes	Dreaming	Parks

Making Scrapbook	Hoping	Eating meals
Calling on phone when away	Evaluating	Playing together
Expressing love	Praying for child	Building forts
Expressing concerns	"Being there"	Celebrating holiday
Expressing concerns	<i>Errands</i>	Working together
Expressing forgiveness	Driving	Dancing together
Expressing valuing	Picking up items	Chaperoning events
Showing genuine interest in day, friends, interest, feelings, thoughts, aspirations, etc.	Making calls for	<i>Providing</i>
<i>Teaching</i>	<i>Caregiving</i>	Financing
Advising	Feeding	Housing
Role modeling	Bathing	Clothing
Problem solving	Clothing	Food
Disciplining	Reaching things for children	Medical Care
Commenting on child's or parent's progress	Caring for sick child	Education
Teaching spiritual development, praying together, etc.	Tucking into bed	Safe transportation
Fostering independence	<i>Child-Related Maintenance</i>	Needed documents, certificates, social security
Providing long-term perspective	Cleaning	Help in finding a place to live
Giving choices and respecting selections made	Repairing	Furnishings
Assisting in gaining new skills (teach to ride bike, swim, drive, balance checkbook)	Laundering	Developmentally appropriate toys or equipment
Scolding	Ironing	Extracurricular activities
Giving chores	Cooking	Alternative care
	<i>Shared Interests</i>	Insurance
	Developing expertise	<i>Affection</i>
	Providing for instruction	Loving

Teaching about own and other cultures	Reading together	Hugging
answering questions	<i>Availability</i>	Kissing
Encouraging interests, hobbies	Attending events	Cuddling
Doing taxes	Leading activities (scouting, PTA, etc.)	Tickling
<i>Monitoring</i>	Spending time together	Making eye contact
Friendships	Allowing/encouraging child to enter into leisure activities	Smiling
Dating partners	Baking cookies for child's activities	Genuine friendship
Safety	<i>Planning</i>	Showing patience
Whereabouts	Birthdays	Praising
Health	Vacations	<i>Protection</i>
Grooming	Education	Arranging environment
Schoolwork	Holidays	Monitoring safety
Checking on sleeping child	Saving for future	Providing bike helmets, jackets, etc.
Going to parent/teacher conferences	Scheduling time with friends	<i>Supporting Emotions</i>
Overseeing TV or movie watching and music listening to	<i>Shared Activities</i>	Encouraging
Rides to and from places	Exercising	Developing interests
	Shopping	

Figure 2. An Expanded Conceptualization of Parent Involvement (Adapted from Palkovitz, 1997)

Panel A: Domains Of Involvement	<i>Definition/Examples</i>
<i>Domain</i>	
COGNITIVE:	Reasoning, planning, evaluating, monitoring
AFFECTIVE:	Emotions, feeling, affection
BEHAVIORAL:	Overtly observable manifestations of involvement, such as feeding, talking to, teaching, etc.
Panel B: Simultaneously Occurring Continua	<i>Range</i>

<i>Dimension</i>	
TIME INVESTED:	Inappropriate-highly appropriate
DEGREE OF INVOLVEMENT:	None, low, moderate, high
OBSERVABILITY:	Covert-overt
SALIENCE OF INVOLVEMENT:	Low-high
DIRECTNESS:	Direct-indirect
PROXIMITY:	Far away-in same room/proximity-touching
Panel C: Factors Moderating Involvement	<i>Description</i>
<i>Factor</i>	
INDIVIDUAL/PERSONALITY:	Personal Psychological well-being
INTERACTIONAL CONTEXT/PROCESS:	Subjective experience/evaluation
MESO-MACRO CONTEXTS:	Motivation
	Priorities/Commitments
	Developmental/Life Course Trajectories
	Family process
	Gatekeeping
	Interaction with other men/friends
	Child Custody Policies
	Welfare Reform
	Father Related Policies
	Public Policy and Business Practices
	Socio-Cultural Factors (e.g., norms about stepfathers)
	Public Policy
	Law
	Business Practice
	Cultural Ideologies

1. 1. We use the phrases "father involvement" and "paternal involvement" interchangeably to capture the wide range of things fathers do with or for their children. Blankenhorn (drawing on a conservative ideological stance) and Popenoe (relying on the tenets of evolutionary psychology) are likely to take issue with this trend. Blankenhorn in particular suggest that it is folly to think that persons other than biological fathers can replace all of the contributions men and uniquely capable of making to their genetic offspring.
2. 2. Given our recognition of the major social policy issues affecting children in our society, and the limited scope of our report, we focus on fathers' involvement as it relates to minor children. We believe, however, that many of the issues we address are likely to have long-term implications for children once they become adults. Moreover, many of the issues central to our report are directly relevant to those young adults who have not yet become financially self-sufficient.
3. 3. While our report focuses on questions dealing with fathers specifically, we should be mindful that these questions are relevant to the more general public discourses about the definition and meaning of family life in industrialized societies today (see Beutler, Burr, Bahr, and Herrin, 1989; Delaisi de Parseval and Hurstel, 1987; Edwards, 1989; Griswold, 1993; Jurich, 1989; Menaghan, 1989; Scanzoni and Marsiglio, 1993; Scanzoni, Polonko, Teachman and Thompson, 1989).
4. 4. See Blankenhorn (1995) and Popenoe (1996) for notable exceptions to this trend. They both emphasize the biological relationship as the only legitimate way to conceptualize fatherhood. Each also suggests that it is folly to think that persons other than biological fathers can replace all of the contributions men are uniquely capable of making to their genetic offspring. These views are often buttressed by an appeal to a religious fundamentalist doctrine.
5. 5. See Fox and Bruce (1996) and Marsiglio (forthcoming) for discussions about how symbolic interactionists theorize the interpersonal processes that foster or hinder men's opportunities to develop a sense of having a "father-like" identity.
6. 6. Some psychoanalytically inclined theorists with interests in object relations theory and self psychology have recently emphasized the need to explore unconventional and controversial innate variables such as "father presence" (see Krampe and Fairweather, 1993).
7. 7. The NICHD working group "Male Fertility and Family Formation/Dissolution" address some issues related to this area.
8. 8. See Nock (forthcoming) for an alternative perspective.
9. 9. The evidence presented in this research does not allow us to determine whether the spending on a higher quality home environment (e.g., a good neighborhood and school system, higher quality child care, or cognitively stimulating toys and books) itself causes better outcomes, or whether that spending is, instead, only a marker for parents who value cognitive success and who spend time nurturing their children's cognitive abilities.
10. 10. The data cited here are reports from custodial mothers. Several studies (Peters and Argys, 1996; Seltzer, 1996; and Smock and Manning, 1996) show that fathers generally report paying more than mothers report receiving.

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CHAPTER FIVE

METHODOLOGICAL ISSUES IN IMPROVING DATA ON FATHERS

Chapter 5: Report of the Working Group on the Methodology of Studying Fathers

Andrew Cherlin, Ph.D. (Co-chair)

Jeanne Griffith, Ph.D. (Co-chair)

Introduction

The well-known changes in American families over the past few decades have greatly increased the percentage of children who do not reside with their fathers. In 1970, 85 percent of all children under 18 were living with both their parents, whereas by 1995, only 69 percent were doing so. Another 23 percent of children lived with their mother only, 4 percent with their father only, and 4 percent lived with neither parent (U.S. Bureau of the Census, Department of Commerce).

As the composition of families has changed, much attention has focused on the roles of absent fathers in their children's lives. At first the focus was on the economic contributions of these fathers. In recent years, public concern has been wide-ranging, encompassing the psychological, social, educational, and health consequences of absent fathers. Moreover, as men's family roles have changed, the family and fertility behavior of all fathers, present as well as absent, has become of greater interest to researchers. Yet social scientific evidence on the process of becoming a father and on what fathers do is limited.

In addition, as parenthood has become decoupled from marriage, the reproductive careers of men have become more distinct from the reproductive careers of women. Men's sexual activities encompass a greater number of partners over the life course than was the case a few decades ago. Because of the increases in divorce and childbearing outside of marriage, men are more likely to have had children by two or more women than was the case a generation or two ago. The rise of cohabitation has led to informal partnerships that are sometimes of short duration.

To be sure, these trends have affected women similarly. But for a number of reasons, men's reproductive careers have the potential to be more complex than women's. Men are not limited by pregnancy and they typically do not provide primary care for young children; moreover, their rates of remarriage after divorce are higher than women's (Cherlin, 1992). Consequently, they report more sexual partners than do women, (Laumann, Gagnon, Michael, and Michaels, 1994) and they are more likely to produce children with multiple partners than are women. Since they are not likely to be living with children from previous unions, they may underreport the existence of those children. It is, therefore, a greater challenge to obtain complete information about sexual, reproductive, and union histories of men than of women.

What is more, we know much less about becoming and being a father than we do about becoming and being a mother. Since 1955, American demographers have fielded a series of surveys of the fertility of women. In 1973, the Federal government took over responsibility for the series, which it entitled the National Survey of Family Growth. It comprises a complex and sophisticated survey of women of childbearing age. Recent waves have asked about the men in the women's lives. But it does not include interviews with men.

In fact, the overwhelming majority of social scientific studies of children's family lives have focused on mothers rather than fathers, even when the fathers were present in the home. Perhaps the fundamental

methodological problem that we face in studying fathers is that the household survey, the basic data gathering tool for demographic and behavioral science research on the family, the labor force, and fertility, was designed based on assumptions that no longer hold. When the standard household survey was being developed at mid-century, it was reasonable to assume that a family lived in just one household. The divorce rate and the percentage of births outside of marriage were far lower than they are as we approach the twenty-first century. Thus, it was reasonable to assume that complete and accurate information about a family unit could be obtained from a single household.

However, social change has undermined this assumption. Increasingly, families extend across the boundaries of households, so that the standard survey, focused on the members of one household, is no longer a sufficient method for obtaining complete and accurate information about family relationships. It is obvious that the standard household survey is deficient in providing complete and accurate information about non-resident fathers. It is less obvious but still true that the standard survey--focused as it is on mothers and children in the household--is deficient in providing a complete sexual, reproductive, and union history of men in the household.

