The Determinants of Marriage and Cohabitation among Disadvantaged Americans: Research Findings and Needs

Marriage and Family Formation Data Analysis Project

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Executive Summary

Interventions to promote healthy marriages and strengthen families with unmarried parents are most likely to succeed if they are based on a sound understanding of the determinants of *union formation, stability, and quality*. With this in mind, the Administration for Children and Families contracted with Abt Associates for a review of the quantitative research on this subject. The review was to focus on the influences most relevant to policy. Its objective was to point to important gaps in knowledge and data and analyses needed to fill them. Evidence on disadvantaged families was to receive special emphasis given the compelling societal interest in decreasing the number of poor children growing up in single-parent families. The project also was to provide a companion guide to major national surveys offering opportunities to address key unanswered questions.[1]

The vast size of the literature on marriage and cohabitation determinants and finite project resources prohibited an exhaustive review of the evidence. Rather, we have attempted to sift through key empirical studies and seminal reviews to identify important insights and gaps in the current knowledge base. Our review identified ten broad categories of influences that are especially important. In this summary, we first discuss main research findings and gaps for each influence and then offer observations on cross-cutting research needs.

Ten Key Influences on Marriage and Cohabitation

Basic research covers a wide range of demographic, economic, socio-cultural, and psychological influences, including both dynamic (changing) and static (stable) factors. In this review, we emphasize dynamic factors because they are the most likely targets of policies. We recognize that static factors can play an important role in conditioning the influence of dynamic factors and note these effects where they seem important. As our assignment was limited to basic research, we do not cover studies of the effects of policies and programs on unions.

Here we summarize the main findings and unanswered questions for each of our ten major influences on marriage and cohabitation. The first three influences are **demographic** processes: early and non-marital childbearing, transitions to marital parenthood, and non-marital cohabitation. These processes establish a framework for reviewing economic, socio-cultural, and psychological explanations. Under the **economic** heading, we examine the effects of changes in the fortunes of women and men, respectively. Two key **socio-cultural** influences are the changing social significance of marriage and cohabitation and varying gender role expectations within relationships. Three final influences cover **psychological** aspects of couple interaction and their connections to personal characteristics and wider social and economic contexts.

1. **Teen and Non-Marital Childbearing.** To what degree might reducing early and non-marital childbearing lead to more marriages? Researchers have used event history analysis to trace the connections between non-marital fertility and subsequent union experiences. Teens and adults who do not marry within a short period after birth face substantially diminished long-term marriage prospects. The near-term aftermath of a premarital pregnancy is a somewhat

[1] See Burstein *et al.* (2003).

elevated likelihood of marriage, although legitimization rates for non-marital pregnancies (i.e., "shotgun marriages") have greatly diminished in recent decades, especially among blacks. For single men and women, cohabitation has become nearly as likely a response to pregnancy as marriage. Both pregnancies and births lead to sharp increases in marriage among cohabitors, however. Although shotgun marriages are unstable compared to marriages formed prior to the onset of childbearing, there does not appear to be a greater risk of marital disruption for women who marry some time after a non-marital birth (most likely to someone other than the father). The effects of teen childbearing on later marital stability have not been ascertained, although there is strong evidence of greater instability for teen marriages. The impacts on subsequent union quality of early or non-marital childbearing also are largely unexplored. Future research on this topic should put more emphasis on understanding why non-marital childbearing reduces marriage prospects and the circumstances that may moderate its effects. Indications that non-marital births are premised on weak marriage expectations from the start suggest a need for further research on the determinants of non-marital childbearing.

2. **Transitions to Parenthood.** In the period following first births, some couples may benefit from services that help them to adjust better to their new roles as parents. Careful longitudinal observation of convenience samples of middle-class white married couples document consistent, albeit modest, declines in average relationship quality in the initial year or two after a first birth. Larger declines have been documented for couples where there was poor communication, depression, and stress prior to birth and when births resulted from unplanned pregnancies or were girls. Researchers have not made much progress in distinguishing the direct effects of births from the effects of other factors that decrease marital quality over time. The causal problem is complicated by the fact that children also bring couples new pleasures and have a positive net effect on union stability. Although the ratio of stress to satisfaction may be higher for poor couples and those in informal relationships (who typically are less committed to each other), there has been very little research on transitions to parenthood among these populations. A broader research agenda on the effects of children on unions would encompass stresses that arise when children reach adolescence and the tensions characterizing step-parenting situations.

3. **Effects of Cohabitation on Marriage.** There is concern that cohabitation is replacing marriage with a less stable arrangement and fostering attitudes detrimental to subsequent marital quality and stability. Descriptively it is clear that the rise of cohabitation occurred at the same time marriage increasingly was being postponed, but the degree to which cohabitation is a *cause* of later marriage has not been established. Analysis of the 1980s shows little evidence of increasing fertility rates within informal unions, although increased cohabitation meant a higher fraction of non-marital births were to cohabitors. Judging from union transitions following non-marital pregnancies, cohabitation is mainly a prelude to marriage for whites and an alternative to single parenthood for blacks. The most sophisticated studies have found that, although cohabitation engenders somewhat more liberal attitudes towards divorce, it does not increase the likelihood of marital disruption. Replication to confirm these results would be helpful. Initial findings of a negative association between cohabitation and marital quality would benefit from re-analysis using more sophisticated techniques for addressing biases. Indications of counterbalancing positive effects of cohabitation from increased age at marriage and improved information on potential spouses also deserve further research. The increased popularity of cohabitation suggests a

need for ongoing study of recent cohorts to see if cohabitation is becoming a more fully institutionalized family form, as in parts of Europe. More research is needed on the decision processes leading from cohabitation to marriage. Rather than treating cohabitation as a uniform outcome, research on cohabitation should take a wider variety of forms of cohabitation as its object.

4. **The Surge of Low-Income Women into Jobs.** How has moving low-income women from welfare to work affected their chances for forming and maintaining healthy unions with men? The traditional view holds that women's employment deters unions by reducing the advantages of role specialization within marriage, but more recent thinking has it that women's earnings are increasingly necessary for marriage in an era of rising consumption standards. Analysts using different datasets, measures, and statistical techniques alternatively have found both positive and negative effects on marriage from women's employment and earnings. Analyses of racial differences similarly have not found consistent patterns. The findings are difficult to weigh, given that they are subject to multiple sources of bias (e.g., selection, reverse causation, and restriction to young adult years) and cover a period in which causal effects may have been changing. More confirmation is needed of findings that effects of women's economic status may be growing more positive, and we need more information about the factors that may be contributing to such a change (e.g., increasing acceptance of female labor force participation, increasing consumption aspirations). Several studies suggest that the effects of women's earnings on marriage may be positive at lower income levels and negligible or negative at higher income levels. It would be useful to examine interactions between women's economic status and a wider array of indicators of socio-economic disadvantage. Finally, more direct investigation of causal mechanisms would be useful—especially whether working affects women's perceptions of their power within relationships, whether men see women's earnings as a positive attractor, and how work affects social networks and associated marriage and cohabitation possibilities for single mothers leaving welfare.

5. **Men's Economic Status.** Calls to improve unskilled men's economic prospects have been an important aspect of discussions of alternative approaches to marriage promotion. The expected positive effects of men's economic status derive largely from the emphasis society traditionally has placed on men's fulfilling the primary breadwinner role. Recent research consistently indicates that the male breadwinner role continues to matter: men's economic status is positively related to their likelihood of getting and staying married. Better-off men also are somewhat more likely to start cohabiting than remain single, and more likely to marry if they are cohabiting. That said, analyses typically have found that men's economic statuses do not explain very much of the variation in marriage at any given time, over time, or across racial and ethnic groups. The concept of men's economic status is multi-dimensional and requires better specification than it typically has received—one promising approach emphasizes career development processes. For the most part, the absolute difference between husbands' and wives' resources has not been found to be as important as whether or not wives have resources: when they do not, their husband's income matters more. How steady increases in women's economic status may be affecting the importance of men's earnings for marriage and cohabitation is an important topic for further study. Studies of variation in responses within the general population of disadvantaged men are needed to gauge the nature and extent of economic improvement required for meaningful impacts on marriage.

6. **The Meaning of Marriage and Cohabitation.** Evidence of declines in the significance of marriage has inspired many in the marriage movement to view culture change as fundamental to the success of efforts to re-institutionalize marriage. The vast majority of people continue to see marriage as important, but the standards against which they are assessing the case for marriage appear to have changed. Whereas marriage once was regarded as an inevitable and central aspect of life, now alternatives such as single parenting, cohabitation, and divorce have become acceptable. Decisions about union formation and dissolution now give more weight to perceived short-run benefits and costs. Studies have found that blacks place more emphasis than whites on financial prerequisites for marriage. Although it is likely that such priorities reflect blacks' greater economic difficulties, we know little about how poverty affects the formation of values and expectations. Turning to the effects of values and expectations on unions, a number of studies have found that values pertaining to marriage, divorce, and personal autonomy affect the formation and stability of marriages and cohabitations. Social scientists suspect that many people are setting the bar for marriage too high, placing expected benefits out of reach for many couples and thereby discouraging marriage and increasing marital strife and instability. Ethnographic research generally supports this thesis—especially among poor people—but there has been little quantitative verification. Finally, although we know much about the changing significance of marriage, there has been relatively little direct study of the meaning of cohabitation or of how views of cohabitation affect experiences in both formal and informal unions.

7. **Gender Role Expectations.** An important subclass of expectations concerns norms about the appropriate roles of men and women in unions. In particular, the degree to which people hold traditional gender role expectations—i.e., with men specializing in market activities and women in home production—is thought to play an important role in moderating the effects of economic factors. As women have moved into the workforce, norms about gender roles within marriage have become increasingly egalitarian. Indirect evidence suggests that even more egalitarian norms apply to cohabitation. General population analyses find that more traditional role expectations predict entries to marriage, whereas more egalitarian values predict cohabitation. Studies tend also to find that gender role expectations have an important role in moderating the effects on union stability and quality of men and women's economic statuses. Blacks hold more traditional views of appropriate gender roles than whites, further raising barriers to marriage associated with the poor earnings prospects of many black men. There are, however, indications that people will adjust their attitudes and behaviors, even while continuing to hold onto traditional values. Further research on the processes linking norms, values, attitudes, and behaviors could help to assess the potential for lowering the bar by fostering more positive views among men of home making and fathering roles. Although race-ethnicity differences have been well studied, it is unknown whether traditional views of gender roles are a more general concomitant of poverty, and how gender role expectations affect marriage prospects in low-income populations. Of particular interest is how policies increasing pressures on low-income women to work may be affecting marriage prospects in segments of the low-income population with more and less traditional gender role expectations.

8. **Interaction Processes.** Patterns of behavior and underlying processes characterizing couple interaction strongly predict long-term marital success. Findings from basic research on interaction have many important implications for prevention of relationship distress and treatment of distressed couples. Extensive observation of convenience samples of largely

white, middle-class married samples shows that couples who exchange few positive behaviors relative to negative ones, and who criticize or express belligerence and contempt, are especially likely to experience marital disruption. Patterns, such as negative reciprocity and "demand-withdrawal" behavior, have substantial potential for escalation. Cognitive factors (e.g., negative attributions), emotional expressions (e.g., negative affect), and physiological arousal (e.g., nervous system "flooding") all play important roles in determining the quality of interaction. To date, much of what we know is based on measurements in psychologists' laboratories, and there has been insufficient research in natural settings and on low-income couples. The rising importance of non-marital cohabitation, especially for low-income population, suggests an urgent need for comparative study of interaction across more varied types of unions and for research on the effects of differences in patterns of interaction on long-term relationship outcomes. Given how well early marital interaction predicts later outcomes, it would be helpful to understand better the processes at work during even earlier stages of relationship formation.

9. **Intrapersonal Influences on Interaction.** Efforts to develop broader social-psychological theories of couple interaction have argued the need to understand the effects of enduring personal characteristics and of social and economic environments in which interaction occurs. Relatively stable background characteristics such as education, ethnicity, and early childhood experiences affect marital outcomes indirectly through their influence on expectations, values, and appraisals and, ultimately, on positive, negative, and problem-solving behaviors during interaction. Personality characteristics such as neuroticism and depression also can interfere with cognitive, affective, and physiological responses needed to sustain positive interaction. Understanding the role of such factors is essential in preventing and treating relationship distress. Researchers have begun to study the direct and moderating effects of personal dispositions among middle-class married couples. There has been little research on disadvantaged couples or informal unions, however. The former, in particular, deserve attention: lower levels of education and higher levels of depression, mental illness, and substance abuse suggest serious barriers to maintaining healthy relationships for low income couples.

10. **Contextual Influences on Interaction.** Many environmental conditions—including virtually all of the demographic, economic, and socio-cultural factors assessed for this review—can influence couple interaction and moderate its effects on union outcomes. Understanding these linkages is critical to knowing when and how environmental changes might be beneficial and identifying strategies for helping couples function better in challenging environments. Cultural differences in norms and values governing interpersonal behavior may help to explain subgroup variation in approaches to problem-solving communication. Another important contextual influence is exposure to stressful events. In particular, financial stress has been observed in prospective studies to have strong negative effects on marital quality and stability. Both chronic and acute stresses—the latter arising from events such as a job loss, car breakdown, or eviction—can wreak havoc on the effortful cognitive transformations required to sustain positive couple interaction. Understanding why some couples are more resilient than others in the face of stress may lead to clinically useful insights. There are strong indications that spouses who exhibit supportive behaviors when their partners lose a job greatly ameliorate the negative effects of stress on their relationships. Most of the research on financial stress and job loss to date has pertained to outcomes for convenience samples of middle-class white married couples. Hence, although the

coincidence of multiple sources of stress is likely to be especially damaging for poor peoples' relationships, we know little about such effects. Furthermore, virtually all of the research on this topic has pertained to engaged or married couples. There is a pressing need for more research on interaction within informal unions and on processes during early stages of relationship formation.

Cross-Cutting Research Recommendations

Having summarized findings and needs for key influences, this section discusses important cross-cutting research needs. Our recommendations speak to needs concerning study populations, measures of outcomes and influences, the role of time, establishing causation, and conducting policy-relevant basic research.

1. **Study Influences within Disadvantaged Populations.** The vast majority of analysis to date has paid little attention to interactions between influences and indicators of socio-economic disadvantage other than race-ethnicity. Results thus are uninformative about the likely responsiveness to exogenous (policy-driven) changes in demographic, economic, socio-cultural, and psychological influences of populations of concern to policy. There is a compelling need for more comparative research on populations distinguished by characteristics such as family background, education, poverty, and neighborhood environment.

2. **Include Both Men and Women in the Analysis.** Better data collection on men has enhanced our ability to determine the effects of both (potential) partners' attributes on union formation, stability and quality. Researchers are exploring the role of differences in characteristics between partners, as well as the degree to which the effects of one partner's characteristics depend on the other partner's characteristics. It is harder to identify the relevant potential partners for analyses of union formation than for analyses of union stability and quality (where the identities of both partners are relatively easy to determine). More research on the social networks defining marriage and cohabitation "markets" and data on both partners in more casual dating relationships are steps towards addressing this need.

3. **Study Varied Types of Unions.** Although the traditional marriage research paradigm stressed first marriages, the rise in divorce and remarriage has brought increased interest in step-family arrangements. The determinants and dynamics of later unions—cohabitations as well as remarriages—are likely to differ from those of first unions due to different kinds of relationships with children from prior relationships compared with biological children, and because experiences in prior unions are likely to affect behaviors in current ones. Compared with marriage, the forms of cohabitation may be more varied. There are likely to be different modal forms of cohabitation—differentiated in terms of frequency, exclusivity, long-term functioning, and other attributes. Particularly among disadvantaged groups, informal living arrangements are more fluid and may be perceived differently by each partner. Research on the determinants and consequences of cohabitation needs to identify and study the determinants of varied types of living arrangements.

4. **Pay More Attention to Relationship Onset.** Researchers have tended to study marriage and cohabitation as discrete states. A more satisfactory understanding of transitions to and from unions requires studying how partners meet and decide they are interested in each other, and the processes governing commitment and eventual decisions to cohabit and marry. As an example, the work place has become an important setting where couples meet, and more attention to the norms and other characteristics of work settings as influences on relationship start-up and later stability could be valuable.

5. **Agree on the Definition and Measurement of Union Quality.** Relationship quality is a complex construct, and yet it lies at the center of current policy interest in promoting healthy marriages. Researchers have used a myriad of definitions and measures—variously drawing on subjective assessments and objective characteristics of relationships—in studying influences on quality. Standardization on valid and reliable measures would help greatly in comparing results across studies and providing policy researchers with stronger measures for use in program evaluation.

6. **Improve Definitions and Measurement of Certain Influences.** A number of important influences require clearer definition and improved measurement. One example is the concept of the "importance" or "significance" of marriage and cohabitation. Indicators variously include general values, values applying to specific aspects of unions, benefits and obligations people believe derive from unions, and expectations they apply to their own relationships. Another concept needing refinement is "economic status," which can be measured in material or social terms, as current or projected future quantities, and in absolute or relative terms (e.g., in relation to consumption aspirations or partner's status).

7. **Analyze Effects over the Life Course.** Researchers increasingly are exploiting panel data to examine the effects of factors measured at one point in time on later outcomes. These analyses often do not specify the ages at which outcomes occur, and the data often are weighted towards the early adult years. It thus is difficult to determine whether a measured response to a particular influence is a temporary effect (e.g., postponed marriage) or a permanent response (e.g., non-marriage). Improved analysis requires following sample members over a longer portion of the life course[2] and testing interactions between age and (appropriately lagged) measures of influences.

8. **Study Recent Experience and Compare Influences across Cohorts.** Recent decades have witnessed dramatic changes in attitudes and behaviors regarding marriage and cohabitation. The substantial potential for change in the effects of determinants indicates a need for ongoing analysis of virtually every topic. Due to lags in data collection and analysis, most of what we currently know about influences on marriage and cohabitation is based on survey data from the 1980s. Because successive cohorts experience the same phases of life in different social and economic environments, cross-cohort comparisons of effects are needed to absorb fully the implications of period change. Researchers have made valuable

[2] Retrospective history information from older respondents may suffice for some analyses, whereas long-term prospective designs will be needed in the many situations where poor recall compromises data quality. In general, analyses of first unions require measurement through at least peoples' early 40s, and analyses of subsequent experiences require observation through at least their 50s.

contributions through cohort comparisons using data from successive cross-sectional surveys, a form of analysis that ought to continue in the future.

9. **Study Interactions between Influences.** Piecemeal study of various demographic, economic, socio-cultural and psychological determinants has led inescapably to the conclusion that the influences on marriage and cohabitation are many and complex. The next generation of research must devote substantial attention to overarching conceptual frameworks that accommodate all major influences and interactions between influences. Of particular importance is the need to specify the linkages between factors external to couple relationships and the internal relationship processes that directly affect union formation, stability and quality. The advent of richer survey databases—particularly the Fragile Families surveys and National Survey of Families and Households—already has encouraged movement in this direction.

10. **Develop and Apply Stronger Methods for Establishing Causation.** During the past decade, researchers have made progress in addressing the chief threats to causal inference: selection bias and reverse causation bias. More sophisticated techniques have not always provided definitive answers, but they certainly have revealed much about the existence and nature of biases plaguing simpler multivariate analyses. Continued work in this area is highly desirable. Stronger conceptual frameworks, richer measures, and careful sensitivity testing are needed in analyses relying on controls for observed heterogeneity. Where possible, fixed effects models and natural experiments should be used to measure and adjust for unobserved heterogeneity. Temporally ordering independent and dependent measures is a good initial step to clarifying the direction of estimated effects: more convincing analysis requires use of theoretically grounded models and structural equation methods. Finally, planned experiments where program impacts are limited to a single influence of interest provide exceptional opportunities to ascertain effects of a wide range of determinants (e.g., teen childbearing, employment and earnings, type of neighborhood) on marriage and cohabitation, even when programs did not explicitly seek to alter union outcomes.

11. **Strengthen the Usefulness of Basic Research for Policy Development.** Following the above recommendations and targeting the right influences and subpopulations for study will lead to substantial policy-relevant knowledge, as well as advances in basic science. It remains only to encourage social scientists to make the policy relevance of their research questions explicit and take a few additional steps to enhance the interpretability of their results. For policy readers, it would be very helpful if researchers could make it a standard practice to translate their effect estimates into metrics that clearly indicate the absolute amount of change associated with a comprehensible amount of change in the independent variable. Simulations of levels of marriage, divorce and other outcomes for subgroups with differing sets of values for key independent variables also would be very useful.

Data Needs for Research

Progress in addressing the research needs identified in this report requires pertinent and timely data. In the body of this report we discuss, for each broad influence, the kinds of data needed to answer outstanding questions. Aspects covered include basic measures, samples, data collection methods, and data structure. A companion document accompanying this report (Burstein *et al.* 2003) takes the next step of describing the degree to which each of nine major national surveys can be used to further research on important unanswered questions on the determinants of marriage and cohabitation.

Chapter 1
Introduction

The search for solutions to problems facing the American family has arrived at the doorstep of marriage. Efforts of the 1990s emphasized financial independence through work, and family services to promote children's well-being. In the face of continuing high levels of non-marital childbearing and divorce, attention has turned to relationships between parents. Policymakers are asking how government can promote the well-being of children by strengthening marriage and, where marriage is infeasible, by strengthening relationships between unmarried parents.

The Administration for Children and Families (ACF) is the lead federal agency charged with developing and testing new initiatives in this area. Since this is a relatively new subject of explicit social policy concern, basic research on marriage and cohabitation has an important role in developing policies and programs. In response, Abt Associates was commissioned to review the basic research literature on determinants of marriage and cohabitation, with special emphasis on disadvantaged Americans and opportunities for addressing critical gaps in current knowledge.

The goals of basic research in this area are, first, to describe marriage and cohabitation experiences and, second, to understand their causes and consequences. For many scholars, advancing knowledge of a crucial area of human behavior is more than a sufficient justification for this research. However, basic research also can play an important role in developing policies to strengthen families. Key uses include identifying outcomes warranting societal concern, identifying causal factors that seem promising as targets of intervention, and anticipating how contextual factors might moderate program impacts.

A distinctive emphasis of this report is its emphasis on disadvantaged families. Children who grow up in single parent families run an increased risk of lagging social and emotional development in early childhood and adolescence, failure in school, limited career prospects, and unmarried parenthood compared with those from stable two-parent families (Amato 2001; McLanahan 1997; McLanahan and Sandefur 1994). Relationship experiences, and influences on these experiences, are likely to differ because low-income Americans' interactions occur in very different—often more stressful—personal and environmental contexts than those experienced by middle class persons (Ellwood and Jencks 2001; Ooms 2001).

A review of research on the determinants of marriage and cohabitation presents many challenges. The pertinent literature is vast (indeed, this may be one of the most studied subjects in the social sciences), and the issues are numerous and complex. To keep the effort within manageable proportions, we have leaned heavily on relatively recent empirical work and seminal reviews. The review focuses on dynamic (i.e., changing), rather than on static (i.e., stable), determinants, as the former are more plausible targets for interventions. We do not assess directly the evidence on the effects of policies and programs, as this substantial literature lies outside the scope of a review of basic research.

In this chapter, we introduce the key concepts framing our review. We then summarize significant trends, and socio-economic differences, in marriage and cohabitation outcomes. After a brief note on assessing research quality, we provide an outline for the remainder of the report.

1.1 Key Concepts

The major outcomes in this review are the formation, stability, and quality of co-residential unions (i.e., marriage and cohabitation) between men and women. Definitions of marriage and cohabitation are relatively consistent across studies, with marriage indicating a clear legal status and cohabitation indicating co-residence without marriage. Of the two, cohabitation clearly is the more ambiguous concept, as perceptions of whether a couple is "living together" may depend on the night of the week and each partner's interpretation of the relationship. Surveys are typically fairly consistent in leaving it to respondents to decide whether or not they are living together, however.

Compared with entries and exits to unions, the concept of relationship quality—which lies at the heart of policy interest in promoting "healthy" marriage—is relatively complex (Fincham *et al.* 1997). Illustrative is Halford *et al.*'s (1997) definition of a healthy relationship as:

> *A developing set of interactions between partners which promotes the individual well-being of each partner and their offspring, assists each partner to adapt to life stresses, engenders a conjoint sense of emotional and sexual intimacy between the partners, and which promotes the long-term sustainment of the relationship within the cultural context in which the partners live* (p. 8).

Definitions and measures of relationship quality vary widely in the empirical literature. One basic distinction is between definitions relying on self-reported happiness in a relationship; those tied to more objective aspects of relationships (e.g., good communication, positive interaction, absence of conflict); and indices combining subjective and behavioral aspects (Bradbury *et al.* 2000; Glenn 1990, 1998).[3] Varied definitions can lead to different results across investigations of the same determinants.

Another important concept in this review is "socio-economic disadvantage." In general, we are interested in the determinants of marriage and cohabitation for people who face limited economic opportunities. The construct also is a multi-dimensional one, encompassing aspects as varied as: family background (e.g., parents' education and income, growing up in a single-parent family); race-ethnicity; education; income; and residence in distressed neighborhoods. In principle, any of these characteristics might indicate useful subpopulations for research. An important proviso is that restricting samples to disadvantaged persons should not bias estimated effects of influences on union outcomes—as might happen if we selected our sample on the basis of a characteristic that could be affected by union experiences.

Although there have been many comparisons of influences by race-ethnicity, this characteristic is a poor proxy for economic disadvantage. Most blacks are not poor (Bachrach 1998), and observed differences by race-ethnicity confound cultural with economic factors. Accordingly, we are interested in studies of subgroups defined using more direct indicators of socio-economic disadvantage. These analyses ideally will look beyond the main effects of such indicators to examine how influences operate differentially across groups (i.e., specifications should include the interaction

[3] Bradbury *et al.* (2000) warn that past use of indices mixing subjective and objective aspects of quality created the potential for spurious association in studies of the effects of marital interaction on marital quality. This problem does not arise in studies of most other influences.

between determinants and disadvantaged status). As we will see, to date there has not been a great deal of quantitative research of this kind.

1.2 Recent Trends and Differentials

In this section, we summarize some of the key descriptive facts framing research on marriage and cohabitation determinants. Where possible, we compare statistics on union formation, dissolution, and quality by level of education—a relatively exogenous indicator of economic opportunities.

The key fact about **entries to marriage** is that people are marrying later. The shift to later marriage has been especially pronounced at the highest levels of education. Among the top third most-educated women, the fraction married by age 25 fell from 79 percent of women born in 1940-44 to 54 percent of those born in 1960-64 (Ellwood and Jencks 2001, Tables A10 and A12). For the bottom educational third, the fraction started higher and fell less, declining from 88 to 69 percent. With age, however, the percentages ever married of more and less educated women converge. By age 35, rates by education are virtually identical at close to 92 percent for the 1940-44 cohort and 83 percent for the 1960-64 cohort.

Although better-educated women increasingly are postponing childbearing as well as marriage, less well-educated women have become more likely only to postpone marriage. One in three women in the bottom educational third had a pre-marital birth, compared with one in ten in the top educational third (Ellwood and Jencks 2001, Tables 8 and 10). As a result, single parenting increased only among women in the lowest two educational thirds—notwithstanding that the latter were just as likely as better-educated women to ever marry (*ibid*, Figures 1-4). The result deserves emphasis: it is the increasing propensity to have non-marital births, rather than increasing avoidance of marriage, that has fueled the disproportionate rise in single parenting among poor women.

Rates of **marital disruption** increased steadily from 1960 to 1980 and declined thereafter (Casper and Bianchi 2002, Figure 1.8; Heaton 2002, Figure 1). Although we could not find statistics on trends by level of education, published statistics from the 1995 National Survey of Family Growth show a strong positive cross-sectional association between education and marital stability. After 10 years, 42 percent of marriages had dissolved among women with less than a high school degree, compared with 29 percent among those with some education beyond high school (Bramlett and Mosher 2002, Table 21).

Average **marital quality** appears to have declined somewhat in recent decades. Waite (2000) reports modest declines in the percent saying they are very happy with their marriages from 1972-96, declines that persist after controlling for socio-demographic characteristics. A comparison of married 20-35 year olds in 1980 and 1992 showed declines in the quality of self-reported couple interaction, little change in marital happiness, and increased adherence to the idea of marriage as a long-term commitment (Rogers and Amato 1997). We found no evidence addressing the question of whether or not trends in marital quality have differed by socio-economic status.

The rise in non-marital **cohabitation** has been one of the most significant trends of recent decades. The proportion cohabiting before age 25 grew from 8 to 33 percent between the 1940-44 and 1960-64 birth cohorts (Bumpass and Sweet 1989, Table 3). By 1990-94, 54 percent of all first unions were

informal unions, and 52 percent of all marriages involved cohabiting partners (Bumpass and Lu 2000, Table 3).

Cohabitation has been consistently more prevalent, and has grown faster, among less well-educated persons than among better-educated ones. Among women aged 15-44 with less than 12 years of school, the proportion ever cohabiting increased from 43 to 59 percent from the late 1980s and mid-1990s, but among women with four or more years of college it grew only from 31 to 37 percent (Bumpass and Lu 2000, Table 4).

Bumpass and Lu report that the **instability of informal unions** has increased in recent decades. They speculate that this shift reflects changes in the pool of cohabitors rather than changes in the nature of cohabitation *per se*.[4]

Cohabitation is much less likely to **lead to marriage** among less well-educated partners than among better educated ones. The fraction marrying within five years was only 28 percent among women with less than a high school degree, but 60 percent among those with some post-high school education (Bramlett and Mosher 2002, Table 13). Nonetheless, the unions of less well-educated women were somewhat more likely to **be intact** after five years (55 percent) than those of better-educated women (50 percent), implying substantially longer durations of cohabitation among the former than the latter (*ibid*, Table 15).

We found no analyses of trends or socio-economic differences in **relationship quality in informal unions**. Simple comparisons typically reveal lower levels of satisfaction, and poorer quality interaction, among cohabiting than among married couples (Waite 2000). Such differences appear largely to be due to initial differences in the characteristics of those who cohabit and those who marry, rather than to the direct effects of cohabiting or marrying (Musick and Bumpass 2002).[5]

1.3 Assessing Research Quality

The key requirements for strong quantitative research on determinants of marriage and cohabitation are representative samples of the populations of interest, good (valid and reliable) measures for key dependent and independent variables, and convincing statistical methods for establishing causation.

The third requirement can be the most difficult to meet. The only highly credible approach to measuring causal relationships is to conduct a randomized experiment, but experimental manipulation of independent variables is rarely an option in basic research. Accordingly, researchers must rely on non-experimental statistical techniques, which are vulnerable to serious biases.

[4] They explain "As cohabitation becomes increasingly accepted, cohabitations may include a greater proportion of couples with less serious commitments—who decide to cohabit as a matter of temporary convenience—leading to lower marriage and higher dissolution rates for the cohabiting population as a whole (p. 33)."

[5] Another analysis also found that initial differences in relationship quality vanished when married couples were compared to the 76 percent of cohabiting couples who said they had plans to marry, rather than with all cohabitors (Brown and Booth 1996).

One type of bias arises when both the independent and dependent variables are influenced by some unobserved third factor. This problem is known as **selection bias**, or unobserved heterogeneity. The most common response is to *control for observable confounding influences*. The most convincing studies relying on observed controls provide a clear discussion of likely selection mechanisms, include well-measured indicators for these mechanisms, and discuss the robustness of results to alternative specifications.[6] A second response is to attempt to directly *control for unobserved heterogeneity*. Typically, researchers exploit variation in independent and dependent variables over time within individuals, thereby avoiding biases due to selection on unobserved characteristics in cross-sections. Such studies can be relatively convincing if they are well executed, but many data sets do not offer the variation needed to identify causal effects with high precision.

A second problem occurs when there is potential for influences to be determined by, as well as determine, outcomes of interest. This problem is known as **reverse causation bias**. The most common response is to make sure that measurement of independent variables is taken for a time point prior to measurement of dependent variables, such as by including lagged measures of employment in an analysis of the effects of women's employment on divorce. This response is not foolproof, since it is still possible that women work because they see divorce as likely. The more direct approach is to estimate models based on structural equations that allow for recursive relationships. Applying these methods requires greater technical sophistication and additional statistical assumptions, and we found only a handful of studies that used them.[7]

1.4 Organization of this Report

The rest of this report reviews findings on ten important themes in research on determinants of marriage and cohabitation. The ten themes represent a variety of demographic, economic, socio-cultural, and psychological influences. Our chosen themes identify the topics that we found most salient in research over the past decade or so, rather than provide an exhaustive account of determinants. For each broad category of influence, we summarize the main research findings, identify high priority research topics, and describe associated data needs.[8] In reviewing work on each broad influence, we also try to point out potentially important interactions with other influences.

Chapter 2 explores the key demographic processes influencing marriage and cohabitation. Separate sub-sections examine research on the effects of early and non-marital childbearing, of transitions to marital parenthood, and of non-marital cohabitation. These processes establish a framework for the economic, socio-cultural, and psychological determinants examined in Chapters 3 through 5.

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[6] It occasionally is possible to find an alternative indicator for an influence whose variation may be relatively independent of confounding influences—such analyses are referred to as natural experiments. An example is Nock (1998), who controls for family background by comparing entries to cohabitation and marriage for brothers who did and did not have a pre-marital birth.

[7] Lillard and his colleagues' work on the interdependency between marriage and fertility—which adjusts for both selection and reverse causation—is especially noteworthy. See Lillard and Waite (1993), Lillard *et al.* (1995), and Upchurch *et al.* (2001, 2002).