As a result, best-practice studies of fathers and families have already moved beyond the standard survey practices of mid-century. Currently, a number of methodological innovations in survey research are being developed and tested. We will describe many of these below. This line of methodological research is still new, and much more work is needed. We applaud this line of research and call for its expansion.

Survey-based studies, however, are inherently limited in the kind of information they can provide. Surveys are best used as hypothesis-testing mechanisms after a general understanding of a topic has been obtained. But when little is known about the behavior of interest, as is the case with father-child relations, surveys cannot provide a full picture. Rather, more intensive studies are necessary as hypothesis-generating mechanisms. These studies include the intensive observation that developmental psychologists specialize in and ethnographic studies of the kind practiced in anthropology and sociology. We endorse further use of these methods also.

Other Working Groups at the Fatherhood Conference being sponsored by the National Institute for Child Health and Human Development will address the substantive issues concerning fathers in considerable detail. Underlying these substantive questions are important methodological issues that must be addressed before we can have confidence in data to be collected on fathering and fatherhood. The Working Group on the Methodology of Studying Fathers was established to address these issues, in consultation with other working groups.

The organization of this paper is as follows. Section 1 reviews current studies that provide some information about fathers or that have interesting methodological approaches that yield insights into improving data on fathers. Section 2 comprises a lengthy examination of a number of methodological issues that are related to the quality and characteristics of data on fathers. Section 3 examines the issue of how new data collection should be undertaken. Section 4 presents our recommendations.

Current Activities

Before discussing current methodological issues, let us briefly summarize some of the major national surveys with protocols that are of methodological interest. While the debate evolves in the statistical and research communities as to what information is needed and how it needs to be collected, important initiatives are being made in both publicly and privately sponsored surveys. A brief overview of major activities and studies that are currently the primary sources of information on fathers serves to inform the

discussion about further advances that may be required.

Studies of Methodological Interest (listed alphabetically):

Add Health. Add Health, a national longitudinal study of adolescent health, is a comprehensive study of the health and health behaviors of adolescents that has been uniquely designed to measure the contextual factors that influence these outcomes. Outcomes to be examined include behaviors related to fertility as well as a broad range of other health-related behaviors and outcomes; antecedents include measures of adolescents' relationships with their resident and nonresident fathers. The study features a longitudinal, multi-level design with independent measurement at the individual, family, peer group, school, and community levels; further, the study is designed to provide information from both partners to romantic relationships in a substantial number of cases. The basic sample is drawn from a stratified probability sample of 80 high schools and 80 feeder schools (middle or junior high schools) nationwide. Information on peer networks, nonsensitive health behaviors, and school climate is collected in the schools from all students attending grades 7-12. Subsequent interviews are conducted in individuals' homes with a subsample of 20,000 adolescents drawn from the school rosters and with a parent of each adolescent. Adolescents are re-interviewed after one year. All adolescent interviews are conducted with a laptop computer, with sensitive portions of the interview self-administered via audio-CASI.

Early Childhood Longitudinal Study (ECLS). The ECLS will be a national, longitudinal cohort of kindergartners in fall 1998, to be followed once or twice a year through at least fifth grade. The study is sponsored by the National Center for Education Statistics. The household roster will obtain some information about persons who have lived with the child at some point in the past for four months or more. Detailed interviews will be conducted with the child, the mother, teachers, and school administrators over the life of the study. There are no current plans to interview the fathers or to seek to find absent parents and interview them.

National Adult Literacy Study (NALS). NALS, sponsored by the National Center for Education Statistics and conducted in 1992, is one of the few national sample surveys that combined a household sample of the noninstitutionalized population with a national sample of inmates in state or federal prisons. Nearly 1,150 inmates in 80 federal and state prisons were interviewed and tested for their literacy skills. These respondents were included in both a separate data set and in national population estimates. This proved an effective strategy for providing a more comprehensive look at the literacy skills of a larger segment of the population. The inclusion of inmates may help to address undercoverage in surveys of fathers.

National Household Education Survey (NHES). The NHES is a random-digit-dial telephone survey that uses computer-assisted telephone interviewing technology to collect data on high priority topics that cannot be addressed adequately through school- or institutional-based surveys. The 1996 NHES included a parent involvement component that asked the parents/guardians of 16,910 kindergartners through 12th graders questions about mothers' and fathers' involvement in their children's schools. The survey also asked about children's contact with nonresident fathers and about the involvement of these fathers in their children's schooling. Responses were provided by the resident parent, usually the mother. The sample included 5,440 children who had a nonresident father.

National Longitudinal Survey of Youth, 1997 (NLSY97). The NLSY97 will attempt to roster all people living in the residence of the sample youth as well as relatives who live outside of the household including biological, adoptive, and step-parents; full, half, and step siblings; non-resident children of parents in the household, and the other parent of any such children. Information solicited about these people will

depend on the relationship of the sample youth to the person. While address information will be obtained when possible for absent parents, there are currently no firm plans for follow-up with absent parents. The survey will include a parent interview in the initial year, and could have additional parent surveys in later years.

National Survey of Adolescent Males. Since 1988, three waves of this study have interviewed young men about their sexual, contraceptive, and HIV-prevention behaviors. In addition to making substantial contributions to information and research on male fertility-related behaviors, this study has made two particular methodological contributions. First, it has demonstrated the feasibility of interviewing young men on these topics by obtaining good levels of response in both initial and followup interviews. Second, it has conducted an experimental assessment of audio-CASI methods for obtaining self-reports of sensitive behaviors. Initial findings indicate that audio-CASI methods increase self-reports of same-sex sexual behavior significantly over paper-and-pencil self-report methods. The most recent round of this study, conducted in 1995, included followup with the original panel interviewed in 1988 and 1991, as well as interviews with a new nationally representative sample of 1729 males age 15-19.

National Survey of Families and Households (NSFH). The NSFH is a national longitudinal survey addressing a broad range of topics related to family life. The first two rounds were conducted in 1987-88 and 1992-94. Within each of approximately 13,000 households, a primary respondent was selected and interviewed. The same interview was administered regardless of the respondent's gender. Much of the interview focused on children and parenting. Some couple data was obtained. Questions about the first husband/wife included whether he/she had been married before and/or had children at the time of the union. Union and birth transitions between waves is quite detailed, but there is limited information on nonresident unions. Both waves include a full range of relationship indicators for resident unions. Attitudes toward union formation and dissolution (both normative and personal) are included. Dating, sexual experience, and early family formation events are available for older focal children (age 13-18 in 1988, 18-23 in 1993), and the next younger group of focal children provide information on dating and sexual experience at the second wave.

National Survey of Family Growth (NSFG). The NSFG is a periodic survey of U.S. women ages 15-44 that has been conducted by the National Center for Health Statistics about every 5 or 6 years since 1973. The most recent cycle was conducted in 1995, and a public use data file has been released. The survey used innovative data collection techniques, including audio computer assisted self-interviewing (ACASI) to obtain detailed information about the respondent's life. The NSFG also asked about the men in the respondent's life. The methodological importance of this study is, in part, that it found that both incentives and the ACASI technique increased reporting of sensitive events and behaviors (e.g. abortions). In this application, the incentives promoted higher response rates and more than paid for themselves, evidently by creating a reciprocation between the respondent and the survey administrator. In addition, test interviews and expert analyses in the NCHS Questionnaire Design Research Laboratory and by Research Triangle Institute, the survey contractor, were instrumental in developing the NSFG life history calendar and procedures, as well as resolving many other questionnaire issues (Peterson and Schechter, 1995).

National Survey of Men. Although this 1991 study of sexual behavior and condom use among 20-39 year old men in the United States did not have a strong focus on fertility issues, it provides rare data on adult males' reproductive behaviors and sexual relationships. Thus, for up to 8 non-marital relationships that lasted 30 days or more since January 1990, the study collected information on pregnancies that occurred within each relationship, and the planning status and outcome of each (up to 3). It also collected information about the partners' demographic characteristics, and about sexual and contraceptive behavior

in the relationship. The study cast a wide net in looking at relationships, including nonsexual relationships, nonmarital sexual relationships, and marriages and cohabitations. Some studies are underway using these data, and they may provide a valuable resource for understanding links between relationship characteristics and fertility risk. These data are unique because they focus on an older population of men that has received insufficient study in the past.

Panel Study of Income Dynamics (PSID). The PSID is a longitudinal study following an initial cohort of 5,000 families and their offspring since 1968. In 1997, the PSID will administer a Parent-Child Supplement, to include approximately 3,200 children under age 12. Respondents will include up to two children from about 1900 households, the primary caregiver of each child (e.g., biological, adoptive, step, or foster mother), the other caregiver of each child (e.g., the spouse of the primary caregiver or grandmother of the child), absent fathers, elementary or middle school teachers, preschool or day care teachers, in-home day care provide's, elementary or middle school administrators, and preschool or day care center administrators. Priority rules have been developed for defining order of inclusion in each of these categories. The different respondents will provide information through assessments, time diaries, and questionnaire booklets about the child and the household. If the biological father lives outside the household, the PSID will attempt to interview him, although it is not yet clear how difficult it will be to locate the absent fathers. In any case, the sample of absent fathers is likely to be small. The primary caregiver is also to be asked a battery of questions about the child's involvement with the absent father, so some data will be available from this perspective.

Survey of Income and Program Participation (SIPP). SIPP is a longitudinal household panel study conducted by the Bureau of the Census, with short- and long-term longitudinal components. It includes modules on child well-being, child care, child support, as well as information on income contributions and reciprocity within the household and both to and from non-household members.

Surveys Conducted by the Bureau of Justice Statistics (BJS). BJS sponsors numerous surveys of inmates in jails, prisons, halfway houses, or probation agencies. Surveys such as the Survey of Adults on Probation (SAP), the Survey of Inmates in State Correctional Facilities (SISCF), the Survey of Inmates in Federal Correctional Facilities (SIFCF), and the Survey of Inmates in Local Jails (SILJ) generally achieve high response rates (with the exception of the SAP). Although most of the content is focused on criminal justice issues, survey items also include basic demographics, parental characteristics, questions about alcohol and drug use, and similar topics. More than ninety percent of inmates are male, and the great majority of these men are fathers. Questions about father involvement ask about the children's living situation before incarceration and currently, contact with children, and sources of economic support.