[8] A companion document (Burstein *et al*. 2003) provides a guide to nine major national data sources that offer opportunities for developing research projects.

Chapter 3 considers key economic influences on unions. Its two sections examine the effects of changing fortunes of women and men, respectively. Chapter 4 explores socio-cultural shifts that have led to profound changes in the social significance of marriage and in role expectations for men and women within relationships. Chapter 5 shifts from external factors to the interior processes in couples' relationships. First, we examine research focusing on couple interaction. Then, we discuss research on the connections between interpersonal interaction, intrapersonal characteristics, and the wider social and economic contexts in which interaction occurs.

Chapter 2
Demographic Influences

Childbearing and previous union experiences have important influences on union formation, stability and quality. There is little unique theory underlying demographic influences, which affect union outcomes through economic, socio-cultural, and psychological mechanisms. Demographic events deserve separate attention, however, because of their importance as influences and as potential intervention targets.

This chapter reviews research on three demographic influences. Section 2.1 assesses the evidence on teen and non-marital fertility. Section 2.2 considers the literature on transitions to marital parenthood. Section 2.3 assesses research on the bearing of pre-marital cohabitation on subsequent marriage experiences.

2.1 Teen and Non-Marital Childbearing

One strategy raised in connection with marriage promotion aims to reduce early and non-marital childbearing. Proponents argue that early and non-marital childbearing are important negative factors in marriage formation, stability, and quality (Sawhill 2001) and point to evidence that programs can reduce teen pregnancy exist (Kirby 2001) and enjoy broad public support.

The connections between fertility and union outcomes have received substantial attention in basic research. This section reviews the literature on early and adult non-marital childbearing. Section 2.2 discusses a closely related subject—marital childbearing's effects on marital stability and quality.

Research Findings

There is substantial descriptive evidence linking **early non-marital childbearing** to reduced marriage prospects. Life table analyses show that women who have non-marital first births in their teens or early 20s are substantially less likely to marry by their mid-30s than women who do not have early non-marital births (Bennett *et al.* 1995; Lichter and Graefe 2001; Lichter *et al.* 2001). Statistics from the 1995 National Survey of Family Growth indicate that 73 percent of women who had a teen non-marital first birth had ever married by age 35, compared with 88 percent of women who had no non-marital birth (Lichter *et al.* 2001).[9]

Whether early non-marital childbearing *causes* non-marriage is another question, since the same characteristics that make women more likely to have teen non-marital births also could make them less likely to marry. Lichter and Graefe (2001) compare transitions to marriage for women who had children as teens with those who had miscarriages as teens, to control for unobserved characteristics

[9] Lichter and Graefe (2001) do not provide statistics for women who specifically did not have a teen non-marital birth, which would be another interesting comparison.

that might be associated with both becoming pregnant and subsequent marital outcomes. By age 35, 73 percent of the former and 87 percent of the latter had married. Based on this finding, they conclude that "causal arguments…cannot be rejected (p. 337)."

There has been substantial research on the effects of **non-marital pregnancies** and births among women in general. Interest in pregnancies focuses on the strength of social pressures to legitimate births, whereas studies of non-marital births tend to focus on associated barriers to marriage over the long term.

Ackerloff *et al.* (1996) find that declines in the fractions of premaritally-conceived pregnancies resulting in marriage – that is, "shotgun marriages" – accounted for most of the increase in the non-marital first birth ratio from late 1960s to late 1980s.[10] In their view, the shift was precipitated by improved family planning technology, which led to changes in women's economic roles, reduced stigma for non-marital childbearing, and greater difficulty for women in enforcing a bargain to marry following an non-marital birth.

Upchurch *et al.* (2001) find that pre-marital pregnancies remained a significant, if diminished, impetus to marriage in the 1980s. Their analysis, based on data from the National Longitudinal Survey of Youth, uses sophisticated methods to adjust for unmeasured heterogeneity (selection bias) and biases arising when childbearing decisions respond to, as well as influence, marriage prospects (endogeneity).

Researchers have found fairly consistent evidence that **non-marital births** reduce the likelihood of subsequent marriage (Bennett *et al.* 1995; Lichter and Graefe 2001; Upchurch *et al.* 2001). Effects are small for all women but larger when analysts exclude women marrying within six months of birth, a proxy for marriage to biological fathers (Bennett *et al.* 1995; Lichter and Graefe 2001).[11] Controlling for cohabitation status at birth also produces a larger negative effect, indicating that cohabitors' greater propensities both to have children and marry suppresses part of the effect of non-marital childbearing (Lichter and Graefe 2001).

Analysts have hypothesized that non-marital childbearing operates to reduce marriage prospects through a number of channels. Bennett *et al.* (1995) investigate the possible contributions of stigma, welfare benefits, and reduced time for dating, and find little support for any of these hypotheses. Lichter and Graefe (2001) speculate that male partners shy away from the emotional and social costs associated with another man's children and avoid situations where they may have to compete with children for their mothers' attention. Analyzing couples with a recent non-marital birth, however, Carlson *et al.* (2002) find that it is more destabilizing when fathers have children by prior partners than when mothers do so.

The increasing acceptability of cohabitation may be another reason why unmarried mothers choose not to marry. Bennett *et al.* find that out-of-union births increase **transitions to cohabitation**.

[10] Ackerloff *et al.* report that 76 percent of the increase in the ratio of non-marital to marital births for whites and 58 percent for blacks is attributable to changes in rates of legitimization following non-marital pregnancies.

[11] The data on which both studies were based did not identify whether spouses were biological fathers of their wives' children.

Lichter and Graefe do not find such an effect in their replication of this analysis. Nock (1998) analyzes the effects of premarital fatherhood on young men's first union entries using the National Longitudinal Survey of Youth. Like Bennett *et al.*, Nock finds that premarital births increased cohabitation but decreased marriage in the following year. He finds even stronger effects in comparisons between brothers who did and did not have a premarital birth to control for possible unobserved differences in family background associated with births and unions. He speculates that premarital fathers opt for cohabitation rather than marriage to avoid the legal and financial burdens of marital parenthood.

There has been increasing interest in the effects of pregnancies and births on **transitions from cohabitation to marriage**. Analyzing data from the 1987-88 National Survey of Families and Households for cohabiting men and women, Manning and Smock (1995) find that pregnancy has a substantial positive effect on transitions from cohabitation to marriage. Unlike the general population of unmarried parents, Manning and Smock find that the presence of children also increases the likelihood that cohabitors will marry in a given year. In contrast, a Canadian analysis found that children decreased the likelihood of cohabitors marrying but increased the longevity of cohabitation (Wu and Balakrishnan 1995).[12]

Ellwood and Jencks (2001) find that the weakening of the connection between childbearing and marriage decisions has occurred mainly among **disadvantaged women** (measured by education levels). They speculate that less educated women's limited career prospects and an unfavorable marriage market, buoyed by permissive norms and supported by public assistance, make unmarried parenthood the most viable recourse. To the extent that these factors explain transitions to unmarried parenthood, they probably also contribute to reduced marriage prospects thereafter.

Notwithstanding disadvantaged populations' greater propensity for childbearing outside of marriage, there has been surprisingly little research on these populations *per se*. Racial and ethnic differences have been examined in some detail, but many members of racial minority groups are not poor, and the role of socio-economic status in these studies often is not the primary concern. Rather, analysts have paid more attention to the implications of residual differences for cultural variability in norms about childbearing and marriage.

Upchurch *et al.* (2001) report race-ethnicity differences after controlling for education, family background, and contextual influences. They find that although premarital pregnancies have positive effects on marriage for all race-ethnicity groups, effects are twice as strong for whites and Hispanics as for non-Hispanic blacks.[13] Non-marital births have similar negative effects on marriage for all three groups, but the effects of children from a previous marriage are negative only for whites and Hispanics (and not significant for blacks). Manning and Smock (1995) assess race-ethnicity differences in marriage following pregnancies and births to cohabiting couples. Controlling for economic backgrounds, they find that pregnancies increase the probability of marriage for both races but, like Upchurch *et al*, this effect is twice as large for whites as for blacks. Another similarity between the two studies is that the presence of children has similar positive effects on marriage for

[12] Canadian law and culture treat cohabitation much more like marriage than in the U.S. (Smock and Gupta 2002).

[13] Finding little difference in responses for Hispanics and non-Hispanic whites, Upchurch *et al*. combine these groups.

whites and blacks. Finally, Nock (1998) finds that premarital fatherhood has similar effects on marriage (negative) and cohabitation (positive) for whites and blacks.

Another argument for reducing early childbearing is the suspicion that it leads to less stable and lower quality marriages (Sawhill 2001). There has been little research on the direct effects of **early childbearing** on marital disruptions or quality.[14,15]

There have been many studies of whether **non-marital births** among women generally (including teens and adults) reduce marital stability. Descriptive statistics from the 1995 National Survey of Family Growth (Bramlett and Mosher 2002, table 21) show five-year disruption rates twice as high for women whose first birth preceded their first marriage (29 percent) as for those whose first birth occurred more than seven months after marriage (14 percent). Some studies find differences after controlling for observable confounding influences (e.g., Waite and Lillard 1991; studies cited in Teachman *et al.* 1999), whereas others do not (Bumpass *et al.* 1991; Timmer and Orbuch 2001). One analysis that controlled for unobserved factors found no significant causal association between non-maritally born children and disruption of first and higher order marriages (Upchurch *et al.* 2001).

In contrast, Upchurch *et al.* find that legitimizations of premarital pregnancies (i.e., shotgun marriages) have a generally destabilizing effect on marriage.[16] They conjecture that shotgun marriages are less stable because they shorten a mate search process that otherwise might not have resulted in marriage. Studies controlling only for observed confounding influences have tended not to find such an effect (Bumpass *et al.* 1991; Waite and Lillard *et al.* 1991).

Non-marital pregnancies and births to cohabitors in the U.S. have no significant effect on the risk of union dissolution but do accelerate transitions to marriage (Manning and Smock 1995). In contrast, within-cohabitation births reduce union dissolution risks without stimulating marriage for Canadian couples (Wu and Balakrishnan 1995). Smock and Gupta (2002) cite this and other evidence as a sign that cohabitation is a more fully-institutionalized family form in Canada than in the U.S.
Compared with union stability, there is little research on the effects of non-marital childbearing on **union quality**. We found one study relating non-marital childbearing to union quality among cohabiting couples. Analyzing the 1987-88 National Survey of Families and Households, Brown and Booth (1996) find that both biological children and children from previous unions were associated

[14] For example, only one paper in a recent collection of empirical studies of causes and consequences of teen childbearing even touches on effects on marriage. Hotz *et al.* (1997) report that teen mothers spend more years as single mothers by age 30 than other women, but their analysis does distinguish the effects of childbearing from those of marriage, or the effects of entries to from exits from marriage.

[15] There has been considerable attention to the potential consequences of early marriage, provoked by discussions of the desirability of encouraging teen parents to marry (Gallagher 2001; Seiler 2002). Recent estimates from the 1995 National Survey of Family Growth show five-year first marriage disruption rates for women marrying before age 18, from 18-19, from 20-24, and at 25 and over of 29, 24, 17, and 15 percent, respectively (Bramlett and Mosher 2002, Table 21). Higher disruption rates for early marriages generally persist in studies that control for other factors (e.g., Bumpass *et al.* 1991). Heaton (2002) finds that declines in early marriage have exerted a strong positive effect on marital stability in recent decades.

[16] Although this effect is statistically significant only for whites and Hispanics, the effect for blacks lies in the same direction.

with lower relationship quality. They report findings only for the 76 percent of cohabitors who planned to marry, however.

Research Needs

Research on early and non-marital childbearing has identified important linkages to union outcomes. Key priorities for future research include assessing some effects that have not been as well studied as others, getting a better understanding of where and how linkages arise, and learning more about socio-economically disadvantaged populations. Also, shifting attitudes towards non-marital childbearing imply a continuing need to monitor how the effects of early and non-marital fertility may be changing across cohorts.

Several basic linkages remain relatively unexplored. One is the question of whether early childbearing affects the stability and quality of subsequent marriages. For parents who marry young, how much do any difficulties in handling relationships reflect complexities associated with parenting, and how much do they reflect general inexperience and immaturity? Are experiences different for teen parents who wait until they are older to get married?

Another basic question is whether and how early and non-marital fertility affect the *quality* of subsequent relationships. Even if these factors have little effect on marital stability, the complexities of step-parent relationships suggests the likelihood of impacts on marital quality (see also Section 2.2).

Given strong evidence that non-marital childbearing reduces prospects for marriage, the next task is to identify the causal mechanisms. Understanding why non-marital childbearing can lead to reduced marriage is crucial to the success of any policies seeking to promote marriage among unmarried parents.

Causes are likely to be quite different in the months immediately surrounding pregnancies and births, compared with over the long-term. In the near-term, both biological parents are likely to still be romantically involved, and there is greater potential for fathers to stay involved with their own children. In the longer-term, attention shifts to mothers' and fathers' relationships with partners who are not their children's parents. Understanding the dynamics of such relationships requires studying each partners' relationships with his or her partner's children from previous unions

Instead of merely controlling for socio-economic status, future studies should examine directly how and why the effects of non-marital fertility on marriage vary across socio-economic groups other than racial and ethnic minorities. Since the weakening of the linkage between childbearing and marriage appears to be greatest for disadvantaged populations, it would be helpful to focus on whether and why social and economic contexts also affect subsequent responses to non-marital births. Differences in responses of men and women also warrant examination.

An improved understanding of why non-marital births occur in the first place is key to understanding subsequent marriage decisions, since such births are premised on weak expectations for marriage. There is a substantial literature on determinants of teen childbearing. In contrast, there has been much less research on the determinants of adult non-marital childbearing. Given that adults have the majority of non-marital births, it seems especially important to understand the causes and context of adult non-marital childbearing.

Data Needs and Analysis Considerations

The essential ingredient for studying effects of early and non-marital childbearing on union behaviors is for complete and detailed fertility, marriage and cohabitation histories. In order to assess effects on union quality, measures of relationship quality for multiple time points also are needed. Data on fertility, and analyses of its effects, are needed for both men and women. Indications of relatively high misreporting of past conceptions and births by men mean that analysts must evaluate carefully the potential for biases in their analyses (e.g., Nock 1998). Such problems may diminish in recent surveys employing new data collection methods for men.

The distinction between unions involving biological and non-biological parents looms large in this research area. Analysts need also to be able to distinguish unions on the basis of the parentage (shared or not) of each partners' children, including those not living with the couple.

A wide range of potential explanatory measures are needed to analyze reasons for linkages between non-marital childbearing and union outcomes. With regard to union formation, desirable measures include assessments of perceived tradeoffs between investments in partners and in children; the availability of suitable partners; time available for dating; stigma; and the additional costs that potential partners may associate with children (especially children from previous relationships). With respect to union stability and quality, important aspects include internal dynamics in relationships in which partners must negotiate their roles vis a vis non-biological children, and external relationships with previous partners with whom they may have shared responsibilities for raising biological children. The latter include biological parents of the children they are living with, as well as children they may have from previous relationships.

Selection bias is an important concern in research on this subject. Some progress has been made in developing innovative techniques for addressing selection bias, but further work is needed. Researchers have used natural comparison groups such as siblings and women who miscarry to attempt to address selection bias. Data sets which provide sufficient samples of such groups are helpful. The increasing analytic sophistication in fixed effects and structural equation models (e.g, Upchurch *et al.* 2001 and Lillard *et al.* 1995) should be encouraged.

Successful experimental tests of interventions focused on reducing early, non-marital, and/or unintended fertility provide good opportunities for ascertaining effects on union formation, stability and quality. Such outcomes typically have not been assessed in these evaluations, but can and should be in the future.

2.2 Transition to Parenthood

Children bring substantial challenges, as well as new pleasures, into couples' relationships. There is growing interest in interventions that help couples cope successfully with the challenges and fully appreciate the rewards (Cowan and Cowan 1995). Although most attention has focused on the initial months and years after birth, parents with teens also may benefit from intervention given indications that risks of marital dissolution increase when children reach their teen years (Heaton 1990; Waite and Lillard 1991).

Research Findings

The arrival of children sets in motion complex changes in couples' relationships with each other and with others in their social networks. Cowan and Cowan (1995) provide an excellent review of the literature on transitions to parenthood. They report that prospective studies of small convenience samples of mainly middle class white couples have found modest declines in average marital satisfaction and interaction, but also wide variation around the averages. The degree to which children cause these changes has not been established: marital quality declines over time more generally (Glenn 1998; Vaillant and Vaillant 1993), and it is difficult to find a suitable comparison group.[17]

Nearly all of the research to date on transitions to parenthood has focused on quality within marital unions. The one study of cohabitation we found (Brown and Booth 1996) compared effects on union quality for married partners only with effects for the 76 percent of cohabiting couples who planned to marry. This study reported no difference in effects for these two union types: in both groups, "the presence of biological children is associated with more disagreements, more hitting and shouting, and less happiness and interaction (p. 676)."