Methodological Issues

This section provides a review of several methodological issues related to gathering information on fathers and fatherhood. These issues have differential impact on studies of varying design, and so they are not insurmountable or uniformly challenging in all the studies that may be recommended for examining fathering. The methodological issues are loosely clustered into three groups: population identification, data collection procedures, and study designs. The impact of these issues for different types of studies is explored in more detail in the following section.

Population Identification:

Undercount. Fathers who are not located or are not included in the survey process at all are undercounted in large scale sample surveys. This includes the traditional undercount by the Decennial

Census that affects the coverage of the sampling frame. Undercount rates are higher for men than for women, and for minorities than for whites and Asians. The undercount varies by age and race combined, ranging from 7 to 17 percent for black men. It is also related to household structure and relationships. Undercount rates are higher for unrelated persons, such as roomers, roommates, and men who are not married to the household respondent. It also appears to be greater for never-married fathers than for previously -married fathers. In addition, men in the military, prisons, jails, or other institutions are typically excluded from household surveys.

One promising technique for reducing the undercount in household surveys is to use expanded rosters with multiple probes. For example, the Census Bureau undertook an experimental "Living Situation Survey" in 1993 (Sweet, 1994) in which it oversampled minorities and renters, two sources of the undercount of fathers. The household roster section included a battery of roster probes. The first question was, "Who stayed here last night?" Another 3 percent of usual residents were elicited by the question, "Who lives here but didn't stay here last night?" For occasional rather than usual residents, a useful probe was, "Since [reference date], who lived or stayed here for one or more nights?" The survey identified an average of 1 additional person per household, and the gains were particularly large for black and Hispanic males age 18 to 29. Cantor and Edwards (1992) also used a similar list in experimental rosters trying to reduce within-household undercoverage in SIPP. (see Appendix L)

Other studies are planning dual rosters. As noted, the NLSY97 will include a household roster and a second roster of relevant individuals who live elsewhere, such as non-custodial parents, non-resident children, and so forth.

In future studies, it might be useful to develop a typology of living arrangements. Not only would this help with the creation of a list of terms and probes, but it also would move survey researchers beyond thinking in terms of traditional families. Work by anthropologists, such as Ruth McKay (McKay, 1993), would be useful here (Martin and de la Puente, 1993). Particularly important would be estimating the proportion of households falling into each category. This information would help in designing samples. Not requiring full names on rosters might improve coverage (Kearny, Tourangeau, Shapiro, and Ernst, 1993). Another technique which could be used in a limited way is network analysis. It is a useful way to explore extended families and/or complicated living or economic dependency arrangements (Knoke and Kuklinski, 1982). Unobtrusive observations of living patterns also might be useful.

The use of administrative records will help reduce not only undercoverage but also undercounting. Household members not identified by respondents can be found through these records. Absent family members, especially those institutionalized or homeless, also could be identified. Matches to Census records, already being done by Census and BLS, may be another way of estimating the number and types of people missed in our surveys. This will provide some estimate of the magnitude of the problem relative to the population as a whole (Couper and Singer, 1996). Different administrative lists can be used in conjunction with area frames in constructing multiple frame designs (Groves, 1989).

Unit nonresponse, especially in cross-sectional surveys, can result in both undercoverage and undercounting. The number and characteristics of household members, including absent parents and children, will not be known. To the extent these households are not missing at random, estimates of counts will suffer.

The interviewer's role in undercoverage and undercounting should be addressed. Vacancy checks could be conducted not only to find missing households, but also to evaluate interviewer reports (Clark, Kennedy, and Wysocki, 1993). The eligibility rates (both in terms of households and persons) obtained by

individual interviewers could be compared to one another or to historical estimates. Techniques for persuading reluctant households should be explored, including ways for interviewers to introduce themselves and the survey to respondents (Groves, 1989). If the interviewer is effective at representing himself or herself and the survey, it will go a long way toward reducing the suspicions or concerns of reluctant respondents. In addition, the effects of type of nonresponse, noncontact versus refusal, need more study (Groves, Cialdini, and Cooper, 1992).

One way to reduce the effects of undercoverage and undercounting is weighting adjustment; however, this assumes a model which is not sensitive to nonignorable nonresponse (Raghunathan, Groves, and Couper, 1996). Not only do these models incorporate demographic information based on geography, but they also take into account the type of nonresponse. This work and other work being done jointly by Census and BLS also consider another area for research-- the effects of different patterns of longitudinal nonresponse.

Underreporting. Absent male parents tend to underreport their parental status to a large extent even though they are included in the survey interviews. In one survey, the National Survey of Families and Households, this accounts for more than half of the missing fathers (McLanahan and Garfinkel, 1996). Disparities between the number of women with previously-disrupted marriages who have children from those marriages at home and the number of men with previously-disrupted marriages with children living elsewhere are often great (Cherlin, Griffith, and McCarthy, 1980). Some studies have found the shortage of non-resident fathers to be largely confined to African Americans, though the factors contributing to this shortage include institutionalization (27 percent), undercount (53 percent), and underreporting (20 percent) (Sorensen, 1996). Beyond underreporting of fatherhood itself, there is also an issue of misreporting child support payments. In unmatched samples, it appears that fathers are much more likely to report giving child support than mothers are to report receiving it (Seltzer and Brandreth, 1994). But in matched samples, when both parents knew the sample was matched, reports were sometimes similar, but not always so (Braver, Fitzpatrick and Bay, 1991; Braver, Wolchik, Sandler, Fogas, and Zvertina, 1991; Smock and Manning, 1996; Sonenstein and Calhoun, 1990). In most surveys, the percentage of non-resident fathers who report providing support is substantially greater than the percentage of resident parents who report receiving it. The extent to which the undercount of adult males interacts with this problem is not known; some researchers presume that fathers who are included in studies are more likely to be paying support, leading to an overstatement of the frequency of providing support. (see Appendix K)

Underreporting of children and of other sensitive behavior may be reduced through technological advances in survey research. For example, the ACASI technology mentioned earlier has boosted reports of abortion in tests of women conducted by the National Center for Health Statistics; and so did paying a modest incentive (Mosher, Pratt, and Duffer, 1994). The ACASI interview involves giving the respondent the interviewer's laptop and a set of earphones. The respondent hears questions on the earphones which also appear on the screen. She or he then answers the questions by pressing a key on the laptop, so that the interviewer cannot hear or see what she is doing. In a pretest in 1993, 14 percent of women who received neither a payment nor the ACASI interview reported an abortion. Twenty-two percent of those who received a \$20 payment but no ACASI reported an abortion. Twenty percent of those who received the 10 minute ACASI interview but no payment reported an abortion. And 30 percent of those who received both the \$20 payment and the ACASI interview reported an abortion. Technology such as this should be tested and developed further for men.

Changing Family Structures. To date, most large scale sample surveys have reflected more traditional family models with parents living in marital situations within the same households or parents living singly.

It has been less common for surveys to take into account multiple family forms, including cohabiting, unmarried couples; single parent families with nonresident, never-married fathers; families with other relatives playing important parenting roles in children's lives; and families with extended networks beyond households. During the life cycle of a family, the family type may well change with important consequences for the children. Current means of collecting information on family structure and relationships between family members, fathers outside households, and family networks are inadequate to help researchers and policymakers understand the complexity of fathering roles as they have evolved.

In multi-family households, CAPI methodology allows for creating spinoff cases with new family rosters, and this is now used in CPS. The same technique is available in CATI (Tucker, Casady, and Lepowski, 1991), although it can be more cumbersome. Spinoff cases could be created for parents or children not living in the household. These people would be linked to the household by special relationship codes in the original roster. Spinoff cases might also be used in longitudinal surveys to follow movers, similar to what is being done in SIPP.

Research to develop or improve any of these procedures will require large and/or targeted samples. Either census block or tract data might be used, but a more efficient method would be administrative records. The use of administrative records, however, raises issues of confidentiality and privacy.

Sampling Strategies. Although research on fathers and fatherhood should focus on all fathers, researchers and policy makers are interested as well in subsets of fathers. Frequently interest is focused on men who are relatively rare in the population, even though they are of increasing interest and may even be increasingly common. This would include, as examples, absent fathers in different subpopulations (e.g., by race or by age of children), fathers in different employment statuses, or stepfathers. They may be "rare" because they are a small percentage of fathers, or because fathers may exist in a particular status for only a relatively short time in their own or in the lifetime of their family. Problems of adequate sample size are exacerbated in analyses that need to cross-classify by race/ethnicity, socioeconomic status, age and gender of the child, or various configurations of families. Sampling strategies that sample children or sample parents, and that include institutionalized populations have different strengths and weaknesses. If children are sampled directly, coverage of children should be improved with concomitant reductions in coverage bias. Since most children live in households, there is nearly always an adult who can report on the child's contact with present and absent parents. Even proxy reports would provide at least minimal information. However, sampling parents may lead to higher rates of successfully locating and interviewing absent fathers directly, without relying on obtaining locating information in the child's household. Direct interviews with absent fathers could reduce bias in reports of certain types of information, although it is not yet fully established what types of information are most subject to such biases. Combined sampling approaches may hold the most promise for in-depth studies of parenting, although the ramifications of these for study design have not yet been fully explored.

One of the basic problems is the large sample size needed to arrive at an eligible sample which can provide enough statistical power. Either this will require money or the ability to piggyback on other research or find other cost effective approaches. In the case of a large, dedicated sample, mode of administration will be an issue, and it is unlikely that a personal visit will be practical. A telephone survey will not include those without telephones, unless a dual-frame design is used (Groves and Lepkowski, 1985). A mail survey would be difficult to administer, and the response rate would be low. Research which investigates the cost and error implications of the choice of mode would be useful (Groves, 1989). More efficient telephone sample designs have been developed in recent years which take advantage of list-assisted methods and matching to census public use files and administrative records, and these should be explored (Mohadjer, 1988). These new designs would be particularly useful for the targeting of

specific subpopulations to reduce the cost of screening for eligibility.