Researchers have made good progress in identifying some of the factors associated with successful transitions to parenthood. Findings—again mostly for white middle class convenience samples—implicate depression, poor couple problem-solving skills, weak social supports, life stresses, unplanned pregnancies, and a girl first-born baby as risk factors (see Cox *et al.* 1999 and reviews by Bradbury *et al.* 2000 and Cowan and Cowan 1995). Most of these factors are more prevalent in disadvantaged populations. However, there has been virtually no research on the relationship quality effects of transitions to parenthood among the poor (Cowan and Cowan 1995).

The conceptual complexity in sorting influences out arises from the fact that parenthood brings both positive and negative changes to parents' outlooks and relationships with one another. Both changes can occur within a relationship, and the ratio of positive to negative changes is likely to depend on a wide variety of couple characteristics. Research on couples with a recent non-marital birth is under way in the Fragile Families project. Although such couples are romantically involved at the time of a non-marital birth, their unions are especially likely to dissolve within the next 12 months.[18]

Also, notwithstanding parenthood stresses, the net effect on union stability of having children is positive. Findings show that biological children reduce dissolution risks particularly when they are boys and young (Heaton 1990; Katzev *et al.* 1994; Waite and Lillard 1991), and that protective effects arise for both blacks and whites (Upchurch *et al.* 2001) and in both marriage and cohabitation (Manning and Smock 1995; Upchurch *et al.* 2001; Wu and Balakrishnan 1995).

There is some disagreement on whether children from prior marriages promote (Upchurch *et al.* 2001) or reduce (Goldscheider *et al.* 2000; McDonald and Maris 1995; Wineberg 1992) stability in

[17] Comparisons with childless couples are likely to introduce serious selection biases, since having or not having children may be either a cause or a symptom of marital difficulties.

[18] Carlson *et al.* (2002) find that 83 percent of unmarried parents are romantically involved at the time of birth, but that only 58 percent are still romantically involved 12 months later.

remarriages. Upchurch *et al.* is the only one of these studies to control for unobserved heterogeneity and reverse causation bias, however.

In general, the consistency in findings from diverse studies support the view that children, especially when they are both partners' biological children, have a positive influence on marital stability but not on marital quality.

Research Needs

The research agenda on transitions to parenthood must be multifaceted. On a purely descriptive plane, it is important to establish the union quality trajectory after childbearing for a wider range of socio-economic groups and relationship types (cohabiting, married), and for nationally representative samples. Researchers should not look just at changes in average levels of relationship satisfaction and interaction, but also at proportions with clinically significant declines, on the one hand, and positive changes, on the other. How do quality trajectories vary for children born at different durations of marriage? For first, compared with later, births? For children reaching different ages?

It also is important to understand whether parenthood actually *causes* shifts in relationship quality and how, and which parents are most vulnerable to unfavorable outcomes. To some degree, identifying risk factors is helpful even if their moderating effects are not fully understood, as a basis for targeting services to parents and potentially for efforts to promote better timing of childbearing (Cowan and Cowan 1995). Ultimately, however, interventions with a strong theoretical basis stand a better chance of success.

In tracing causal influences, more work is needed on the nature of changes in couple relationships that parenthood sets in motion, as well as on the range of personal, couple-level, and environmental factors that moderate these changes. There is special need to study these factors for poor parents, who experience substantially higher rates of depression, substance abuse, domestic violence, unplanned pregnancy, unemployment, and other stressful life events—all factors that have been associated with difficult parenthood transitions in middle class white samples.

Another broad topic is single mothers' relationships. Although single mothers have been the subject of substantial policy interest and programmatic concern, interventions historically have paid little attention to strengthening their relationships with their children's other parents and other potential partners. We know that half of unmarried parents are cohabiting at birth and that another third are in romantic relationships with their children's other parent (McLanahan and Garfinkel 2002). Research now must move to a fine-grained description of changes in the quality and dynamics of these relationships and identify the intra- and interpersonal factors and environmental influences that threaten and support positive union outcomes.

Although a majority of births to disadvantaged parents are non-marital, it is nonetheless important also to study disadvantaged married couples, who face many stresses that can lower marital quality and increase the risk of divorce.

Transitions to parenthood bring different elements into play when partners acquire non-biological children as step-parents, as well as when couples with children from previous relationships have one or more additional children together. The increasing complexity of parenting contexts is evident in the substantial numbers of births occurring within remarriages and cohabiting unions where one or

both partners have children from previous relationships (Bumpass *et al.* 1995; Mincy 2001). The quality and dynamics of step-parenting arrangements have received increasing attention in the past decade (see reviews by Cherlin and Furstenberg 1994 and Coleman *et al.* 2000). More work is needed especially on the challenges disadvantaged couples face in co-parenting in these complex arrangements.

Finally, research should address the degree to which changes in relationships are normative and not detrimental to overall family functioning in the long-term (in comparison with non-normative stressful events). The fact that children are associated positively with union stability suggests that parenthood on balance increases partners' investment and commitment to their unions at the same time it changes the texture of their relationships, sometimes in challenging ways. It is important to understand better the nature of these positive forces and the personal and environmental conditions under which they flourish.

Data Needs and Analysis Considerations

Analyses of the effects of transitions to parenthood require repeated measures of relationship quality and related outcomes before and after birth. Although our focus is on couple relationships, understanding these fully also requires analysis of other relevant relationships within and outside the family system—particularly parent-child relationships. Understanding the nature and influences on fathers' involvement with children is likely to be especially important to understanding how parenthood affects the couple.

Data that provide quality measures for both cohabiting and married couples would provide a fuller picture of an important emerging parenting context. Data on remarriages and other re-couplings also would help in understanding how the challenges accompanying transitions to parenthood vary across the wider range of pertinent contexts.

The ideal data set would start with union formation, extend for many years, and measure outcomes at frequent intervals (e.g., annually or biannually, with more frequent measurement around the time of birth). Longitudinal measurement preceding birth would provide a stronger baseline for measuring and studying variation in growth curves for relationship outcomes over time. Such measures would provide an improved basis for identifying discontinuities in relationship quality following transitions to parenthood, controlling for union duration. Improved identification of discontinuities will provide a stronger basis for distinguishing causation from correlation.

2.3 Effects of Cohabitation on Marriage

The increasing popularity of cohabitation has led policy makers and scholars to ponder its implications for marriage. One question is whether cohabitation reduces entries to marriage. Another is whether cohabitation affects marital stability and quality. Basic research on these topics may help to identify conditions under which it might or might not be productive to encourage cohabitation, as well as opportunities to strengthen cohabitors' relationships and support transitions to marriage.

Research Findings

Statistics clearly show that fewer Americans in their young adult years are marrying and that more are cohabiting (Bumpass and Lu 2000; Kreider and Fields 2002). These trends have led to some concern that cohabitation might be replacing marriage as a family form (Smock and Gupta 2002). Another possibility is that cohabitation is simply filling the gap in an era where many people are postponing marriage, serving as a trial arrangement for people who eventually plan to marry. Finally, cohabitation may be an alternative to remaining single, rather than to marrying, for some people.

Descriptive evidence points to the second situation as the predominant one, although the functions of cohabitation appear to vary across race-ethnicity groups (see below). The vast majority of people eventually marry, with most cohabiting with their spouses prior to marriage (Bumpass and Lu 2000; Ellwood and Jencks 2001). By providing couples a way to live together before marrying, cohabitation is likely to be a contributing factor in increasing ages of marriage in the U.S. Although cohabitation clearly is associated with later age of marriage (Heaton 2002), we have seen no analysis of the degree to which cohabitation is the cause, rather than the consequence, of decisions to postpone marriage.

To ascertain the degree to which cohabitation may be replacing marriage, one important line of research has explored the extent to which cohabitors are having and raising children—perhaps the most important traditional function of marriage. In the aggregate, cohabiting couples accounted for most of the increase in the fraction of all births born to unmarried parents between the early 1980s and early 1990s (Bumpass and Lu 2000). Are higher fractions of cohabiting couples becoming parents? A recent analysis suggests not—the increasing fraction of all births that are to cohabitors arises mainly because more people are cohabiting, rather than because a greater share of cohabiting couples are having children (Raley 2001).

Manning (1993) examined women's marriage and cohabitation behavior following a non-marital pregnancy as an index of whether cohabitation is serving as an alternative to marriage for child rearing. Her findings for 1970-84 reveal a strong propensity to legitimate pregnancies among single and cohabiting white women, but much less legitimization among unmarried black women—who mostly remain single. She concludes that cohabitation represents a step to marriage for whites, but an alternative to being single for blacks. Analogous evidence suggests that at least one Hispanic group—Puerto Ricans—regards cohabitation as an alternative to marriage (Manning and Landale 1996).

More recent data for the overall population suggest that patterns of union formation following a non-marital pregnancy are changing. By the early 1990s, single women were nearly as likely to cohabit (9 percent) as marry (11 percent) after becoming pregnant (Raley 2001). Notwithstanding this shift, pregnant single women overall became less likely to form any union (marital or cohabiting): the fraction remaining single at birth increased from 67 percent in 1970-74 to 81 percent by 1990-94. Over the same period, the fraction of pregnant cohabitors still cohabiting at birth declined. This change arose because both the share marrying and fraction breaking up before birth increased somewhat. Given these mixed signals, Raley concludes that "It is too early to tell whether this behavior marks the early stages of a shift in the meaning of cohabitation (p. 66)."

Jayakody and Cabrera (2002) argue against the view that cohabitation is a threat to marriage among low-income families. They cite qualitative evidence from Edin (2000) and Furstenberg (2001)

showing that poor people value marriage highly, but see it as unattainable in light of limited financial options and (especially among women) a perceived lack of partners capable of providing reliable social and emotional support. Jayakody and Cabrera speculate that these same constraints also work against cohabitation.[19] Such explanations are consistent with the indication from legitimization research that cohabitation serves more as an alternative to remaining single than to marrying among blacks.

People with less education are more likely to cohabit before marriage, and the degree to which this is so has increased over time (Bumpass and Lu 2000; Bumpass and Sweet 1989; Raley 2000). There has been little quantitative exploration of the whether motives for cohabiting differ for people with less and more education.

A second set of questions revolves around whether pre-marital cohabitation affects **marital stability and quality**. Any such effects could have substantial implications, given that a majority of the population now cohabits before marriage (Bumpass and Lu 2000).

Descriptive statistics show that marriages preceded by cohabitation are shorter-lived than those not starting with cohabitation. Since the mid-1970s, the fraction lasting ten years consistently has been about ten percentage points lower for marriages preceded by cohabitation (Bumpass and Sweet 1989; Bumpass and Lu 2000; Bramlett and Mosher 2002).

One key question is whether pre-marital cohabitation affects values, attitudes, and relationship skills linked to marital longevity, or whether people who cohabit before marriage are simply less committed to marriage from the start. These alternative hypotheses distinguish *causation* from *selection*. There is substantial evidence that cohabitation selects people with more liberal attitudes towards divorce and people who have had more personal experience with divorce in their families. Controlling for observed background differences of individuals and their families of origin accounts substantially, but not entirely, for the association between pre-marital cohabitation and divorce, or attitudes towards divorce (Bumpass *et al.* 1991; Heaton 2002; Thomson and Collela 1992). There is some evidence that the association has weakened over time (Heaton 2002; Schoen 1992).

More sophisticated analyses control for unobserved, as well as observed, characteristics that might influence both pre-marital cohabitation and subsequent marital experiences. Using different panel data sets to control for initial attitudes, Axinn and Thorton (1992) and Axinn and Barber (1997) find that cohabitation does engender more liberal attitudes towards divorce, but they do not examine effects on divorce itself. Analyzing data from the National Longitudinal Study of the High School Class of 1972, Lillard *et al.* (1995) find no effect of cohabitation on marital disruption after controlling for a measure of the degree to which cohabitation is selective of people who are prone to marital disruption from the start.

It seems likely that any effects of cohabitation on marital stability are complex, with positive effects from improved information on which to base marriage decisions counterbalanced by more favorable attitudes towards divorce. Bumpass and Sweet (1989) speculate that increased screening through

[19] Jayakody and Cabrera (2002) conclude: "Because of the unavailability of marriage, the unattractiveness of marriage and cohabitation, and the importance of deciding to remain living alone, it does not appear that cohabitation has posed a serious threat to marriage for this economic group (p. 90)."

cohabitation partly explain the plateau in divorce rates of the 1980s. Heaton (2002) finds evidence that cohabitation indirectly promotes marital stability by increasing the average age at marriage. Seltzer (2000) cites a German study finding positive effects on marital stability after controlling for unmeasured differences (Brüderl *et al.* 1998). Controlling for observables, Wineberg (1994) finds a substantially greater likelihood of reconciliation following separation among women who cohabited before marriage.

A related question is whether cohabitation affects marital quality. There is fairly consistent evidence that a negative association remains after controlling for observable characteristics (Glenn 1990; Booth and Johnson 1988; Rodgers and Amato 1997). Booth and Johnson (1988) found that introducing controls for personality and commitment to marriage substantially reduced the negative relationship, whereas Rodgers and Amato (1997) saw little change when they introduced a very different set of control variables. The importance of selection in findings on marital dissolution (e.g., Lillard *et al.* 1995) implies a strong possibility that these findings from analyses of connections between cohabitation and marital quality are subject to substantial bias.

A different question is how relationship quality differs for married, cohabiting, and romantically involved couples. Studies that control for observable differences between these unions consistently find that married couples have higher levels of overall satisfaction and positive interaction, fewer disagreements and negative interactions, and better sex lives than cohabiting couples (Brown and Booth 1996; Waite and Gallagher 2000; Waite and Joyner 1999). One closer look showed few differences between couples who were married and the majority (76 percent) of cohabiting couples with plans to marry (Brown and Booth 1996). Using change scores to net out unobserved differences (i.e., selection bias), Musick and Bumpass (2002) observed little difference between cohabiting and married couples and conclude that "what matters in terms of well-being…is being in a relationship, not marriage or cohabitation *per se* (p. 23)." Similarly, Jayakoda and Cabrera (2002) cite research from the Fragile Families study showing that "for…supportiveness and companionship, cohabiting couples appear to be somewhat more similar to married couples than to noncohabiting, unmarried parents (p. 92)." Other than the Fragile Families project, there has been little attention to influences on relationship quality among economically disadvantaged groups.

Research Needs

Cohabitation is in flux, and there is much we do not understand about its changing significance and implications for marriage. At the most general level, we need simply to continue studying cohabitation, with close attention to changes in its attributes over time. A second general need is for more direct research on the processes that affect the development of commitment within cohabitation and decision-making about marriage.

A key topic deserving further examination is childbearing and child rearing by cohabiting couples. Research in the 1990s—mostly based on evidence for the 1970s-80s—showed little evidence that cohabitation was supplanting this key function of marriage among whites, whereas single parenting appeared to be an increasingly attractive alternative for blacks. Have things changed more recently?

Past research has implicated "cultural" factors as underlying racial and ethnic differences in legitimization rates (based on residual differences after controlling for social and economic status). What exactly are these cultural factors, and to what degree are they based on shared histories of economic disadvantage in different groups?

More direct attention to the effects of economic status on responses to pregnancy also would be helpful. Most current analysis does not explore interactions between pregnancies and economic situations. Studies of unions following non-marital pregnancies must be alert to potential biases from under-reporting of abortions.

The duration of cohabitation relative to marriage provides another indication of the degree to which it may be competing with marriage, given traditional views of marriage as a life-long commitment. Current knowledge of time trends is sketchy—descriptive evidence shows increased disruption rates for unions beginning as cohabitations in recent cohorts (Bumpass and Lu 2000), but this increase could reflect increased transitions to marriage, increased disruptions, or changes in the composition of cohabitors.

Does pre-marital cohabitation reduce marital stability? Although the most rigorous analysis to date (Lillard *et al.* 1995) suggests not, much of the policy discourse continues to emphasize a larger and much weaker body of correlational evidence showing a negative association. It would be valuable to the policy debate to replicate Lillard *et al.* using data for a more recent period, and analyze effects for different sub-populations. Given the close connection between marital stability and marital quality, it seems likely that selection and endogeneity biases plague findings from prior studies of the relationship between cohabitation and marital quality as well.

The concept of "cohabitation" requires elaboration in future research. Whereas it makes sense to treat marriage as a dichotomous variable, forms of non-marital cohabitation are more diverse and often highly fluid—especially among disadvantaged populations. We must ask how many nights a couple spends together, where they live when they are not together, what relationships do they maintain with other and former partners (distinguishing those with whom they have had children), and whether and how couples pool resources. With a sturdy typology of cohabitation arrangements, we will in good position to look in more detail at the effects of different forms of cohabitation on marriage.

Research on the implications of cohabitation for low-income population need to take seriously Jayakody and Cabrera's hypothesis that cohabitation strengthens, rather than weakens, some couples' marriage prospects. Where marriage is unlikely in the short-run, a better understanding of the conditions promoting entry to cohabitation and subsequent union stability may suggest avenues for encouraging more poor parents to live together and, eventually, marry.

For all of the above questions, understanding linkages between childbearing and union status requires more direct investigation of the underlying motives and couple decision-making processes. In particular, we have much to learn about how peoples' values and attitudes change while they are living together, and about the interpersonal processes and external events that influence the development of long-term commitment. Motives and circumstances are likely to differ profoundly for low-income, compared with other, cohabiting couples. There is a great need for more research on disadvantaged populations distinguished using more direct indicators than race and ethnicity.

Data Needs and Analysis Considerations

Analysis of the linkages between cohabitation and marriage entries and exits requires longitudinal data on cohabitation and marriage—ideally full event histories for recent and earlier cohorts of men and women. Repeated measures of relationship quality extending from cohabitation through marriage

are needed to distinguish pre-existing differences from changes due to cohabitation. Analogous data for marriages not preceded by cohabitation would provide the relevant comparison. Analysis of the linkages between fertility and cohabitation outcomes requires histories for pregnancies and childbearing.

The most important outstanding questions about the changing role of cohabitation require extensive measures of the nature of cohabiting arrangements and interpersonal processes occurring within different kinds of arrangements. Key concepts include the regularity, or frequency, of cohabitation; communication and interpersonal behaviors within unions; relationships with family, friends, and other partners; and values and attitudes concerning issues such as having and rearing children, long-term commitment, and sexual exclusivity.

Research on the implications of cohabitation for marriage postponement require longitudinal observation extending through at least peoples' 30s. Survey samples with higher upper age limits are needed to provide sufficient samples at older ages.

Chapter 3
Economic Influences

The essence of economic explanations is the assumption that individuals freely choose among their available options to maximize their utility or well-being. The influence of economic factors is sometimes non-economic in character, however. For example, if the additional income from a husband or wife improves their relationship by reducing stress, such an influence is more psychological than economic in character.

This chapter considers the economic and non-economic effects of two important economic factors. In Section 3.1, we review research on the effects on union formation and dissolution of women's economic status, with a particular focus on recent increases in low-income women's labor force participation. In Section 3.2, we assess evidence on the effects of men's economic status, paying attention especially to the status of disadvantaged men.

3.1 The Surge of Low-Income Women into Jobs

A major policy thrust of the 1990s has been to encourage low-income women with dependent children to find jobs. Since the transformation of AFDC to TANF, it has been difficult for single mothers to obtain cash benefits without working. As a consequence, many more low-income women are now in the labor force. But the consequences of promoting women's employment for union formation and dissolution are largely unknown.

Research Findings

A striking implication of early theoretical work on the economics of marriage was the notion that women's earnings gave them more freedom not to marry—the "independence hypothesis" (Becker 1991). Yet the literature does not show a strong, consistent relationship between women's employment and union formation or stability.

With regard to **union formation**, some authors have found negative effects of women's employment, hours of work, earnings, or potential earnings on entries to marriage (Blau *et al.* 2000; Cready *et al.*, 1997; Lloyd and South 1996; Schultz 1992). But others have found positive effects on marriage formation or marital status (McLaughlin and Lichter 1997; Olsen and Farkas 1990; Raley 1996; South 1991; Sweeney 2002), and still others found no effects (Manning and Smock 1995). Studies of **union stability** similarly report mixed results, with women's employment and earnings sometimes increasing (Hoffman and Duncan 1995; Greenstein 1990), sometimes decreasing (Ruggles 1997; Ressler and Waters 2000), and sometimes having no effect on (Johnson and Skinner 1986; Tzeng and Mare 1995) marital stability.

Sorting through these inconsistencies is a challenging job. Oppenheimer (1997) notes the potential for especially serious biases in earlier studies based only on area-level measures for dependent (percent of women married) and independent (percent of women employed) variables. One problem is reverse causation bias; that is, the conflation of effects of women's earnings on marriage with effects of marriage on women's earnings.

Johnson and Skinner's (1986) simultaneous equations analyses indicate that the anticipatory effects of divorce tend to induce wives to begin work prior to marital break-up, rather wives' decisions to work causing divorce. These results suggest that analyses of employment effects on divorce that do not adjust for causality in the reverse direction are likely to result in overestimates. Omitted variables also are likely to be a problem. Sayer and Bianchi (2000) show positive effects of wives' economic status on divorce vanish when controls for gender ideology and marital quality are included in the analysis.[20]

Another problem is the confounding of postponement with non-marriage: most studies do not specify effects by age or include many women in their mid-to-late 30s, resulting in an inability to discern whether non-marriage is a temporary or permanent response to increased education and earnings (Ellwood and Jencks 2001).

Yet another possible explanation for inconsistencies across studies is that the influence of women's economic status was changing over the time periods they covered. Sweeney (2002) has found positive effects of women's earnings on marriage for women born between 1961 and 1965, but not for an earlier cohort of women (born from 1950 to 1954). These results suggest that a positive relationship between women's earnings and marriage may be a relatively recent phenomenon—one possibly associated with increasing female labor force participation, changing societal norms, and increases in the perceived material requirements for a decent standard of living.

A considerable number of analyses have compared influences for blacks and whites, but only a few authors have attempted to measure influences for groups based on direct indicators of **socio-economic disadvantage**. Most studies that look at the effects of women's employment on marital formation for both blacks and whites find similar results for the two groups. For example, Schultz (1992) and Blau *et al.* (2000) find negative impacts for both blacks and whites, whereas Sweeney (2002) finds positive effects for both blacks and whites. On the other hand, Raley (1996) finds that women's full-time employment is more likely to lead to marriage among blacks than among whites; and Lloyd and South (1996) find a negative effect for whites and no effect for blacks.

McLaughlin and Lichter (1997) is the only study we found that looks specifically at the effects of economic status on marriage for poor women. Using data from the National Longitudinal Survey of Youth, they find that employment increased the likelihood of marriage for poor women. Carlson *et al.* (2002) find higher wages and education levels for mothers are associated with increased likelihood of unmarried parents living together one year after having a non-marital birth.

Ono (1998) finds that at low levels, women's earnings help stabilize marriage by relieving economic pressure, especially if the husband does not earn much. At higher levels, in contrast, women's earnings destabilize marriage by allowing the wives to leave. Sayer and Bianchi (2000) find otherwise: women's earnings have little effect when husbands' incomes are low but a strong protective effect on marital stability when husbands' incomes are high.

In sum, inconsistent research results to date do not support strong conclusions about differences in effects for less and more disadvantaged persons. Where analyses have found differences, they have

[20] Sayer and Bianchi (2000) conclude that "the independence effect found in prior research without controls for marital quality may have been measuring escape from bad marriages, not from all marriages (p. 938)"

tended to show that women's employment and earnings have more positive effects on marriage among disadvantaged persons.

These results may have little applicability to inferring the likely effects of *exogenous, policy-induced shifts* in low-income women's labor force participation, chiefly because policy-influenced decisions may occur in a different context. For example, studies finding a positive relationship between women's employment and union status tend to be specified in ways that conflate the effects of potential earnings, education as a determinant of potential earnings, and actual earnings. A possible interpretation is that positive effects of women's education and earnings on marital stability reflect "the protective effects of educational attainment (economic status) dominat[ing] the disruptive effects (economic independence)" (Hiedemann *et al.*, 1998). Since low-income women have little education and derive relatively small gains in overall income from work, they may experience relatively little of this protective effect.

Research Needs

The evidence suggests that the net effect of women's employment on union formation and stability is small. This net effect may conceal important variation, however, because of the counterbalancing effects of increased income and diminished leisure. If jobs are of poor quality, the union-enhancing effects of the attendant income may be small. On the other hand, women on welfare who are compelled to work at a low-wage job may be more willing to enter a union (so as to be able to stop working) than women who have the option of not working but still receiving welfare. Several specific areas in which more information is needed are described below.

One set of questions surrounds ways in which increased employment might affect unions by increasing women's resources and thereby rendering them more attractive as potential wives and cohabitors. Under what conditions do such effects arise, especially for low-income women? Must earnings or job quality surpass threshold levels for the effects to occur? Are the effects stronger in environments where there are more "marriageable" men for women to marry? Do positive effects of women's earnings depend on the relative earnings potentials of women and men in the community, and on relative earnings of partners after single women enter relationships?

A second set of questions concerns ways that employment might improve single women's opportunities to meet potential partners, particularly those whose economic prospects are relatively good. What happens between low-income women and men in the workplace, and how do experiences vary in different kinds of jobs and work settings? What norms and patterns govern relationships between men and women in the workplace?[21] Do friendships at work broaden social networks and opportunities to meet potential partners? Do job changes lead to residential mobility and thus affect dating opportunities in the local community?

A third set of questions revolves around the possibility that increased resources from work will reduce financial strains in low-income couples' relationships. A growing literature suggests that financial and other environmental stresses can make it difficult to sustain healthy relationships (see Section 5.3), and it seems likely that the marginal effects of an additional $1,000 in averting financial crises

[21] Popenoe (2002) observes that the workplace has become a primary setting where men and women meet and begin relationships and suggests that we currently know little about norms and practices governing these relationships.

would be greater for low-income couples. Under what conditions does increased income from women's employment reduce financial stresses after they begin to marry or cohabit with men? To what degree do stresses associated with low-wage jobs create countervailing tensions?

A final set of questions arise from considering the above issues specifically for single women with children. Mothers of young children face higher costs of working than other women due to childcare needs, and they have greater time pressures and stresses outside of work. Consequently, any pro-union effects of employment could be less for them than for childless women. On the other hand, mothers may have greater incentives to find a partner to help with parenting responsibilities.

Data Needs and Analysis Considerations

Addressing these research questions requires above all accurate measures for pertinent aspects of women's economic status, including their employment experiences and their potential, as well as actual, earnings. Relevant details include hours (including non-standard work schedules), wages and benefits of jobs, duration of employment spells, and details concerning occupations and work settings. Ideally, these variables, and dates of employment, would be available for every job spell over a substantial portion of women's lives. However, details for a shorter time span of interest (e.g., young adult years) would be more feasible and still useful. Data on spells of welfare receipt also are needed to assess rates of union formation and dissolution for single mothers who leave welfare for work. Additionally, one also would like to have measures for more subjective aspects of economic status, including perceived financial security and strain and the meaning single women and their partners attribute to their jobs.

To investigate employment effects on social networks and opportunities, it would be useful to have measures of whether women meet their partners through work and how other relationships with co-workers may widen their dating opportunities.

Analysis also requires longitudinal data on a sufficient number of low-income women, however defined (e.g., education, welfare receipt, family background). Multiple observations on the same individuals are required to investigate if employment in time t affects union status in time $t+1$. Measures for dates of job spells, welfare spells, marriage, cohabitation, and fertility events could be obtained from retrospective reports, but more detailed information on these events—as well on associated subjective assessments—would require prospective data.

As always, the challenge is to distinguish causation from correlation. Differences in union outcomes between poor women who do and do not work in the same environment may be attributable to unmeasured characteristics such as temperament and capability. An appropriate data set for analyzing these questions would therefore span different environments (spatial and temporal) in which women with given characteristics were more or less likely to work. There is the danger that the environments would differ with respect to the marriage markets as well. Potential sources of variation are differences in the unemployment rate, especially for low-wage jobs (although this factor also affects the marriage market) and the shift in work incentives associated with PRWORA. One alternative tactic for addressing selection bias is to include rich descriptors of women's characteristics in a variety of dimensions (attitudes, ability, work experience, education) so that remaining unmeasured factors dwindle in importance.

Experiments that narrowly target and significantly increase low-skilled women's employment offer an attractive solution to the causality problem to the degree that they also provide measures for marriage and cohabitation outcomes. Such data potentially will allow analysts to use differences in employment-related outcomes generated through random assignment as instruments in analyses of impacts working on union experiences. There have been many such experiments in the past. It would be useful to inventory the degree to which experiments finding substantial employment and earnings impacts also measured marriage and cohabitation outcomes. Re-analysis of such data could help to identify characteristics of women and their jobs that enhance or limit marriage and cohabitation.

3.2 Men's Economic Status

Will improving economic outcomes for low-skilled men produce more healthy marriages and help to stabilize fragile families? Basic research can help gauge the potential for benefits given a spectrum of assumed impacts from employment and training services, although it cannot tell us whether services will be able to generate such impacts.

Research Findings

Evidence from time series suggests that the worsening economic position of low-skilled men, especially blacks, in recent decades has been closely associated with overall declines, and a widening racial gap, in marriage rates (Ellwood and Jencks 2001; Moffitt 2000; Wilson 1987). Ethnographic work also indicates that poor employment prospects are an important strike against men in the minds of low income women (Edin 2000).

Rival economic theories yield consistent expectations for the effects of men's economic status on marriage and cohabitation. Whether men's earnings are seen as helping them to fulfill the primary breadwinner role and reap the advantages of specialization (Becker 1991) or contribute to total household resources in an era where two incomes increasingly are required to meet rising consumption aspirations (Oppenheimer 2000), the indications for marriage formation are positive. Entries to cohabitation also should be affected positively by men's economic status, although perhaps to a lower degree given more modest financial expectations and more egalitarian gender role expectations (see Sections 4.1 and 4.2). Once in a union, men's economic resources may promote better relationship functioning and stability by reducing chronic stresses and crises associated with poverty (see Section 5.3). Expectations that men should be the primary breadwinners, a socio-cultural influence, will tend to reinforce these economic effects (see Section 4.2).

The most relevant empirical studies use panel data to estimate the probability of union formation and disruption over time as a function of men's (time-varying) economic characteristics. Studies of **union formation**, discussed below, have examined varying aspects of economic status, including employment and job stability, job characteristics, stage of career development/difficulty, predicted and actual wages and earnings, and earnings relative to other men with similar characteristics.

One set of studies analyzes first marriages for single men without distinguishing whether men were cohabiting or not prior to marriage (Koball 1998; Oppenheimer et al. 1997; Sweeney 2002; studies reviewed by Ellwood and Jencks). Findings consistently show a positive correlation between men's economic status and marriage rates after controlling for possible confounders. Effects tend to persist

for different aspects of economic status—such as education, job stability, job type, current employment and earnings—when they are included simultaneously in multivariate models, suggesting that economic status has multiple relevant dimensions.

Another approach treats marriage and cohabitation as competing risks in modeling the effects of economic status on first union transitions (e.g., Clarkberg 1999; Nock 1998). Such studies have found positive effects on marriage and smaller, but still positive, effects on cohabitation. A third category includes studies of transitions to marriage among cohabiting couples (Manning and Smock 1995; Smock and Manning 1997) and "fragile families"— that is, unmarried partners who have a baby (Carlson *et al.* 2002). Men's economic status also shows up as a positive correlate of marriage in this third group of studies.

Although men's economic status has consistently positive effects on marriage, it does not explain very much of the variance in marriage rates within or across successive cohorts in recent decades (see reviews by Ellwood and Jencks 2002 and Rodgers and White 2000). Nor do men's situations appear to account for more than a small portion of the racial differential in marriage rates (Koball 1998; Tzeng and Mare 1995).

It seems likely that the measures of employment and earnings researchers have used do not capture all of the relevant aspects of men's career trajectories that men and women assess when they contemplate marriage (Oppenheimer *et al.* 1997). Another specification issue is that most analyses take little account of the many important factors with which men's economic status likely interacts, such as parenthood status, consumption aspirations, gender role expectations, and women's earnings.

A weak global test for such interactions is to see whether the importance of men's economic prospects for marriage formation has changed over time, since gender role expectations may be growing more egalitarian (see Section 4.2). There have been at least two such analyses (Sweeney 2002; Zavodny 1999): neither finds evidence that men's economic status has diminished in importance. Sweeney (2002) suggests that increased consumption aspirations may counterbalance any dampening effects arising from increased female earnings and more egalitarian gender norms. Analysts also have studied whether the effects of men's economic status on union formation differ for blacks and whites (Manning and Smock 1995; Oppenheimer *et al.* 1997; Sweeney 2002; and Zavodny 1999). No consistent findings emerge. Results for different measures (e.g., education, employment, earnings) vary substantially across studies, sometimes indicating stronger effects for blacks, sometimes indicating stronger effects for whites, and sometimes indicating similar effects.

Another limitation of existing research is that it concentrates on experiences of young (20s) adults and rarely assesses how influences change with age. With increasing proportions not marrying until their 30s, research currently offers little basis for assessing whether economic factors are leading people to postpone, or permanently avoid, marriage (Ellwood and Jencks 2001). Most often discussed in connection with increasing investments in education by upper middle-class men, postponement is quite plausibly the main force underlying low marriage rates among young low-income men whose difficulties in moving to decent jobs and stable earnings also impose a considerable delay (Oppenheimer *et al.* 1997).

There have been many studies of the effects of men's economic status on the probability of **union dissolution**. Unlike studies of union formation, nearly all such studies incorporate measures of both partners' economic characteristics. Specifications examine the absolute effects of economic

variables, of male-female differences in economic status (e.g., relative income) and of interactions between the economic statuses of men and women (e.g., effects of men's income at different levels of partner's income).