The alternative of using ongoing surveys also may be attractive. Since these surveys vary according to mode and sample design, they could be used for different purposes. The new NLSY design will screen households for children and identify not only present but also absent parents. The National Immunization Survey has hundreds of thousands of screened numbers with some information about the households found. Many of these households have not been burdened with long surveys (Abt Associates, Inc., 1994). It is possible that a CPS supplement could be used for gathering information on fathers and linked to the other CPS data for the households. If the American Community Survey goes into production, it might serve as a data collection vehicle on a periodic basis.

Another problem which must be faced is the following of movers in longitudinal surveys, and such an operation will be important for measuring long-term outcomes. Much can probably be learned from the NLSY, SIPP, and other surveys which attempt to track respondents across significant periods of time. For example, SIPP has issued a memorandum detailing the most effective tracking techniques (Allen, 1994). However, they have not exclusively focused on fathers, a group which might present a particularly difficult challenge. Again, administrative records might be explored as a way of following families that separate. Finally, there are a number of weighting issues to consider. How are families which split apart weighted, and attrition in the longitudinal surveys will require using methods for censored data (Little and Rubin, 1987; Wiley and Sons; and Amemiya, 1985).

Within household sampling is of some concern if more than one child is involved or there are children with more than one father. The actual selection may not be difficult, but issues might arise if the person selected does not actually live in the household or is uncooperative compared to others in the household. Furthermore, a parent actually could have children from different generations, and the relationships may be very different.

Institutional Populations. Typically, large scale national surveys of the population are of the civilian, noninstitutionalized population only. Because of the particular issues being addressed in the search for improved information on fathers, it is clear that a large share of men excluded by these approaches are fathers (Harlowe, 1996). To fully understand the roles that men play in their children's lives -- and the types of influence they may have intentionally or otherwise -- it is important to examine better ways to obtain information from men in institutions and in the military population.

Data Collection Procedures:

Response Burden. Collecting information on or from fathers clearly increases interview time. There is a strategic issue as to which surveys should be affected and how, since response burden is a substantial issue in many large scale surveys that affects both their feasibility (from a financial and operational perspective) and the quality of the information provided when respondents tire. This problem very quickly reverts to what information is required and what are the best ways to obtain it, but it is also a fundamentally methodological issue regarding how to balance subject matter among the most appropriate, effective, and efficient surveys of differing designs and content.

There are two types of respondent burdens to face, but it is unclear how these will play out in terms of surveys of fathers. Furthermore, both types are affected by mode. The first is the burden associated with the difficulty of the task. This would include the length of the questionnaire, how many respondents are interviewed, and how difficult the questions are to answer (Groves, 1989; Tucker, Casady, and Lepowski, 1991; Schuman and Presser, 1981; Heberlein and Baumgartner, 1978; Herzog and Bachman,

1981; Sudman and Ferber, 1974; Silberstein, 1993; Dillman, Brown, Carlson, Mason, Saltiel, and Sangster, 1995; Herriot, 1977, Hermann, 1993). What effects these factors have on data quality will depend on the mode of administration (deleeuw and van der Zouwen, 1988; Groves, et. al.; Tucker, Casdy, Lepowski, 1991; Groves, 1989; Wiley and Hochstim, 1967; Rogers, 1976; Warriner, 1991; Sudman and Bradburn, 1973; Morgenstern and Barrett, 1974; Krosnick and Alwin, 1987; Miller and Downes-Le Guin, 1989; Conrad, Brown, and Cashman, 1993; Silberstein, 1989; Mullin, Cashman, and Straub, 1996; Hermann, McEvoy, Hertzog, Hertel, and Johnson). For instance, surveys done in person have the potential to be more burdensome because they can be longer and involve more complicated tasks.

In this case, burden may be tied closely to the extent of recall required, and recall has been a subject of intensive study. The saliency of experiences will be related to the ability to recall them, but the way the questions or memory probes are ordered and formatted also can matter (Schuman and Presser, 1981). The difficulty of the task also is affected by whether data collection will recur (Kasprzyk, Duncan, Kalton, and Singh, 1989). Recurrent data collection can be quite burdensome. If the collection is done too often, the respondent is likely to become annoyed. Infrequent collection might avoid this problem, but it can make the recall task more difficult and recontact will be more problematic. The more infrequent the contact, the longer the survey might become.

A considerable amount of research is needed to develop less burdensome data collection instruments for fathers and children. This would include the level of difficulty associated with different questionnaire formats under various modes. Research should be done on the problems associated with recall of family history and the usefulness of available records in the household. The feasibility of inserting and removing modules of questions in both cross-sectional and longitudinal surveys should be examined. The optimal frequency of data collection for recurring surveys should be determined.

The other concern is the burden accompanying sensitive items (Colombotos, 1965). Questions about income, sexual practices, drug use, and some health conditions can be very sensitive to some respondents. In addition, information about family relationships, critical in this case, is often difficult to obtain from respondents. Mode of administration is important here also in that distance from the interviewer can affect the respondent's feelings of privacy and confidentiality. Methods of reducing the burden associated with sensitive items have been investigated. These include randomized response techniques, (Groves, 1989) self-administered survey instruments, (Turner, Forsyth, Reilly, and Miller, 1996) and question order (Groves, 1989).

Reporting. For understanding different aspects of fatherhood and fathering, it may be more desirable to use proxy- or self-reporting. The trade-offs between the two fundamental ways of obtaining information are related to cost, accuracy, reliability, and accessibility to the respondent. While in some cases proxy responses provide entirely adequate information, in others information can only be obtained directly from the father who is being studied. Further research is needed on which areas previous partners or children are able to serve as proxy respondents and which ones require the additional expense of locating and interviewing the fathers to achieve the needed accuracy and reliability. When fathers must be contacted directly, there may be serious problems with accessibility of the respondent, so that targeted studies may be designed to gather information on a more limited sample.

The central question to ask about proxy response is whether it is less accurate than self response. It seems that it should be in most cases (Jones, Nisbett, 1972, Lord, 1980). However, empirical work, which is difficult to do, has shown this to not always be true. Some have speculated the relationships among family members will have an effect (Groves, 1989; Mathiowetz and Groves, 1989; Moore, 1988). The other

reason results on this question might vary is that the accuracy of proxy reports could depend on the subject of the inquiry, the questionnaire strategies used to obtain the reports, or whether the proxy has first-hand experience concerning the information being sought (Miller and Tucker, 1993; Tucker and Miller, 1993; Kojetin and Miller, 1993; Cash and Moss, 1972; Kojetin and Mullin, 1995; Mullin and Tonn, 1993; Bickart, Blair, and Menon, 1994; Schwarz and Sudman; Menon, Bickart, Sudman, and Blair, 1995; Kojetin, Burnbauer, and Mullin, 1995; Kojetin and Jerstad, 1997). Nevertheless, in the case of men's reports of their children living elsewhere, it seems clear that there is indeed underreporting.

Administrative Records. For targeted topics, it may be feasible to obtain some information from administrative records. These can be linked to sample survey data to yield some more specific estimates. However, the usefulness of administrative records is highly dependent on the topics being studied and the availability of information in different records systems. In any given application, researchers must investigate whether access to records can be obtained under the auspices of the study, what information is available, the quality of the information in the system (primarily in terms of accuracy and completeness), and how such information might be linked to other data being obtained in the study.

Mode of Data Collection. The consequences of gathering data using different modes (mail, telephone, or personal interviews; degree of computer-assistance; observational studies; diaries; or other modes) are closely related to the type of study being undertaken. However, there is still considerable latitude in the designs of some research. Most studies of the effects of interviewing mode have been made with the more typical respondent--the mother or the child. Consequently, further research is needed into how these modes may influence data quality and response rates.

Study Design:

Questionnaire Design and Measurement Issues. There are a variety of issues related to the quality of information obtained from mothers and fathers about the role of fathers in children's lives. If either or both parents are interviewed, most surveys currently ask them both the same questions. Researchers are not yet certain what to ask fathers, because studies have not yet pointed to any distinctive understanding of fathers' roles. However, since researchers do acknowledge that fathers may have unique ways of interacting with their children, it is clear that such relationships cannot be discerned using traditional questions. Further research is needed on what aspects of fathering are important to men, what aspects of fathering are important to children, and ways to improve the quality of information collected. Specifically, the stability, reliability, and validity of survey responses are likely to be increased by improving the questions asked. Another measurement of critical importance is the time reference used in sample surveys. This also has important implications for the quality of data obtained from respondents.

New questions will be needed to assess what fathers contribute to their children, both emotionally and physically. Other questions will focus on the ways fathers and children view their relationships with one another. Some questions will be subjective, but many should be behavioral measures. Types of questions which could be used are attitude scales, behavioral frequency measures, behavioral checklists, and open-ended items (Poister, 1978).

Whatever the types of questions used, they must be thoroughly tested. This research is important to ensuring ultimately data quality. The identification of question wording and order effects is becoming commonplace, and the methods used in this area are growing (Groves, 1989; Schwarz and Sudman, 1993; Conrad and Brown, 1995; Esposito, Campanelli, Rothgeb, and Polivka, 1991; Forsyth, Lessler, and Hubbard, 1992; Turner, Lessler, and Gfroerer.; Martin and Polivka, 1995; Menon, 1994, Schwarz and Sudman; Willis, Royston, and Bercini, 1991; Tanur, 1992; Sudman, Bradburn, and Schwarz, 1996).

This work also examines problems of respondent understanding, memory, and recall, which will be of central importance in the development of data collection instruments concerning fatherhood. Small field and laboratory tests will be necessary, as well as the field observation of large-scale tests. Testing will involve think-aloud interviews, respondent and interviewer debriefings, and interview monitoring with behavior coding. Administrative data can also be used to measure data quality (Moore and Marquis, 1989).

Research should be undertaken to develop methods which overcome problems of memory and recall. Some research has already been done in this area (Anderson and Conway, 1993; Schwarz and Sudman, 1993; Burt, Mitchell, Raggatt, Jones, and Cowna, 1995), but more is needed as it relates to the experiences of fathers and children. One method which could have some merit is time-use diaries (Juster and Stafford, 1985). Respondents also might be asked to do narrative histories of family relationships which could be content analyzed (Dillman, 1978; Groves, 1989; Groves and Kahn, 1979). Other qualitative methods will be discussed under recommendations number 7, below.

Questionnaire design is dependent on the mode of data collection. For instance, long lists requiring flashcards cannot be used in telephone surveys, and lengthy narratives cannot be collected over the telephone. Question order effects will differ by mode, and the ability to obtain answers from multiple household members will be limited with both telephone and mail surveys. Literacy is a problem in mail surveys, but privacy and confidentiality is better preserved, unless computerized self-administered surveys are used. Thus, the effects of mode on surveys of fathers will need to be considered, and the information to be collected should be fitted to the mode.

Finally, multiple measures from multiple sources will be needed to ensure the quality and/or accuracy of the data. This is true for two reasons. As with most social research, the measures used can have a considerable amount of nonsampling error, so it is better to use multiple measures of the same concept and arrive at a combined indicator by "triangulation," also known as the multi-trait/multi-method approach (Alwin, 1974; Campbell and Fiske, 1959; Jick, 1979; Tucker, 1992). The other reason it is important, especially in this case, is that different respondents may give conflicting answers or, at least, express different points of view. A more accurate picture is likely to be obtained by asking the same questions to several family members and/or gathering data from outside sources such as education or health providers and administrative records.

Linking Quantitative and Qualitative Designs. Enhancing quantitative survey designs with qualitative research methods has the potential to enhance knowledge in at least two ways. First, researchers can address many of the methodological and substantive issues that are not yet completely or even well understood using qualitative techniques. Such smaller scale studies frequently provide approaches to address issues in large scale quantitative studies. These studies can help to develop topics to study, question wording, or survey design, as a few examples. Secondly, linking methods can greatly enrich what can be learned by either approach taken alone. Combined approaches provide a much more rounded view of social phenomena by calling on the strengths of each (U.S. Department of Education, National Center for Education Statistics).

The fact is that quantitative data, especially when presented only at the aggregate level, often masks or even misstates important relationships (Copeland and White, 1991). Thus, qualitative methods are needed to inform and guide quantitative research. Fortunately, the last decade has seen one example of the effective use of both methodologies--the use of cognitive methods in survey research (Fienberg and Tanur, 1989; Forsyth, Lessler, and Hubbard, 1992; Nargundkar and Gower, 1991; Turner, Lessler,

Gfoerer; and Tanur, 1992; Sudman, Bradburn, and Schwarz, 1996). This combination was used very effectively in both designing and analyzing the Supplement on Race and Ethnicity to the Current Population Survey (Cannell, Oksenberg, Fowler, Kalton, and Bischooping, 1989; McKay and de la Puente, 1995; McKay, Stinson, de la Puente, and Kojetin, 1996; Tucker, 1996; Esposito, Campanelli, Rothgeb, and Polivka, 1991; Willis, Royston, and Bercini, 1991; Conrad, and Brown, 1995; Peterson and Schechter, 1995) Qualitative methodologies from other fields, such as anthropology, also have been used (McKay, 1993), and work is ongoing to include other disciplines like linguistics. [\(1\)](#)

Many lessons have been learned from these experiences. One of them is that qualitative methods are useful for designing questionnaires that interviewers can administer more easily and that respondents can understand. These techniques also can help explain seemingly conflicting or confusing findings from quantitative research. Several limitations, however, have already been encountered, and research is beginning to deal with these. One problem with qualitative research is that the methodology is less codified. This problem has been examined (Tucker, 1996), and more rigorous methods are being developed (Conrad and Blair, 1996; Tucker, 1996; King, Keohane, and Verba, 1994; Yin, 1989). Basically, qualitative research still must be judged against the same scientific standards as quantitative research. At the same time, qualitative research should not be dismissed out of hand if its standards are high. Therefore, in studies of fathers, the two should be used together, and the results should be judged with the same ruler. Given, the complexity of the problem, both will be useful.

Longitudinal or Cross-sectional Designs. Whether a longitudinal or cross-sectional design is selected is dependent on the kinds of information that are being sought. While longitudinal designs tend to be thought of as more expensive, they may be more cost-effective through providing richer information with a smaller sample than may be achieved with repeated cross-sectional studies.

Population Diversity. Just as it may be inadequate to study parenting by asking the same questions of both mothers and fathers, it also may lead to inadequate understanding of important issues if studies do not account for the diversity in the population. The rich cultural, ethnic, racial, and linguistic diversity in the population of the United States means that studies have to be carefully designed to elicit information from different groups. In studies that are characterized by uniformity of administration to all respondents (such as large scale sample survey research), this means that conscious compromises will need to be made to develop items that are understandable to a wide variety of respondents. In other types of research, special, more targeted, approaches may be taken when dealing with different populations; or specific studies may be developed for different groups. The challenges of population diversity relate to the content of the study (different aspects of fathering may carry different levels of importance), conceptualization of the content (different groups may have varying perspectives on the same issues), and structure and wording of questionnaires or interview templates.

Measuring Time Use. Assessment of parent-child interaction often rests largely on reports of children's time use. There are several ways of assessing how much time and in what activities parents and children engage. The most accurate way to collect such data would be through observation. However, such methods are costly, intrusive, and limited in the amount of a day that can be covered. Another accurate way to collect information is by time sampling, in which respondents write down the activity they are engaged in whenever a beeper sounds. This methodology is also costly, intrusive and limited. The most common method in survey research is to ask parents directly how much time they spend in certain activities, such as reading to their child. While simple and widely used, this method is known to be biased. First, it is subject to social desirability bias. Parents will report more time spent on desirable activities (such as reading) than on less desirable ones. Second, there is no baseline against which to check consistency, validity, or reliability. Thus times have been shown to be quite inaccurately reported (Juster

and Stafford, 1985).

In contrast, substantial methodological work has established the validity and reliability of data collected in time-diary form (Juster and Stafford, 1985). The instrument for assessing time use is a "time diary," which is a chronological report by the child and/or the child's primary caretaker about the child's activities over a specified recent 24-hour period, beginning at midnight (who the reporter is depends on the age of the child). The time diary is interviewer-administered and asks several questions about the child's flow of activities, such as what they were doing at that time, when the activity began and ended, and what else they were doing (if they were engaged in multiple activities). The Child Development Supplement to the Panel Study of Income Dynamics also added two questions: "Who was (child) doing that with?" And "Who else was there?" These added questions, when linked to activity codes such as "playing" or "being read to" provide unbiased details on the extent of parent/child one-on-one interactions and availability of the parents. The advantage of such questions is that total time in one day has to add to 24 hours. Consequently, while individual times may be slightly inaccurate, the times are consistent with one another. The disadvantage of the time diary is that it represents only a sample of children's days. Thus while it accurately represents the activities of a sample of children on a given day, it is only a very small sample of a given child's days and, as such has limited reliability. To improve reliability, most time-use studies obtain at least one weekend and one weekday assessment, and many also obtain multiple samples over a period of time, such as a year.

Since the data collection format is open-ended--an advantage for avoiding biases toward "good" activities and away from "bad" activities but a potential pitfall for proper interpretation of the data--precise, clear, and well-focused definitions of activities are vital. Fortunately, the 1975-1981 Time Use Study has paved the way in terms of guidelines for coding children's time-diary reports (Juster and Stafford, 1985). Working with several child development experts and time-use experts in a number of disciplines and representing a wide range of countries and cultures, Hill, Stafford, Juster, and colleagues in the 1981 follow-up in the 1975-1981 Time Use Study spent considerable time and effort designing a time-use methodology appropriate to children (Hill, Stafford, Juster, and colleagues, 1975-1981). The methodology is not onerous. Researchers have found that parents of young children enjoy working with their youngsters to provide the children's time diaries, which take about 15 minutes per child per day, and can adequately represent the child's day.

How Should New Data Collection Be Undertaken?

There are two issues that are fundamental for the research community to consider in designing studies to obtain information on fathers: (1) Should a new study be initiated or would an add-on to an existing study be more appropriate? (2) Should the study be conducted by Federal statistical agencies or as a privately sponsored effort? While it is clear that the right directions depend in part on the nature of the study, some guidance about factors to consider when addressing these questions may be useful.

New vs. Supplemental Studies. In the past, new ideas may have readily generated entirely new studies. However, concerns about financial support for social science research now more often lead to consideration of ways to piggyback onto existing studies. There are, however, advantages and disadvantages to either approach. New studies have a distinct advantage in that the designers and sponsors of the study can exercise substantially greater latitude in defining the scope of the study. As a result, they are better able to focus the entire study on the topics of interest rather than having to fit components in around an existing questionnaire or other information collection. Similarly, they have greater control over the research design and study operations, within cost constraints, so that these aspects can be tailored to their needs. They have the disadvantages of higher costs and longer start-up

time that unavoidably occur with a new program.

Supplemental studies address that disadvantage directly, typically being of lower cost and with a faster start-up time. Often, the sponsor will only have to contribute marginal costs, which may be minimal, to obtain additional information. Additional information that is likely to be related to the topic of interest will be obtained at no cost to the sponsor because it is included in the base survey. However, the lack of control over the design of the survey and the sample introduce potentially severe disadvantages. The sponsor may not have control over question wording, although this problem is more likely to affect those items already in the study than those being added. Lack of control over survey operations and data processing can hinder the utility of the results, insofar as they influence the outcomes of the inquiry or the timeliness of reporting. The latter is a problem particularly if the primary data are processed with higher priority. In a related issue, the context of the independent study may introduce response or nonresponse bias if its content or design are not compatible with the goals of the sponsor. Finally, although the cost advantage is attractive, this approach means that the sponsor depends on another organization to carry out the survey, to obtain funding for the core, and to produce the data. It is not entirely unusual for such arrangements to fall through when funding unfortunately becomes unavailable for the sponsor of the core survey.

Federal vs. Privately Sponsored Studies. Studies that are conducted by or for the Federal government under contract have different strengths and weaknesses than those of studies that are fully privately sponsored or that are conducted under a grant from the Federal government. However, in recent years, these distinctions have become increasingly blurred, as funding sources for Federal statistical studies have declined and the quality of large scale research in the private sector has improved. Nevertheless, there remain significant differences between these two types of studies.