Findings for marital disruption are somewhat more mixed than for transitions to marriage. Of 12 couple-level studies we identified, five found higher economic status of husbands reduced the likelihood of marital disruption and the rest found no effect (Ono 1998; Sayer and Bianchi 2000; and studies in Ellwood and Jencks 2001). However, the significant findings represent five of the six studies in the group that were conducted since 1990, implying either that effects were stronger in the 1980s (the latest period covered by these analyses) than previously or that researchers were using stronger analysis methods. We found no studies directly testing whether husbands' economic status is becoming more or less important for marital stability over time.

Tzeng and Mare's (1995) nicely-specified analysis assesses the degree to which changes in husband's economic status—in absolute terms and relative to their wives' economic status—explain (1) the increased probability of marital disruption from the mid-1960s to late 1980s and (2) the greater likelihood of marital disruption for blacks than for whites. They find economic variables account for virtually none of the time trend, and at most a small part of the racial differences.

A number of analyses have assessed the effects of differences in husbands and wives' economic characteristics. One hypothesis is that as wives incomes grow relative to those of their husbands, their ability and incentives to leave the marriage both will increase. Most studies have not found such an effect; rather, they suggest the opposite (see summary by Ono 1998; also Tzeng and Mare 1995). Less well explored is the expectation that husbands' earnings will matter more for union dissolution when there is less offsetting income from wives. The one test we found (Ono 1998) supported this hypothesis.

Two studies have assessed effects of men's status on separations from cohabitation (Manning and Smock 1995; Smock and Manning 1997). Both studies find lower rates of disruption when men's economic status is higher. In Manning and Smock (1995), the finding appears only for whites. Unlike Ono's finding for marriage, Smock and Manning (1997) find no interaction between men's and women's economic resources.

None of the studies we reviewed controlled for unobserved characteristics—such as personality or interpersonal skills—that might affect both economic and union outcomes and lead to selection biases. Another problem is reverse causation bias; that is, the likelihood that observed associations capture effects on economic behavior of expectations for marriage and cohabitation, rather than the reverse. Many of these studies reduce this second bias by including lagged independent variables in hazards models (thereby introducing temporal order into their models), but potential for anticipatory effects remains.

Research Needs

Research to date indicates that men's economic prospects continue to matter for marriage, but does not address a number of key issues relevant to policy. Most fundamentally, the existing knowledge base provides a weak basis for ascertaining the nature and magnitudes of economic gains needed for substantively significant family effects. Better information on the moderating effects of personal,

family, and community contexts is needed both to target interventions and address non-economic barriers to their effectiveness.

One basic requirement is for improved conceptualization and measurement of economic status. Multivariate analysis indicates that a variety of aspects of economic status matter (e.g., educational attainment, employment, occupation, and earnings), and that the construct should be conceptualized as an evolving career process (Oppenheimer *et al.* 1997). Future work also should adopt a longer perspective over men's lives. Distinguishing economic influences on postponement from non-marriage requires asking how influences vary by age at least through the mid-late 30s (Ellwood and Jencks 2001).

Subjective, as well as objective, aspects of men's status should be assessed. In forming judgments about men's economic status, how do people (men and women) weigh factors such as family background, education, delinquent behaviors, current and past job history, and ambition? What are the minimum earnings deemed necessary for marriage, and what are the consumption standards underlying these perceptions? Is there a "reservation wage" or minimal level of job stability for marriage, analogous to the reservation wage for accepting a job offer, and if so how is it determined? How do requirements vary across social groups, and how do they differ for men and women?

Improved measures will support more definitive analyses of the degree to which men's status accounts for variation in marriage and cohabitation outcomes, including changes across time periods and differences across population subgroups. Past analyses of time trends have investigated the effects of changes in population composition with respect to economic status and other factors (e.g., Koball 1998; Tzeng and Mare 1995) and whether the influence of economic status within time periods is changing over time (e.g., Sweeney 2002; Zavodny 1999). Future analyses incorporating both specifications (e.g., main and interaction effects) would be useful in understanding time trends, as well as population subgroup differences.

As data for the 1990s become available, it will be helpful to extend analyses in time. There has been substantial fluctuation in men's absolute and relative incomes over the past 15 years, especially at the bottom of the earnings distribution. This natural variation affords analysts an improved opportunity to distinguish causal effects from confounding influences and detect any changes in the importance of men's economic roles.

Concerning changes in the influence of men's status, a key question is whether increased women's employment is diminishing the effect of men's economic status on marriage. To date, only a few analysts have explored the effects of interactions between husband and wives' economic statuses on marital dissolution, and there has been even less work on interactive effects on transitions to marriage and cohabitation and the dissolution of cohabitation. Another question is how the effects of men's status may differ for social groups with relatively more and less traditional gender role expectations. Finally, even in considering the effects of men's economic prospects, it may be that men and women apply different standards to judging marriageability (Sweeney 2002).

The foregoing indicates clearly the need to represent the situations and views of both partners in the analysis. Identifying the most relevant female perspective is straightforward for couples, but difficult for single men who might partner with any number of women. In contrast to the considerable attention paid to women's response to varying local supplies of economically attractive men, there has been little investigation of men's responses to varying supplies of economically attractive women.

Another response is to consider men's prospects in relation to the characteristics of women with whom they already are cohabiting or romantically involved. In addition to the greater certainty attached to partner characteristics, analyses of marriage transitions for cohabiting couples are important because a majority of marriages now begin with cohabitation (Bumpass and Lu 2000). Of course, the question of what prompts initial decisions to cohabit remains important as well.

Other than studies of racial minorities—mostly of blacks—there has been little investigation of how men's economic status affects unions in disadvantaged populations.[22] Findings for the general population will tend to obscure the effects on marriage and cohabitation of a given increment in education, employment, or earnings on union formation and stability for low-income men.[23] Analyses for disadvantaged men would help to support more realistic appraisals of the potential benefits of employment and training interventions. Illustrative impacts of interest might include a shift from irregular employment to steady low-wage employment; earning a high school diploma, GED, or vocational certificate; a wage subsidy; and placement in an entry-level career-track job. Relevant subgroups of disadvantaged men might include high school students, dropouts, and young custodial and non-custodial fathers.

Finally, it would be helpful if more researchers cast their findings in terms of the percentage point effects on marriage and cohabitation of specified changes in economic status. Such simulations would help policy makers assess the impacts that might be required for interventions to generate substantively meaningful increases in desired family outcomes.

Data Needs and Analysis Considerations

An initial requirement is for time-varying measures of objective aspects of men's economic status such as: educational attainment and school enrollment, job stability, occupation, and earnings. For couples—ideally including romantic partners, as well as cohabiting and married partners—similar measures for the female partner are needed to assess relative economic status and interactive effects. For single men, aggregate measures of supplies of women with varying economic characteristics in relevant local areas will provide proxies for characteristics of likely partners. Full marriage and cohabitation histories are needed to analyze the relationship between economic status and the formation and dissolution of unions. Fertility histories for men and women are needed to distinguish influences conditional on parenthood status.

Time-varying measures for values and attitudes are needed to assess cultural and subjective aspects of men's economic status. These include the strength of traditional gender role expectations, levels of expected financial well-being, and minimal financial expectations levied on potential partners.

Data extending through the 1990s for members of successive cohorts observed through at least their early 40s are needed to compare effects of economic variables at different ages over time.

Both selection and reverse causation biases could be addressed with data from social experiments involving successful employment and training interventions. Although results from past experiments

[22] Oppenheimer *et al.* (1997) is a notable exception.

[23] For example, the experiences of employed men in the general population are unlikely to be similar to those of disadvantaged men.

often have been disappointing, several—e.g., pilot studies of the Center for Employment and Training and Quantum Opportunities programs—produced fairly large overall impacts, and others have found substantial effects for specific subgroups (U.S. Department of Labor 1995).

Chapter 4
Socio-Cultural Influences

Among the most distinctive sociological contributions to the study of marriage and cohabitation is the thesis that socially-derived ideas about the importance, purposes, and requirements for marriage and cohabitation have powerful effects on decisions and experiences in these unions. This chapter reviews evidence on the nature and effects of two important sets of ideas about marriage and cohabitation. In Section 4.1, we examine research on the significance, or meaning, of marriage and cohabitation. In Section 4.2, we discuss analyses of the effects of changing expectations for gender roles in unions.

4.1 The Meaning of Marriage and Cohabitation

Within the marriage movement, there is substantial support for public policies promoting a more positive societal view of marriage.[24] Proposals range from public information campaigns touting the benefits of marriage for partners and their children to workshops and counseling designed to increase peoples' understanding of what makes a good marriage, motivate interest in marriage, and provide training in relationship skills (Ooms 2001). These proposals reflect widespread recognition that key traditional functions of marriage have weakened, and they assume that changing people's views of marriage is essential to re-establishing it as a vital societal force. In this section, we first review findings describing changes in the significance of marriage and cohabitation and then look at analyses relating these attitudes to union outcomes.

Research Findings

Researchers have found that marriage remains centrally important in Americans' stated aspirations—perhaps more so in recent decades (Thorton and Young-DeMarco 2001)—and the vast majority of the population continues to marry. At the same time, divorce also has become more widely accepted, and the perceived purposes of marriage have changed.

Behaviors once deemed exclusive to marriage—sexual intimacy, childbearing, and child rearing—now are widely acceptable outside marriage (Thorton and Young-DeMarco 2001). Accordingly, the relative weight on two remaining threads—marriage's ability to provide emotional satisfaction and financial security—has increased. Social scientists believe that broader economic and cultural forces generated by the needs of a strong market economy have raised expectations on both counts (Bumpass and Sweet 2001; Schneider 2002; Seltzer 2000; Thorton and Young-DeMarco 2001). Specifically, the culture created by this market economy increasingly encourages people to evaluate their relationships on the basis of short-term self-interest and to condition marriage on its ability to support high standards of consumption.

[24] See, for example, Waite and Gallagher (2000; Ch. 14) and essays in Hawkins *et al.* (2002).

Cohabitation has become increasingly acceptable. A substantial majority of adults believes that living together before marrying is a good idea, and few believe it is wrong or harmful (Thorton and Young-DeMarco 2001).

Analysis of variation in the meanings of marriage and cohabitation across social groups has focused mostly on racial and ethnic differences. Compared with non-Hispanic whites, racial and ethnic minorities—especially female blacks—place more emphasis on financial requirements and benefits of marriage (South 1992; Bulcroft and Bulcroft 1993; Tucker 2000; Timmer and Orbuch 2001). There also is some evidence that minorities see marriage as more important generally, and mixed findings on whether they put more (Bulcroft and Bulcroft 1993; Tucker 2000) or less (South 1992) weight on the social and emotional requirements and benefits. Scholars have inferred from childbearing behavior that minorities are more likely to deem childbearing acceptable within cohabitation (Manning 1993; Manning and Landale 1996), but there is little direct evidence on racial and ethnic differences in the meaning of cohabitation.

There has been little quantitative analysis of what marriage and cohabitation mean to poor people. Ethnographic research suggests that poor women and men attach greater value to the economic benefits of marriage because these requirements are so much more difficult for them to satisfy (Edin 2000; Furstenberg 2001). Among poor single mothers, the desire for independence and mistrust of men also appear to underlie avoidance of marriage and relationships with men generally (Edin 2000). Quantitative analysis shows that couples with non-marital births place greater emphasis on the financial and other practical benefits of marriage (Bulcroft and Bulcroft 1993; Timmer and Orbuch 2001).

Studies of the influence of values and attitudes on **union outcomes** have examined several themes. One theme is the **importance of marriage**, varyingly measured through questions on whether people see marriage as important for life happiness and raising children—sometimes in comparison to single or cohabiting people. Findings usually show that single people who see marriage as more important are more likely to marry (Axinn and Thorton 1992; Carlson *et al.* 2001; Clarkberg 1999), but the importance of marriage is sometimes found to be associated with cohabitation positively (Axinn and Thorton 1992) and other times negatively (Carlson *et al.* 2001; Clarkberg 1999). Harknett and McLanahan (2002) find that blacks' higher valuation of marriage operates to narrow the racial gap in marriage.

Another theme is **long-term commitment to marriage** and acceptance of divorce. Axinn and Thornton (1992) find that acceptance of divorce is positively associated with transitions to cohabitation and negatively associated with transitions to marriage. Thomson and Colella (1992) find that married couples who see marriage as a lifetime commitment are less likely to see themselves as ever separating or divorcing. Rogers and Amato (1997) find that a more recent cohort placed more weight on long-term commitment than an earlier cohort, and Amato and Rogers (1999) show that such values are associated with increases in relationship quality with increasing marriage duration.

A third theme is **personal autonomy**. Thomson and Colella (1992) find an increased perceived likelihood of divorce when husbands (but not wives) feel that married partners should be free to do what they want to individually. Moors (2000) finds in a sample of German youth that scores on an index of autonomy and independence were more likely to be affected by than lead to changes in living arrangements. In contrast, he finds that "traditional family values" (an index comprised of measures of the importance of marriage and views of gender roles) are more likely to be positively

associated with transitions to both marriage and cohabitation, compared with living alone or with parents.

Despite indications from ethnographic research that financial security and emotional satisfaction are important perceived benefits of marriage, researchers are only beginning to explore the effects of **perceived benefits of marriage and cohabitation** on union formation, stability and quality. The most direct analysis is Harknett and McLanahan (2000), who analyze the effects of perceived benefits and costs on transitions to marriage for a small sample of unmarried parents. Possibly because the sample is small, results indicate little effect of specific perceived benefits and costs (financial, freedom, control over money, sex lives), although an overall index of marital utility does have the expected positive effect. Timmer and Orbuch (2001) classify couples' responses to open-ended questions about the "nice" and "not so nice" things about their marriages into three independent measures (communication, practical, emotional) and analyze their association with subsequent marital disruption. The validity of these measures as indications of the "meaning" of marriage is open to question—they appear instead to capture relationship quality. In their review of determinants of marital stability and satisfaction, Karney and Bradbury (1995) cite evidence that unrealistic expectations for parenthood can lead to greater reductions in marital satisfaction and call for more research on the effects of expectations generally.

Research on the effects of marital values and expectations in the 1990s, including most of the empirical studies mentioned above, used panel data to relate attitudes at one point in time to subsequent behaviors. Although clearly an improvement over cross-sectional analyses of contemporaneous measures, it is possible that anticipated union outcomes (e.g., divorce) affect perceived meanings rather than the reverse. None of the analyses used structural models to deal with reverse causation bias. Nor did we find any analyses that controlled for unobserved heterogeneity. Some analyses reduced potential selection biases by including extensive measures of varied factors for men and women. Recent studies using Fragile Families survey data (e.g., Carlson *et al.* 2001; Harknett and McLanahan 2002) are especially noteworthy in this regard.

Research Needs

Research in this area would benefit from a more careful conceptual mapping of the general construct of "meaning" or "significance" of marriage and cohabitation. Such mapping should distinguish clearly the values people apply to marriage and cohabitation, the perceived advantages and disadvantages of these unions, and their own expectations for these unions.

Studies of values have concentrated on a variety of different concepts pertaining to the "importance" of marriage. Indicators include questions about the importance of marriage and a happy family life, whether marriage is better than living together in general and for raising children, whether there are more advantages to marrying than living together, and indices including a variety of items. One need is for more systematic distinction between values, or what people feel is right on moral grounds (i.e., "people who want children ought to marry"), and their beliefs, or what they feel leads to better outcomes (i.e., "people who marry will have happier lives than those who do not").

Research on values has devoted uneven amounts of attention to union formation, stability, and quality. For example, analyses of the importance of marriage have focused on implications for union formation, whereas analyses of marriage as a lifelong commitment have focused on marital stability. There has been relatively little analysis of the effects of values or expectations on marital quality.

Qualitative research suggests that union outcomes also are affected by the benefits and costs people attribute to marriage and cohabitation—key aspects of "meaning," but different from values. There has been some quantitative description of such perceptions, but little analysis of their bearing on marriage and cohabitation experiences.

Another untested hypothesis from qualitative research is that unrealistic expectations lead people to avoid or have negative experiences in relationships. There has been little quantitative measurement of the level and strength of expectations or of their effects on unions. To what extent do expectations for childbearing, financial security, and social and emotional benefits affect union entries and exits? At what point may the bar be too high or too low in relation to what is realistic to expect? Have expectations changed over time, and how has this affected time trends in marriage and cohabitation?

Researchers have begun to explore the effects on cohabitation of changing views towards marriage. So far, however, there has been little research on how views of cohabitation influence unions. Do people see cohabitation as a way-station to marriage or as an alternative living arrangement? Do they see cohabitation as acceptable for childbearing and long-term relationships? To what degree do they expect the same or different financial, social, and emotional benefits from cohabitation as from marriage? And how do these expectations affect their experiences (e.g., childbearing, marriage) in informal unions?

As for so many other influences reviewed in this report, there has been good documentation of differences in values and expectations by racial and ethnic groups, but little analysis of differences by education, poverty status, and other measures of socio-economic disadvantage. Potential for substantial measurement error in independent variables must be acknowledged in any analyses of the degree to which differences in union outcomes by race-ethnicity or other characteristics reflect differences in values or expectations. Efforts to develop more valid and reliable items and scales are needed.

Data Needs and Analysis Considerations

Research on this topic requires measures for norms and values, perceived benefits and costs, and expected experiences within unions. These measures should distinguish general values and expectations from specific values and expectations concerning childbearing, commitment, social status, financial security, and emotional well-being. Measures also are needed of related values such as personal autonomy, work, and material consumption that can affect priorities for relationships.

Consistent measures are needed for marriage, cohabitation, and other relationships in order to evaluate meanings across different union types. Measures should reflect both the valence (direction) of sentiments and their perceived importance or centrality to a given relationship type. They should have a high degree of validity and reliability. Descriptive and causal analyses require repeated measurement of individual values and attitudes at different points over the life course and at different stages in the evolution of relationships. Unlike measures for more readily remembered events (e.g., births), values and expectations must be measured prospectively.

4.2 Gender Role Expectations

An especially important subclass of the expectations people bring to marriage and cohabitation includes personal attributes deemed desirable for men and women. Gender role expectations—whether traditional or egalitarian—are believed to exert a powerful influence on prospects for, and experiences in, relationships. The key question for policy is how to take account of these expectations in designing interventions: do the effects of gender role expectations suggest benefits to altering or working within these attitudes?

Research Findings

National surveys indicate that Americans hold increasingly egalitarian values concerning gender roles, role specialization and decision-making within the family, with women tending to have somewhat more egalitarian values than men (Casper and Bianchi 2002; Thornton and Young-Demarco 2001). In contrast, people express more traditional role preferences when asked specifically about the characteristics they desire in their own spouses (Bulcroft and Bulcroft 1993; South 1991). Reviewing attitudinal data from the 1987-88 National Survey of Families and Households, South (1991) finds women less willing than men to marry someone with less earnings and education. Men place relatively more emphasis on their partners not being previously married or having children, and on physical attractiveness. However, with increased need for two wage earners and increasing normative acceptance of working wives, earning capacity may be becoming a desired trait in wives as well as in husbands (Goldscheider and Waite 1986; South 1991; Sweeney 2002).

In quantitative analyses, blacks tend to report more traditional gender role attitudes and partner preferences than whites (Bulcroft and Bulcroft 1993; McLloyd *et al.* 2000). Although quantitative research on other disadvantaged populations is limited, qualitative research suggests that traditional gender role attitudes—especially concerning males as primary breadwinners—may be a more general characteristic of low-income populations. Such expectations raise a difficult hurdle for marriage, given the poor earnings prospects of men with low skills and disadvantaged backgrounds (Furstenberg 2001; Edin 2000).

One set of pertinent studies directly explores the effects of gender role attitudes on union outcomes. These studies typically find that traditional views are positively associated with the decision to marry, and that more egalitarian attitudes are positively associated with the decision to cohabit (Barber and Axinn 1998; Clarkberg, Stolzenberg and Waite 1995; Kaufman 2000; Moors 2000; Sassler and Goldscheider, forthcoming; Sassler and Schoen 1999).

A second group of studies attempts to infer effects of gender role expectations from associations between union outcomes and the potential or actual earnings of women and men. This indirect evidence strongly indicates that men with limited earnings potential are less likely to marry. The influence of gender role attitudes on marital quality and stability is highly dependent on the degree of incongruity between spouses' attitudes and actual household roles (Casper and Bianchi 2002). Women report higher marital quality when their spouses take on a more egalitarian division of household labor (Hochschild 1989; Gerson 1993). In contrast, marital quality is lower when men who hold traditional gender role attitudes have working wives (Perry-Jenkins and Crouter, 1990).

Researchers believe that gender role expectations are more traditional for marriage than for cohabitation. This conclusion appears to rest largely on indirect evidence on the differing effects of

men's and women's incomes on the likelihood of marriage and cohabitation, rather than on direct attitudinal comparisons. Larger earnings for men show a strong positive association with marriage and a much smaller (but still positive) effect on cohabitation. In contrast, higher earnings for women tend to have a larger positive effect on cohabitation, or little effect on union formation (Carlson *et al.* 2002; Clarkberg 1999; Goldscheider *et al.* 2002; Manning and Smock 1995; Smock and Manning 1997).

More egalitarian gender role expectations for cohabitation may appeal to poor and upper middle-class couples for different reasons. For low-income couples, cohabitation offers an alternative to marriage with less prohibitive financial requirements, whereas for upper middle-class couples it offers a period for both partners to develop their careers before eventually marrying and having children (Clarkberg 1999; Cherlin 2000; Ellwood and Jencks 2001; Raley 1996).

Research Needs

The first basic research need in this area is for improved descriptive research on changes in gender role expectations. Are women placing increasing value on men's potential to contribute to household tasks and child rearing? Are men placing greater value on a partner's potential earnings? How are any such changes influencing union formation decisions? Cohabitation, with more flexible gender role expectations, may be attractive because it offers an alternate model for gender relations. It would be useful to have more direct evidence on the extent to which differing expectations for men and women's roles leads people to cohabit instead of marry (Brines and Joyner 2000; Sanchez, Manning and Smock 1998).

Second, a number of studies have explored the direct influences of gender role expectations on unions, but we have only a sketchy view of the factors moderating these influences. One question is how economic opportunities condition the effects of gender role attitudes, given the substantial apparent gulf between expectations and earnings ability of low-skilled men. To what degree do couples revise their expectations in order to accommodate to the realities of everyday life? For example, there is some evidence that despite more traditional role orientations, black men shoulder a proportionately greater share of domestic household responsibilities than white men. That people are willing and able to modify their behavior despite normative expectations points to a need to look more closely at the processes by which norms affect personal values, and the ways different values can coexist in the same individuals with varying impacts on specific behaviors.

Gender role expectations are likely to be much more nuanced than is suggested by the simple continuum running from "traditional" to "egalitarian." For example, many women are likely to value their role as mothers and yet also value and desire to work. Barber and Axinn (1998) find that when women have both traditional gender role attitudes and high educational goals, they are *less* likely to get married. We also might expect such incongruities to affect marital stability and quality and cohabitation. Research that allows for greater complexity in personal values and traces the conditions under which different values are expressed in behavior is needed.

Questions about gender role expectations also arise in connection with programs like TANF that seek to promote both employment and marriage among low-income women. Do work requirements for single mothers influence expectations surrounding women and men's respective roles? What effects do changing gender role expectations have on prospects for, and experiences in, marriage and cohabitation? How do the effects of moving low-income women into the workforce play out when

gender role expectations are more and less traditional, and when the economic status of men is more and less precarious?

Traditional gender role expectations have been used to justify efforts to improve low-income men's economic status through employment, training and other means. Research also is needed on the possible policy benefits from fostering greater acceptance of non-traditional family roles for men, especially those with lower earnings capacity. There is some evidence that father's greater involvement with children (especially sons), and greater personal commitment to their parental role, helps to make marriages more stable (Faust and McKibben 1999; Morgan *et al.* 1988). Can increasing men's commitment to active fathering be a mechanism for improving union quality and stability?

Data Needs and Analysis Considerations

Research on the foregoing questions requires measures of the degree to which people in different social groups hold different expectations for men and women in marriages and cohabitations. Key roles include: generating income, raising children, and performing duties essential to maintaining the household. Measures are needed of the degree to which women and men hold differentiated expectations for roles (values) and how they evaluate specific partners' attributes with respect to these roles (attitudes). It is essential to have data from both men and women on the expectations applying to each gender. Ideally, this information would be available for both partners in the same couple, thereby enabling analysts to measure the effects of relative, in addition to absolute, expectations. It would be helpful to be able to distinguish the direction in which expectations lie for each gender from the importance people attach to these expectations. Against the possibility that gender role expectations are merely an expression of more important general value orientations, it also will be helpful to have measures of the value attached to broader values pertaining to egalitarianism, child bearing, material consumption, and work.

Longitudinal data are needed to study the factors underlying formation and change in gender role expectations and to distinguish the behavioral consequences from the causes of such expectations. As noted in the previous section, longitudinal measures must be obtained prospectively in multi-wave surveys that also collect histories for marriage, cohabitation, employment, births, and other needed analytic measures.

Chapter 5
Psychological Influences

Whereas demographers, economists, and sociologists focus primarily on factors extrinsic to interpersonal relationships, psychologists are interested mainly in interpersonal interaction and its effects on marital stability and satisfaction. Psychologists have been especially concerned with factors that are under couples' control and hence potentially amenable to change through direct intervention. Section 5.1 reviews some of main themes and needs in research on couple interaction. Increasingly, psychologists are recognizing the need also to understand how relatively stable personal dispositions, as well as wider environmental factors, affect couple interaction. Sections 5.2 and 5.3 look at research on intrapersonal and contextual influences, respectively.

5.1 Interaction Processes

Basic research on interpersonal interaction has made considerable strides in identifying behaviors that predict marital dissatisfaction and dissolution. Practitioners hope that, by targeting these predictors, their interventions can be more effective in helping couples. Moving from prediction to understanding has been an important goal over the past decade. Efforts to strengthen theory have been spurred by debates about whether current knowledge of causal mechanisms provides an adequate basis for intervention design (Jacobson and Addis 1993; Gottman *et al.* 1998; Gottman *et al.* 2000; Markman *et al.* 1997; Stanley *et al.* 2000; Stanley *et al.* 1999).

Research Findings

The key outcomes in much of this research have been marital satisfaction and stability. Marital satisfaction is a subjective state typically based on self-reports on global happiness and levels of comfort/discomfort with varying aspects of the marriage.

Marital satisfaction has been analyzed as a predictor of divorce/separation and as an important outcome in its own right. An excellent meta-analysis of 115 longitudinal studies found marital satisfaction to be the best predictor of marital stability for wives and the second best predictor for husbands (Karney and Bradbury 1995). However, satisfaction explained only a small amount of the variation in marital stability. Improved measurement of satisfaction might improve its explanatory power. It also seems likely that factors other than satisfaction keep people together. Stanley *et al.* (1999) suggest a need to incorporate a wide range of constraints to leaving relationships as part of the concept of commitment. These constraints may operate to moderate the effects of satisfaction on marital stability.

A major advance in research on marital satisfaction and dissolution has been the use of prospective research designs to test developmental models for predicting longitudinal changes in relationships (Gottman 1994). For example, Gottman and Levenson's (1992) "cascade model" of marital outcomes proposes a five-stage sequence in which diminished marital quality (between the first two time points) predicts serious consideration of marital dissolution, which in turn predicts separation and divorce. Their results, based on structural equations models, support such a sequence.

Psychologists have studied marital interaction as a proximal determinant of marital satisfaction and stability. Although negative premarital interactions and disengagement predict low post-marital satisfaction 18 months later (Smith *et al.* 1990), positive interaction appears to be an even stronger predictor (Karney and Bradbury 1995). High ratios of positive to negative interactions also predict marital satisfaction and stability (Gottman & Levenson 1999). Certain **sequences of interaction** have been found to predict marital difficulty. One of the most consistent indicators is the so-called "demand-withdraw" pattern. In this pattern, one partner (typically the wife) raises a sensitive issue and the other (most often the husband) withdraws from the discussion (Bradbury *et al.* 2000; Christensen and Heavey 1990; Gottman and Levenson 2000; Gottman and Notarius 2000). In these situations, negative reciprocity often lacks a brake and leads to escalating conflict.

In seeking to understand these patterns of interaction, one line of research has addressed the **cognitive processes** through which each partner interprets the other's behaviors. Attributions of negative motives have been found to play a major role in marital distress. The Attribution-Efficacy Model of Conflict (Bradbury and Fincham 1987) describes three stages in the process of attributing blame to a partner. First, a spouse locates the cause of a problem in the partner; second, he/she decides that the other partner is responsible; and, finally, he/she assigns blame to his/her partner. Stable negative attributions, often formed early in a relationship, can have pervasive effects on many aspects of a relationship and be resistant to change. Such attributions lead to negative interpretations of partner behavior, which set the stage for negative interactions. In contrast, positive attributions lead to more friendly interactions and constructive problem-solving (Noller *et al.* 1997).

A second important area of research has concerned the role of **affect**, or emotion. Although affect sometimes is viewed as a single continuum, researchers now believe it is a more complex construct. One view is that there are two key dimensions: a pleasant/unpleasant (quality) dimension and an arousal (intensity) dimension (Whisman 1997). Another view sees the relevant dimensions as high/low positivity and high/low negativity. Relationships can be high on both positive and negative responses, low on both, or high on one but low on the other (Fincham *et al.* 1997).

Researchers have videotaped couples during conflict discussions and subsequently asked both participants a series of questions about they thought how each partner was feeling at different points while replaying the tape. Spouses were more accurate in decoding partners' hostility than in identifying expressions of affection (Fincham *et al.* 1997). Timmer and Orbuch (2001) report a similar result. This finding may explain why spouses are more likely to reciprocate negative than positive behaviors (Noller *et al.* 1997). However, Gottman and Levenson (2000) show that it is the absence of positive affect, rather than the presence of negative affect, that predicts divorce in the long run. The distinction has intriguing implications for the content of intervention programs.

Researchers studying negative affect (e.g., expressions of anger and hostility) have come to different conclusions about its impact on long-term marital satisfaction and stability. Although some findings suggest that negative affect, especially negative reciprocity, is detrimental (Bradbury *et al.* 2000), others have found positive effects for emotions such as anger (Buelman *et al.* 1992). Gottman and Krokoff (1989) report that anger lowers marital satisfaction in the short-run but raises satisfaction over time. It is reasonable to suppose that anger can be constructive or destructive, depending on when and how it is expressed and how each partner responds to the underlying causes over time.

Gottman *et al.* (1998) pose the possibility that marital therapy "may be at an impass because it is not based on a process model derived from prospective longitudinal studies of what real couples do that

predicts if their marriages will wind up stable and happy, unhappy and stable, or end in divorce (p. 5)." They go on to challenge widely-held clinical assumptions, such as that anger is a destructive emotion and that couples can learn "active listening" even when they are unlikely to spontaneously listen in such a manner. Stanley *et al.* (2000) reply that Gottmen *et al.*'s clinical recommendations rest on weak grounds, due to their small sample size (130 couples) and other limitations. The issues clearly deserve further research and discussion.

Marital interactions are accompanied by measurable **physiological reactions** that index the intensity of emotional experiences, tensions, and arousal experienced by individuals during conflict. Physiological reactions occur even while partners are viewing a tape of their conversation during a disagreement. In some circumstances, physiological reactions anticipate the onset of conflict (Gottman and Levenson 1999). This research opens the door for an understanding of how physiological reactions to stressful events may mediate the link between interpersonal encounters and physical well-being.

Nearly all of the research on couple interaction to date has focused on engaged or married couples. One exception is Brown's (2000) study of a large sample of **cohabiting couples** interviewed in two waves of the National Survey of Families and Households. She explores the effects of relationship quality (amount of time spent together, disagreements, conflict resolution, and marital expectations) on the odds of continuing to cohabit, marrying, or separating. Low levels of self-reported interaction in the first interview increased the likelihood of separation five years later. When both partners initially were happy, they were more likely to have married five years later. Negative assessments by female partners increased the odds of separation, whereas negative assessments by male partners reduced the odds of marriage. These varying indications of when male and female evaluations matter most in sustaining or terminating relationships need to be confirmed and elaborated.

Research Needs

Recent studies of interpersonal processes have been notable for their attention to detail, methodological sophistication, and beginning efforts to build integrated theories of how marriages succeed or fail. This integrative theoretical effort needs to be encouraged in the future.

Knowledge accumulated to date rests heavily on convenience sampling methods that do not produce highly generalizeable findings. One analysis showed that samples recruited via newspaper ads differ in important ways from those drawn from marriage license records and can give rise to different results (Karney *et al.* 1995). Rarely is it possible with such samples to estimate sampling biases or provide a convincing statement of the degree to which samples represent the community at large.

Because most of the extant research has involved middle-class whites, we have no idea whether the data apply to other ethnic or income groups. If attributions—especially negative ones—vary with education and cultural norms, this variation could give rise to corresponding variation in partners' interpretations of each others' behaviors. Similarly, if affect expressiveness varies in disadvantaged populations, this variation could lead to differences in abilities to decode a partner's feelings.

Another kind of sampling limitation is that the vast majority of studies have sampled engaged and married couples and, as a result, psychologists have amassed little knowledge of cohabitation and other informal relationships. With the rise in cohabitation, and indications that the meaning of informal relationships varies across the population (see Section 2.3), such unions deserve much

greater attention in future research. Furthermore, this body of research has not addressed union formation nearly as much as stability and quality. More observation of interaction at early points in relationships would be beneficial.