While Federal studies historically have been thought to have more secure funding sources once the government committed to the survey, this may no longer be the case in the current budget climate. Federal surveys do have a small advantage in easier access to national sampling frames that may be more difficult to construct in the private sector. Federal researchers are constrained to create public use analysis files for researchers to have equal access to, and this clearly enhances the value of the study for the broad research and policy community. Federal agencies typically provide metadata, describing the characteristics of the data, which is highly important for more informed use of the data. Consistent with these last two aspects, publicity about the availability of the data is typically seen as a part of the survey process, thus enhancing access. Despite concerns about response burden, the Federal government still tends to achieve substantially higher response rates than are achieved in privately-sponsored surveys.

Federal surveys also have disadvantages, many of which stem from a generally long lead time from conceptualization to development to data production and analysis. Funding is typically difficult to secure initially. The clearance process conducted by the Office of Management and Budget adds considerable time to the survey process, and can place constraints on the response burden and content of surveys that can restrict the topics that can successfully be studied. In certain studies, association of a study with a particular agency may introduce response bias. Finally, whether because of elaborate designs or operational inefficiencies, Federal studies tend to be somewhat costly.

Privately sponsored studies or studies conducted with Federal grants avoid some of these disadvantages. The researcher may have more latitude in defining the topics of study, and so may be able to address more sensitive issues. These studies show a clear advantage in that less time is typically required to move from conceptualization to data production. Researchers can more readily adopt innovative techniques, that may (or may not) prove useful from a wide variety of perspectives. And, as noted above, such

studies may be designed to serve more precise needs and they may, as a result, to be less costly.

On the other hand, privately sponsored studies are less likely to provide timely public use data files to allow the broader research community access for analysis. The degree of collaboration is more dependent on the individual principal investigators, as there is less motivation to do so from the perspective of the public good. Finally, the care and attention focused on technical issues of all sorts varies considerably in such studies. This disadvantage can have serious and broad consequences for the quality and utility of the data.

Recommendations

Let us now summarize the implications of the research activity we have reviewed for future research on fathers. The state of knowledge about how to study fathers is not adequate to prescribe a single set of optimal procedures for all studies; and we do not wish to create a new methodological orthodoxy. Nevertheless, we believe that the following implications can be drawn.

1. ***Include fathers.*** Fatherhood is a complex aspect of our society that is inadequately understood. The knowledge base is insufficient to inform policy makers about the roles that fathers and mothers play in our families and our communities. Issues extend beyond the most commonly expressed concerns about absent fathers. Thus, national surveys need to provide a more accurate and in-depth profile of fathers to improve this understanding. Two surveys in particular should consider including fathers as interviewees - the Early Childhood Longitudinal Survey and the National Survey of Family Growth.

Studies of what non-resident fathers do should include non-resident fathers. Although this precept might seem self-evident, its adoption would mark a major change in research design. Until recently, an inordinate proportion of studies of fatherhood have attempted to measure the importance of absent fathers solely by examining households in which fathers are absent. In most of these studies, little or no effort was made to contact absent fathers. This literature on father absence has been useful but it has its limits. Studies that dichotomize all fathers into "present" and "absent" may miss important aspects of a child's continuing relationship with a non-resident parent. Studies that do not contact the absent parent are inherently limited in the understanding they can provide about why fathers may be relatively uninvolved with their children. Future research on non-resident fathers should move beyond merely studying their absence.

2. ***Improve household survey methodology.*** The standard household survey methodology is critical to our understanding of fathers because it is the only methodology that has the potential for identifying the entire universe of resident fathers and nearly all nonresident fathers. A very small share of fathers are outside of this sampling frame. Part of the underrepresentation of fathers in household surveys is due to an undercount of fathers who are tenuously attached to households and part is due to underreporting by men who are interviewed but who do not disclose that they have children living elsewhere. Both of these issues can and should be addressed.

3. ***Add expanded household and extra-household rosters to existing surveys.*** Standard rosters in household surveys are not adequate to resolve the problems of underrepresentation. Experimental surveys have increased their coverage of underrepresented groups of fathers by using an expanded set of questions and probes. Existing surveys should test these questions and probes along with their standard rostering techniques. Follow-up interviews should be conducted with a subset of these individuals to ascertain who is not being interviewed. Some surveys are also obtaining extra-household rosters of important family members who live elsewhere, such as non-resident parents and non-resident children and

attempting to conduct follow-up interviews with these individuals. Further study of these individuals may be desirable.

In-depth studies (particularly long-term longitudinal studies) should carefully consider whether including fathers as interviewees would not improve the utility of the database. The Early Childhood Longitudinal Study of the National Center for Education Statistics, in particular, should make every effort to include a father supplement at some point in the study. This study, currently under development, could provide important information about children's development in relation to father involvement that could have important policy implications. Some effort is needed to include at least correctional institutions in household surveys to fill out the picture of absent fathers. The typical exclusion of men in institutions leads to a distorted view of how families function in our society.

4. *Develop questions that are relevant to fathers and result in accurate responses.* Unlike the well-tested interview protocols for female fertility and family formation, protocols for surveys focused on fathers are not yet well-developed or standardized. It is not wise to merely ask fathers a set of questions about parenting that parallels the set typically asked of mothers. Rather, new questions are needed to assess fathers' contributions to their children's development. Better measures of time use, such as time diaries, need to be incorporated in studies. Consequently, survey-based studies of fathers should include a substantial amount of development and testing prior to interviews with the sample. Exploratory methods exist that use laboratory and small field-test settings; these methods include think-aloud interviews, respondent and interviewer debriefings, and interview monitoring.

5. *Improve procedures for asking sensitive questions.* There is strong evidence that even when fathers are interviewed, they underreport the existence of their children living elsewhere. Mothers may also underreport non-resident fathers of their children. In addition, non-resident parents may be motivated to exaggerate the amount of contact they have with their children. For these reasons, it is important to employ, when feasible, improved measures for obtaining this information. We will note below that this is an important topic for further methodological research. Some promising techniques for survey research have been developed, such as audio computer self-administered segments of interviews. This is also a topic for which ethnographic studies are useful, both for identifying and studying fathers whose existence may not be revealed by a survey and for suggesting better ways to ask sensitive questions in surveys.

6. *Reduce response burden.* Other Working Groups recommend placing a high priority on obtaining detailed sexual, reproductive, and union histories for men. Yet the complexities of some men's sexual histories and reproductive careers means that for a subset of fathers, obtaining comprehensive histories could impose a substantial response burden. The very fathers who have the longest, most complex histories are often the group of greatest interest. It is not clear how much information can be collected from them: respondents may tire of remembering their histories at some point, or they may remember dates inconsistently. Therefore, a high priority for methodological research is to undertake studies of ways to reduce the response burden imposed by extensive histories. The life-history calendar is one way to reduce the burden; it seems to be clearly preferred by respondents to interviewer questions; and it seems to result in better quality data (Peterson and Schechter, 1995). But little methodological research has been conducted specifically on men. New studies that propose the collection of extensive sexual, reproductive, and union history from men should include development and pretesting of ways to reduce the response burden of histories; and methodological research on the topic should be supported.

7. *Conduct intensive observational studies.* The gaps in our knowledge of what fathers (both resident and non-resident) do suggest the importance of smaller, intensive observational studies. For example, developmental psychologists conduct studies of children and their caregivers that involve direct

observation, batteries of tests and assessments, and sometimes videotaping and subsequent rating of family interaction. Ethnographers conduct studies that use anthropological field work methods to describe and understand family interaction. These kinds of studies can provide valuable insights about fathering. They also can serve as hypothesis-generating studies that yield propositions about fathers that can be tested by subsequent close-ended questions in larger, more representative sample surveys.

8. Use supplementary and alternative sampling strategies. The standard household sample-survey methodology appears not to find many unmarried fathers. Other sampling strategies may sometimes be advantageous, either as supplements to household samples or as alternatives to them. The underrepresentation is particularly large for young men from minority groups, so other sampling strategies are particularly important for studies which focus on them. Part of the underrepresentation is due to an undercount of fathers who are tenuously attached to households and part is due to underreporting by men who are interviewed but who do not disclose that they have children living elsewhere. The other sampling strategies include the use of administrative records to locate fathers who may no longer be involved with their children or whose names are not supplied by respondents in a household survey. They also include the addition of the incarcerated population and the military population when possible. In addition, they may include the development of alternative designs such as sampling on births at hospitals and interviewing both parents for the first time as soon after the birth as possible.

9. Recognize population diversity. The roles of fathers are embedded in larger family processes that can differ by class, race, and ethnic groups. Even within these groups there can be substantial diversity. Studies need to take this diversity into account. For example, studies of low-income groups where single-parent families and broad kinship networks are more common should consider the roles in children's lives of stepfathers, male kin, mothers' boyfriends, and other men. In addition, the roles of biological fathers may differ in family settings where extended kinship ties (such as to grandparents, aunts, or uncles) are present; consequently, studies of fathers should consider variations in family patterns.

10. Be careful of unobserved sources of bias. Despite the best efforts of researchers, studies of fathers can suffer from bias due to incomplete observation or to patterns of responses to questions. Fathers who are underrepresented are likely to have some characteristics that differ from fathers who are represented. Data collected from mother-father pairs are, in principle, superior to data collected from only one parent; but, in practice, the difficulty of collecting matched mother-father reports can result in an underrepresentation of certain kinds of couples. Difficulties in attributing cause and effect can arise, particularly in cross-sectional studies. Studies of fathers should at the very least demonstrate that such problems, and their likely effects on analyses, have been considered. Research designs that can reduce bias should be used where possible. These include so-called panel data (longitudinal studies that can be used to control for unchanging unobserved sources of bias), studies of families that are affected by external assignments of fathers' roles such as military transfers or court orders, and statistical models that attempt to correct for incomplete and self-selected samples.

11. Carefully consider additions to existing data programs. It is not clear that completely new, large-scale studies should be undertaken to investigate issues related to fatherhood and fathering at this time. There is a great deal to be learned from working with existing survey mechanisms to expand the content and scope of studies in targeted, appropriate ways to address specific questions. Very little is understood on this topic to inform an emerging policy debate that encompasses far more than just the economic role of fathers. Consequently, important contributions can be made with small scale work and through expansions to existing studies of family conditions and processes. In this time of scarce resources

for social science research, funds should be directed where they will provide the greatest insights. Thus, careful trade-offs need to be made in investing in new studies, major expansions of existing studies, and continuing some existing data collections as is in the interests of economy.

12. Conduct more methodological research. Lastly, we call for a program of methodological research on studying fathers. Because of the focus of past studies on mothers and on families that do not extend beyond the boundaries of one household, not enough is known about how to study fathers. We have briefly summarized the major developments in methodological research at this time. But many important facets of research on fathers need to be improved before we can be satisfied with the quality of current and future studies. These include the basic problems of finding non-resident fathers, of the underreporting of fatherhood among the men that are found, and of obtaining full and accurate answers about contact with children living elsewhere. Solutions involve sampling strategies, interviewing techniques, and questionnaire design. We need to know more about how to combine and analyze responses from mother and fathers (coresident or non-coresident) in data in which couples are the unit.

Furthermore, in order to construct informative surveys, we need to know more about what aspects of fathering are important and valuable. Questions of and about fathers should include more than just their economic circumstances and contributions to families. An expanded concept of fatherhood is essential. We doubt that this information can be obtained without detailed, observational studies of fathers and children of the type carried out by developmental psychologists and ethnographers. Technically speaking this is substantive, rather than methodological research; but it is a necessary precursor to the construction of adequate structured survey instruments. For example, other Working Groups note the importance of determining men's attitudes toward fatherhood and their motivations for having children. Although there is a psychometric literature on the reliability and validity of survey-based measures of attitudes and motivations, little research has been conducted on the population of interest. Qualitative studies would be particularly useful in order to determine the kinds of questions that close-ended surveys ought to ask.

Conclusion

There is much methodological work to be undertaken to help improve the quality and scope of information available on fathers and fathering. This paper has attempted to present some of the methodological issues, while at the same time suggesting some types of activities that could be undertaken immediately to improve the information base. Although it is always difficult to discuss methodology absent a clear concept of what content is needed, the dearth of information on these topics is so severe that some actions must be taken immediately. It is the sincere hope of this Working Group that the Fatherhood Conference will provide a strong foundation from both the substantive and methodological perspectives to support moving expeditiously to fill the data gaps.

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CHAPTER SIX

OPPORTUNITIES TO IMPROVE DATA AND RESEARCH ON FATHERHOOD

Chapter 6: Summary of the Targets of Opportunities Presented to the Interagency Forum on Child and Family Statistics by the Working Group on Targets of Opportunity and Trade-Offs

Linda Mellgren (co-chair)

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Report to the Federal Interagency Forum

On October 1, 1997 the Data Collection Committee presented to the Federal Forum on Child and Family Statistics a report on ten key Federal activities that could improve data collection on fertility, family formation, and fathering. Identified as targets of opportunities, some of these activities required that the Forum initiate action. Others asked the Forum to promote certain opportunities that would benefit from multi-agency support. The Forum endorsed the report and all of the ten identified opportunities are now in some stage of implementation. This chapter presents the ten targets of opportunity, the rationale for their choice, and the implementation activities that are underway.

The goal of this multi-year review of the state of data collection and research on male fertility and fathering has been to fill gaps and build on existing efforts. The ten targets of opportunity identified in this section reflect the general agreement by a wide range of participants on the most important issues that need to be addressed, but do not exhaust the set of recommendations and ideas that have been identified as a part of this review. The report to the Forum focused on those activities that seemed most consistent with the missions of the Forum member agencies and that would benefit substantially from ongoing interagency collaboration. The selection of particular surveys or mechanisms for exploring change resulted from discussions among work group and data collection committee members, conference participants, academic experts and Federal agency staff. New efforts were considered only when no other options were available.

Target of Opportunity One: State of Data Collection and Research on Fathering

Publish a report on the state of data collection and research on male fertility, family formation, and fathering.

Rationale: The papers and plenary sessions from the March conference provide the most extensive overview of the substantive and methodological issues surrounding data collection and research on male fertility and fatherhood ever assembled at one time. Because of the excellent scholarship and multi-disciplinary partnerships that went into writing the papers, these published proceedings could contribute to the development of more precise measurement and understanding of male fertility and fathering for the next decade.

Implementation Status: This report, *Nurturing Fatherhood: Improving Data and Research on Male Fertility, Family Formation and Fatherhood*, in this report; it has been published and distributed widely and is available on the Internet has been published.

Target of Opportunity Two: Indicators of Male Fertility and Fatherhood

Publish a Report on Fatherhood Indicators. This report would include indicators on male fertility, family formation, and fathering.

Rationale: A systematic assessment of the information available on male fertility, union formation and fatherhood needs to be conducted to identify desirable indicators, to identify survey mechanisms, to obtain data, to evaluate the quality and usefulness of what is available, and to tabulate and publish the best available information for the public and policy making communities. In the Forum's report, *America's Children: Key National Indicators of Well-Being*, some of the important missing indicators were identified: family structure, time use (for both parents), children's interaction with nonresident parents, particularly fathers, and the establishment of paternity; but more work needs to be done. Although this report would not be a trends report, it would establish the baseline for new trend lines and identify trend information that may exist on a limited number of indicators. Focusing on the indicator identification and selection process would clarify what data on fatherhood are most critical for routine collection by federal statistical agencies. Progress on the development of indicators would also improve the quality and standardization of questions asked on national surveys. We anticipate that a by-product of this effort would be the inclusion of more fatherhood indicators in trends reports produced by the Federal Government and elsewhere.

Implementation Status: The Reporting Committee of the Forum has agreed to develop this baseline report with assistance from the NICHD Family and Child Well-Being Research Network and the Office of the Assistant Secretary for Planning and Evaluation/DHHS. Basic conceptual work is already underway. Potential indicators for male fertility and union formation were developed by the and Work Group Male Fertility and Family Formation as part of their conference paper. Kristin Moore and Anne Driscoll of Child Trends coordinated work on indicators of male fertility and family formation. The NICHD Family and Child Well-being Research Network has asked Randal Day, Kristin Moore and Brett Brown to take the lead on developing fatherhood/fathering indicators. Although the first stage of the process has begun, additional work will be needed to actually identify what information is available and to assess its quality. Some additional data analysis may be needed as well before a product could be published. Funding is being sought from several agencies and from the private sector. The target date for release of the report is on or near Fathers Day 1999.

Target of Opportunity Three: Collection of Data on Male Fertility

Use the National Survey of Family Growth to increase our understanding of fertility and family formation by interviewing men directly.

Rationale: In order to identify trends and differences in how men become fathers and what they do as fathers, basic descriptive information needs to be collected periodically about (a) their sexual activity, contraceptive use, the pregnancies to which they contribute, and the outcomes of these pregnancies; (b) males' perceptions of their own and their partners' views of the intendedness of these pregnancies and births and their views of fatherhood and marriage; and © what they do as fathers. To accomplish this objective the collection of data about male fertility must be institutionalized. Expansion of the NSFG is the most promising avenue for this effort. What is learned from the NSFG work should also be used to inform the collection of male fertility information in other surveys.

Implementation Status: NCHS has funded seven small contracts to examine what has been learned

in other large national surveys that have collected information directly from men on their sexual behavior and family formation. The results of these reviews will be submitted in early in 1998. By April or May of 1998, there should be an outline of the questionnaire for males. A contract will be let in the spring of 1998 to draft a questionnaire for men. In addition to NCHS, NICHD and the Office of Population Affairs (DHHS) are contributing to this developmental work.

Target of Opportunity Four: Better Measurement of Father Absence and Presence

Include measures of whether fathers live with and have contact with their children in surveys and routine administrative data collection. Additional measures of father-child interaction should be developed and incorporated as feasible.

Rationale: Data on marital status and cohabitation cannot be used to measure father involvement, because unrelated males living in a household may be the children's father, some fathers see their children often and regularly even though they may not be living in the same household with them, and custody and visitation arrangements increase the difficulty of identifying the nature of father-child interactions. Children's living arrangements with their parents have been shown to have strong relationship to child outcomes, but questions on living arrangements and contact in most surveys do not measure father absence or presence accurately. This change would be a first step toward correctly measuring father-child living arrangements and involvement.

Implementation Status: The Data Collection Committee of the Forum will review how questions of cohabitation, contact and interaction are addressed in major federally sponsored surveys and in other routine data collection, such as vital statistics reporting. The Committee is to develop and report back to the Forum with a plan for identifying the best prototype questions and developing new questions, if necessary. The Committee should include recommendations on how to make this information available to sponsoring agencies in a timely fashion. A number of related activities are already underway:

As a result of the President's initiative and the Forum's interest in the issue of fatherhood, ASPE and NICHD have provided the Panel Study of Income Dynamics (PSID) with additional resources to expand the information available about and from nonresident fathers. Analysis of the expanded data collection should be available soon.

The Data Collection Committee has a project underway to examine how living arrangements are addressed in major national surveys.

ASPE has transferred funds to the Census Bureau to investigate the possibility of expanding male fertility and nonresident contact questions on the Survey of Income and Program Participation (SIPP).

NCHS is in the process of working with states on the FY 2002 revision of the birth registration forms.

NCES has funded Child Trends to identify constructs and review existing father-child contact and involvement questions in major national surveys.

Target of Opportunity Five: Understanding the Role of Father Involvement in Child Development and School Readiness

Use the Early Childhood Longitudinal Study Birth Cohort Study (ECLS-B) to expand our understanding of fathers' relationship to child development and school readiness by including a module on the involvement of both resident and nonresident fathers.

Rationale: The ECLS-B is a new study that will provide information on young children's health and nutrition; physical, cognitive and social development; and child care, child development program and school experience. The ECLS-B will have a nationally representative sample of approximately 15,000 children. This study provides a significant opportunity to identify those aspects of father-child and father-mother interactions that affect young children's development over time. Including fathers is crucial because studies of school-age children and youth have shown that father absence is adversely associated with school performance and that resident and nonresident fathers can have positive effects on school performance, independent of mothers. Yet, at the same time, many previous studies have not found that father involvement influences the cognitive ability of young children. This study would allow us to begin understanding how and when fathers' influence on children's cognitive development and school performance develops.

Implementation Status: The contract for the ECLS-B design has been awarded to Westat. The scope of work includes provision of a module for fathers who live in the home, but no decision has been made on whether to try to interview fathers who do not live with the child. Developmental work has begun to determine the difficulty in finding nonresident fathers and to identify the most important questions that fathers should be asked. Funding options are being developed to ensure that sufficient resources are included in the survey to obtain information from non-resident fathers who continue to have an influence on their child's development and well-being.

Target of Opportunity Six: The Transition from Adolescence to Adulthood: Understanding the Relationship of Sexual Activity, Fertility, Marriage, and Parenthood to Educational Attainment and Labor Force Participation.

Use the new National Longitudinal Survey of Youth (NLSY-97) to increase our understanding of how sexual activity, fertility, marriage, and parenthood (including child support and child care responsibilities) affect educational attainment and labor force participation for men.

Rationale: The NLSY-97 provides a unique opportunity for examining how male sexual behavior, fertility, cohabitation, marriage and fatherhood affect the education, training, employment and income of young men and women. Longitudinal data obtained directly from young men will provide descriptive information on male behavior. Moreover, analytic data will support studies of how fertility, family formation and fatherhood affect labor force success and how labor force activities affect families and children. The previous youth survey (the NLSY-79) has been one of the most important survey instruments for increasing our understanding of the impact of fathering and family formation on the lives of young men because it interviewed young men directly and asked them questions about their fertility and fathering behaviors rather than gathering information from a secondary source. However, its analytic use would have been enhanced, if comparable data had been collected across all waves.

Implementation Status: An initial wave of data collection has been completed for the NLSY-97 that includes rich data on sexual and contraceptive behavior, cohabitation, marriage and fatherhood. Discussions are underway to determine how many of these questions can be included in the

subsequent waves. NICHD has made a funding commitment to help in this effort and to include child support and child care questions as part of future efforts.

Target of Opportunity Seven: Developing a Better Understanding of the Meaning of Father Involvement

Use the Early Head Start Research and Evaluation Project as a laboratory for conducting basic theoretical research on the meaning and nature of fathering for low-income men and their children.

Rationale: Additional basic research is needed to expand the concept of father involvement, constructs should be included, and how those constructs should be measured. Conference participants identified the need to explore how the meaning of parenthood may differ for men and women and how the meaning and actions of fathering may differ by race, ethnicity, culture and income. Such research usually has to be done outside general survey work because participants need to be interviewed in-depth. Without an expansion of work in this area we will remain unsure that we are asking the right questions about fathering or are asking questions in the right way.

The Early Head Start (EHS) Research and Evaluation Project allows us to examine issues of fathering for low-income and minority parents who are married, cohabitating, dating, or no longer in a relationship, and who have relatively young children (less than two years of age). This is precisely the population that has been ignored in most of the studies of parenting behavior. Because these interviews would take place within the context of the much larger Early Head Start research project, it would also be possible to determine whether the study fathers were generally representative of a much larger group of fathers.

Implementation Status: Members of the Data Collection Committee are working with the EHS project to ensure that a direct connection between research needs and project design is maintained and that the results of the EHS project are shared and utilized to refine measures of father involvement. The Early Head Start Research and Evaluation Project was identified as a potential laboratory in which marginalized fathers could be identified and studied. The project has a group of well-qualified, university-based, researchers at 15 EHS research sites who are interested in conducting research on the issues of fathering and on the relationship of fathering to child development. An EHS research consortium has been formed and has received planning money from the Head Start Bureau and ASPE to develop a collaborative research agenda on low-income fathers that addresses some of the theoretical issues that have been identified in the Forum sponsored research review. NICHD is providing core support and the Ford Foundation is considering funding for an in-depth sub study of fathers and infants.

Target of Opportunity Eight: Finding the Missing Men--Living Arrangements

Test, as part of a national survey, the experimental method for identifying individuals who are tenuously attached to households developed by the Bureau of the Census and piloted in the Living Situation Survey(LSS).

Rationale: The Living Situation Survey(LSS) was developed as part of the Bureau of the Census' ongoing efforts to decrease undercoverage in the decennial census. About one-third of the coverage error in surveys occur because of errors made in compiling household rosters, and error

rates are higher for minorities, males, young adults, nonrelatives, and persons with tenuous attachment to households. Fathers, especially young adult, minority, never-married fathers, who are not located or are not included in the survey process at all are undercounted in large scale sample surveys, including the decennial census. This undercount varies by age and race and also appears to be greater for never-married fathers than for previously-married fathers. One of the reasons for this undercount is that many young-adult minority men do not permanently reside in any one household. They may live for a few weeks with their parents, move in with a girlfriend or other friends for a while and then stay with a sibling. Frequently no one considers the young man a member of their household. Because the undercount is heavily concentrated in populations of high policy interest, improvements in coverage have the potential of improving our data on a wide range of areas including fertility and family structure, income and child support, victimization, health and risk behaviors. The LSS has been pretested on a national probability sample of one thousand households. The results of that test were quite promising.

Implementation Status: Census Bureau researchers are proposing a field experiment in July of 1999 to evaluate the efficacy of modified and expanded roster probes for possible implementation in Census Bureau household surveys. The field experimentation would be followed by ethnographic follow-up interviews to further explore causes of omissions. NICHD has made a commitment of \$100,000 to the Census for further development work and testing of the methods employed in the Living Situation Survey. This work will provide important information, but a full scale test of the LSS as a part of a national survey would provide higher quality and more definitive information.

Target of Opportunity Nine: Finding the Missing Men: Special Populations

Explore, with the Department of Justice and the Department of Defense, the possibility of including military and prison populations in some surveys.

Rationale: Fathers in the military and in prison are part of the undercount problem. Like the lack of permanent living arrangement, the absence of these populations from national surveys distorts the identification of who and where fathers are and how they affect their children's development. Moreover, the household sampling frame for most of our national surveys would continue to exclude these populations even if we expanded the definition of living arrangement in those surveys. Prison surveys indicate that over two-thirds of the men in prison are fathers; given the relatively young age of men in prison, many have children who are still minors. Some urban areas are heavily affected by the criminal justice system, with 25% or more of young men in jail or prison. Similarly, men in military barracks are missing from household sampling frames as well. Methods should be identified that permit these populations to be included in our surveys, or special surveys of these populations should be developed so that they can be combined with, or be used in conjunction with, other national data collection efforts.

Implementation Status: A subcommittee of the Data Collection Committee has been formed to explore improving data collection and comparability of data collection of institutionalized populations. The subcommittee is chaired by the National Institute of Justice with participating members from the Bureau of Justice Statistics, The Administration for Children and Families/ Department of Health and Human Services, Department of Education, and National Center for Health Statistics. We are exploring with the Department of Defense whether they would like to co-chair this effort which would be expanded to cover military personnel or lead a parallel effort.

Target of Opportunity Ten: Expanding Data Collection Sources

Explore the possibility of using state administrative data to augment national survey data about fathers.

Rationale: One of the most complex data problems involving fathers is that it is difficult to collect any information about nonresident fathers. Direct interviews of resident and nonresident parents double the cost of collecting information and information asked of the resident parent, about the parent who lives elsewhere, is often unreliable. There is currently an expansion of information being collected at the state level on nonresident parents as part of new mandates on the child support enforcement system. These mandates may make it possible to add some income, employment and location information to survey data without conducting two interviews.

Implementation Status: The State and Local Data Committee will explore the feasibility of testing the use of state administrative data to augment national survey data about families. The Committee will review current efforts, and identify issues and constraints, e.g., privacy, informed consent, and survey integrity.

Continuing the Public-Private Partnership

The general approach taken in the selection of these targets of opportunity was to identify a mix of activities that would produce significant improvements in how data on fertility, family formation and fathering is collected and that could provide a broad research community with more accurate and complete information on factors that affect family and child well-being. The opportunities selected are not the only options for accomplishing these objectives, but, in the considered judgement of federal staff and researchers, appeared to be the opportunities with high potential for success and ones that would benefit from the Forum's Federal leadership. Critical to the selection of activities were issues of timing, staff resources, and agency commitment.

Costs associated with each of the ten targets of opportunity have been discussed, but those discussions are not included in this volume. Some projects will be done as part of competitively-awarded government contracts, other activities will be negotiated as part of ongoing agency administrative or intramural research expenditures. Some projects are soliciting support from private foundations. These investments are likely to have a high payoff, not just to our understanding of the dynamics of fatherhood, but is our understanding of how children are affected by the family and community context in which they live.

An organized, well-thought out, interdisciplinary plan for improving information on male fertility, family formation and fatherhood has the potential to cost less than ad hoc project development, or to cost no more, but with a substantial increase in the quality and quantity of available information. By building on agencies' existing plans and by coordinating question development across agency surveys, inefficiencies and redundancies can be reduced. Since the preponderance of evidence indicates that father involvement may play a crucial role in promoting child well-being and in helping children make the difficult transition from childhood to productive adulthood, the cost of inaction was thought to be much higher than the cost of concerted action on the part of the Forum and its member agencies.

The success of these opportunities also will depend on the continued participation of foundation and academic and nonprofit research partners. It is hoped that the development of an overall plan and the publication of these conference papers will mobilize resources and focus the attention of

foundations and research experts on activities likely to produce substantial payoffs. Foundation support for this effort has already been strong and likely to continue. This review has also facilitated additional federal agency collaboration in terms of both resource commitments and joint staff efforts. To help in this collaborative effort we have included at Appendix M the names and addresses of prime contacts for each of the Chapters in this report and for the ten targets of opportunities.

There are many other national surveys and data collection activities, other than the ones we mention in this report, that will continue to be very important in increasing our understanding of male fertility, family formation and fathering. The importance of many of these has been recognized, discussed, and incorporated into the activities of this review. It is anticipated that, in addition to the publication of this volume (opportunity one), the work on other recommendations will also move forward. For example, development of the indicators report (opportunity two) and the Data Collection Committee paper on improving information on cohabitation, contact and father-child interaction (opportunity four), will specifically address the current, potential, and unique contributions of these efforts. By working together to push the analytic limits of our current data collection efforts and to thoughtfully expand new data collection efforts we can contribute to the well-being of the children of the twenty-first century.

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