Many of the insights afforded by psychological research have come from the development of sophisticated observational methods in research laboratories (Gottman 1998; Gottman and Notarius 2000). The challenge now is to find ways of transporting these methods to more natural settings, such as the home, where both the nature and consequences of interaction may be different.

A key measurement need is to refine the construct of marital satisfaction and develop appropriate instruments for measuring it. Multiple measures are likely to be needed given indications (1) that satisfaction and dissatisfaction represent independent dimensions of the broad construct, and (2) that both the intensity and direction of assessments matter. A problem with several standard marital satisfaction indices is that they incorporate self-reports of interaction behavior, as well as appraisals of internal subjective states. Indices defined in this way introduce spurious correlation in studies of the relationship between couple interaction and marital satisfaction (Bradbury *et al.* 2000). A coordinated effort is needed, so that researchers can standardize on improved measures and results will be comparable across studies.[25]

A second need is to specify the relevant cognitive processes more clearly and get a better understanding of their sources and effects. How do constructive and maladaptive attributions form, and how are they organized in broader, cognitive schemas? How do attributions affect interactive behaviors and how can negative attributions be changed?

Third, there is a need to expand our understanding of the nature and role of affect. Why are couples more likely to perceive and respond to negative than to positive affect? Why have varying studies found negativity (e.g., anger and criticism) to be sometimes healthy and sometimes harmful for relationships over the long term? Answers to these questions have important implications for how interventions approach anger and other emotions.

Fourth, psychologists have made some exciting initial discoveries implicating physiological responses as both determinants and consequences of marital interaction. As a determinant, Gottman and Levenson (1988) offer the hypothesis that men's greater tendency to withdraw is a response to higher levels of autonomic arousal during conflict. The factors underlying physiological responses and the conditions moderating their effects on relationships merit further investigation. What are the biological processes (age, genetic dispositions), environmental stresses, and cultural norms that determine and moderate physiological arousal?

Finally, behavior patterns such as demand-withdraw have been identified by detailed analyses of behavior exchanges. Other patterns, such as negative-negative patterns that escalate into major battles, also deserve careful scrutiny to identify techniques helpful in soothing and repairing the emotional after effects of marital conflict.

[25] Karney and Bradbury (1995) counted 30 different measures of marital satisfaction among the 68 longitudinal studies they identified for this outcome.

Data Needs and Analysis Considerations

Research on interpersonal processes and their consequences requires extensive measures of interactive behaviors (affective reactions, supportive gestures); cognitive operations and inferences; affective expressions; and physiological correlates of observable behavior.

The ideal data set would contain continuous observational measures of couples interacting in a range of natural situations, with synchronized measures of each partner's cognitive (i.e. interpretive), affective and physiological responses as well as measurements of marital satisfaction using two- or three-dimensional models. Multi-method assessment devices would be constructed so the satisfaction indices would be independent of potential causal variables. These data would be available for couples in different socio-economic groups and, when aggregated, be representative of the population as a whole (Whisman 1997).

No data set to date approaches this ideal. Several national longitudinal surveys (most notably the National Survey of Families and Households and Fragile Family Surveys) incorporate self reports on relationship functioning, satisfaction, and stability at multiple time points. At the other extreme, there have been numerous laboratory studies of small convenience samples—typically weighted toward middle-class Caucasian couples. These studies have pioneered sophisticated data gathering schemes and opened challenging fields for future research. Carefully designed, large-scale studies that over-sample disadvantaged couples and include informal as well as formal unions are needed to exploit the full potential of these intensive data collection methodologies.

5.2 Intrapersonal Influences on Interaction

A recently proposed model of marital well-being holds that marital outcomes are a function of personal vulnerabilities, stressful events, and adaptive processes (Karney and Bradbury 1995). In turn, vulnerability is a function of personality traits and enduring dispositions. Stable background characteristics such as education, ethnicity, and early experiences affect marital outcomes indirectly through their influence on expectations, values, and appraisals and, ultimately, on problem-solving behaviors (Kelley *et al.* 1983). Other characteristics—such as neuroticism and depression—are more or less stable personality characteristics that may vary with stressful events, physical health, and other circumstances that place demands upon individual coping. We consider the latter dispositions in this section because research suggests they matter and accordingly may present challenges in short-term interventions.

Research Findings

Neuroticism, or negative affectivity, is a trait-like tendency to see the down side of events regardless of particular circumstances. Indices of neuroticism typically are created from questionnaire items such as "Are you a worrier?" This trait has shown consistent associations with both marital satisfaction and dissolution. A recent meta-analysis of 115 studies found seven analyzing neuroticism (Karney and Bradbury 1995). When aggregated, these studies yielded substantial effect sizes for marital satisfaction and marital dissolution.

In a recent longitudinal study, 60 newlywed couples were observed trying to solve a marital problem (Karney and Bradbury 1997). Data collection continued in six-month intervals over four years. At

the end of this time, 56 couples remained in the study and, of these, 18 had divorced. Interactive behaviors were coded according to the positive and negative behavior displayed by each spouse. Neuroticism was assessed at Time 1 and Time 2. Dependent measures were marital satisfaction and marital dissolution. Analyses showed that higher levels of neuroticism were associated with lower levels of satisfaction for both spouses, although significantly so only for husbands. Spouses scoring high on this trait reported lower marital satisfaction from the start of the marriage, but the rate of change was unrelated to neuroticism scores. Further, neuroticism was unrelated to marital dissolution, conceivably because the divorced sample was too small.

Depression is assessed by a questionnaire asking how often each partner experienced symptoms during the past week. Evidence suggests that the effects of depression are both important and subtle. A good example is Vinokur *et al.'s* (1996) study of job seekers. Their findings suggest a process that begins with an adverse effect of financial strain on job seeker and partner's depression. The partner's depression then contributes to the partner's diminished support and these, in turn, contribute to the job seeker's depression. Concurrently, these factors reduce the job seeker's relationship satisfaction.

The birth of a child is another life event that affects depression scores (see Section 2.2). Both new mothers and fathers are at risk for depressive symptoms and these in turn are associated with more difficult marital adjustments after the birth of a child (Cox *et al.* 1999).

Research Needs

Intrapersonal dispositions come from a variety of sources, ranging from genes to early childhood experiences. Their effects on intimate relationships could be moderated by a variety of cultural or economic factors. However, there is little evidence on the effects of depression on unions in minority or low-income populations, or on the factors moderating these effects. Clearly, these personal dispositions can have a profound effect on an individual's adaptive abilities in relationships as well as his or her response to ameliorative efforts. Whether individuals with these or other tendencies can acquire adaptive strategies that ease the stress on marital processes is an important unanswered question (Bradbury *et al.* 2000).

It is also likely that some individual personality traits are sensitive to situations and settings. Individuals high in neuroticism or with depressive tendencies are likely to experience inordinate stress during periods of unemployment, illness, or other crises. Economic disadvantage and minority status, although neglected in the research, are associated with personal dispositions that yield maladaptive behavior (Tessor and Beach 1998; Vinokur *et al.* 1996). These dispositions need to be mapped for disadvantaged and minority populations who are likely to be subject to especially high levels of stress.

Neuroticism has been studied as an overall score summarizing a complex array of symptoms, including anxiety, depression, hostility, temper outbursts, and oversensitivity to relationship events. It might be useful to develop sub-scores for clusters of symptoms distinguishing anxiety, hostility and other aspects to examine more concretely whether and how these distinct tendencies contribute to dysfunctional relationships.

Other individual differences also merit investigation. Several researchers have identified attachment theory as a promising source of explanatory constructs that might help explain how individual differences come about and how they might affect intimate relations (Bradbury *et al.* 2000).

Dysfunctional beliefs are another source of individual differences that might have strong cultural connections as well as marital effects (Kurdek 1993).

The extant research has made a promising start towards better understanding the effects of individual characteristics on marital relationships. These efforts have also identified several promising leads that invite further scrutiny. However, this research does not address disadvantaged or minority groups or informal unions. Once again, small convenience samples tend not to include these couples, and therefore reanalysis of extant data is unlikely to add to our knowledge base.

Data Needs and Analysis Considerations

Research on intrapersonal traits, especially in disadvantaged individuals, can expand knowledge of how personal dispositions affect, and are affected by, life circumstances and adaptive processes. One problem with existing research in this area is that distributions of some critical variables (e.g. physical health, education, marital histories) are skewed and their ranges are narrow, factors that reduce their predictive and explanatory power. A major need is to sample low-income populations, paying special attention to ethnicity and background.

Another need is to expand the set of individual difference variables studied along with multiple data collection tools beyond self-report and check lists. Diary data collected by phone interviews, for example, might offer a rich source of information regarding daily events and individuals' reactions to these.

5.3 Contextual Influences on Interaction

Although poor communication and low-quality interaction are proximal causes of union distress, these processes are but components of a far more complex dynamic. An adequate theory of couple interaction requires specifying the role of broader contexts within which interaction occurs. Existing psychological research

> *focuses heavily on the interior of marital relationships as the generative mechanism in marital functioning, leaving relatively little room for the ecological niches in which marriages are situated or for the intersection between interior processes and external factors that impinge upon them… This focus can be understood in part from the clinical… need to emphasize potentially changeable determinants of marital quality* (Bradbury *et al.* 2000; pp. 8-9).

Nonetheless, the efficacy of preventative and clinical interventions depends also on how well they recognize and help couples respond to external challenges. From a broader policy standpoint, research on context is needed to determine when it would be better to change the conditions of couples' lives or address skills for improving their relationships.

Research Findings

It is helpful to distinguish between the broad environmental conditions that provide the background for family life and the more immediate circumstances facing couples. At the **macro level**, we have the broad ecological niches in which unions form and change. Bradbury *et al.* (2000) describe this

layer of context as "the broader social conditions and institutions that can affect individual mates and their marriages…more encompassing, relatively slow-changing factors that can influence, to varying degrees, entire cohorts of couples (p. 10)." Macro-level influences include factors such as laws and public policies, housing availability, employment opportunities, mate availability, and racial discrimination.

Researchers have investigated the linkages between these macro influences and union outcomes. For example, the risk of marital dissolution has been found to be higher in regions where there is high mobility, where there are large numbers of single working women and potential mates, and where local employment rates are low (South and Lloyd 1995). There has been little work on the linkages between these macro factors and the couple interaction behaviors that mediate effects on union formation, stability and quality, however.

Macro-level processes operate on a large stage and we can expect that they will penetrate personal relationships relatively slowly. Factors external to interpersonal processes work both as primary influences on these processes and as moderators of the relationship between these processes and relationship outcomes (e.g., satisfaction and stability). Any interest in improving relationship functioning must take these broader societal conditions into account. However, the effects of public policies implemented at a national, state, or community level, and aimed at these factors, will not be evident immediately. Efforts to evaluate their efficacy thus must take place over substantial periods of time. The implications for prevention and clinical therapy revolve around need to help couples cope with environmental challenges that can make it difficult to maintain healthy relationships. Implications for broader interventions concern detrimental environmental influences that policy makers may want to target for change.

Influences at the **micro level** take shape closer to the family level, and include salient settings and circumstances with direct links to interpersonal functioning in marriage (Bradbury *et al.* 2000). Researchers have paid the most attention to a variety of life stressors and transitions. This research tends to address either discrete events (e.g. hurricanes, illness); economic or work-related stressors; or the larger set of stressors to which couples might be exposed at any given time. Stressful events place great burdens on marriage. Yet some marriages survive and others do not. Research on moderating factors may point to processes that either buffer or exacerbate marital difficulties.

The largest body of research on contextual effects comes from the study of work-related stressors. In a comprehensive study of economic pressure on rural families, Conger *et al.* (1999) find that economic pressure at Time 1 predicts individual distress and observed marital conflict at Time 2 which predicts marital distress at Time 3. Economic strain is related to higher hostility and lower warmth among husbands, which in turn is associated with lower reported marital quality by wives. The effects of stress are significantly ameliorated when wives provided social support to their husbands.

People's feelings provide valid cues about important relationships. When asked about a relationship when feeling good, they judge the relationship as good; when bad, they focus on the problems. As negative life events increase, relationships are judged more negatively, at least up to a point. When that point is reached, increased negative life events no longer have this effect. Tessor and Beach (1998) argue that the switch occurs because people become aware that environmental events are driving their feelings and, at this point, they are able to revise their judgments. Awareness of internal reactions permits people to contain their negative feelings. But as these events pile up, negative affect

returns. These findings point to the value of interventions that can monitor couples' progress and provide timely feedback when negative affect returns. As long as negative life events accumulate, it may be difficult for people to maintain a positive outlook on marital relationships.

Research Needs

Research needs fall within several broad categories of micro- and macro-contexts. One subject of great interest is how childbearing and the presence of children affect couples' relationships. We discuss research needs pertinent to this subject in some detail in Sections 2.1 and 2.2.

Another important set of factors includes stressful life events and crises, especially the important sub-category of financial and work-related stressors. The latter raise crucial questions for research on relationships of disadvantaged persons, and yet little research has focused on this population. Theory suggests stress can challenge positive communication by "interfering with effortful cognitive transformations and so disrupting patterns of pro-social interaction," (Bradbury *et al.* 2000; p. 12) as well as by inducing depression. Research is needed to understand how such threats to positive relationship functioning are influenced by the chronic stresses associated with poverty, as well as by acute stresses arising from crises to which people with fewer financial resources are especially vulnerable.

Many contextual factors that can interfere with positive relationship functioning are more likely to be present among socio-economically disadvantaged persons. The coincidence of multiple risks may take a particularly heavy toll on poor persons' relationships. Well-formulated research designs that assess the connections between environmental vulnerabilities and interpersonal processes for disadvantaged couples are an important need. The role of financial resources deserves much greater attention. To what degree does access to income and other resources helps couples to both avert and resolve crises that otherwise might prove debilitating for their relationship?[26]

Karney and Bradbury (1995)'s conceptual model provides a promising framework for work on contextual influences on interaction for disadvantaged groups. This model organizes causal influences into three categories: enduring vulnerabilities (intrinsic aspects of the individual's background and personality); stressful events (the external circumstances, crises, and problems that couples encounter); and adaptive processes (the behaviors summoned to deal with crises and lesser problems, including functional and dysfunctional couple interaction processes). Elaboration of this model should clarify how these components act upon one another and thereby strengthen the case for particular ameliorative measures.

With regard to macrocontexts, research recommendations in previous sections of this report discuss some of the primary economic and socio-cultural forces deserving further investigation. Here, we note the importance of asking how these factors get linked to observed relationship outcomes. For example, what are the mechanisms by which social norms about the acceptability of divorce affect the way individuals think about alternatives to current relationships? How do such norms affect couples' willingness to engage in problem-solving communications, and to negotiate and compromise?

[26] Researchers have speculated that the strong positive impacts on marital stability found in the Minnesota Family Investment Program reflect reduced stresses from life crises associated with this program's large boost to average family income (Miller *et al.* 2000).

Sociologists and economists have studied the effects of many of these influences on relatively easily-observed union outcomes such as entry and dissolution and, to a lesser degree, on self-reported relationship satisfaction. From the standpoint of interaction processes, the challenge is to specify and understand the linkages between these contextual factors and the interpersonal processes that drive marital stability and satisfaction.

Also important is to identify intra- and interpersonal variables that moderate potentially threatening environmental circumstances. Karney and Bradbury (1995) suggest how the presence or absence of "enduring vulnerabilities" in personal or family backgrounds can play an important role in moderating environmental stresses. Bradbury *et al.* (2000) point to recent research indicating that a supportive spouse can help to moderate injurious effects of stress on relationship. There is a substantial need to learn more about these and other factors that contribute to couples' resilience in the face of environmental stresses.

Data Needs and Analysis Considerations

The ideal data set for studying the issues discussed in this section would incorporate measures of both contextual influences and interpersonal processes and relationship outcomes (see Section 5.1). Key contextual variables include: family and personal background (e.g., early attachment, parents' marital quality/divorce and socio-economic status, partner's education, depression); earlier relationships; children; economic and work-related stressors; and social and economic characteristics of neighborhoods and communities.

Again, the lack of data from large-scale observational study requires compromises. National longitudinal surveys afford opportunities to analyze self-reports on relationship processes and outcomes in relation to a fairly wide range of contextual factors. The key weaknesses are limited detail on specific interaction processes, relatively infrequent measurement, and biases associated with self-reports. The strengths are measures of a relatively wide range of contextual factors, larger samples of disadvantaged and other population subgroups, and national representation. Observational studies are the opposite: rich in detail on relationship processes and outcomes, relatively poor in measuring contextual influences, and constrained by small samples.

Analyses need to distinguish how environmental variables operate to influence relationship processes from how they serve to moderate the effects of interaction patterns on relationship satisfaction and continuance. Such analyses require, above all, detail on the timing of relevant context, process, and outcome variables. Analysts' ability to order these variables in time is crucial to assigning causal influence.

Experiments that manipulate key context domains—e.g., promote work, enhance income, facilitate residential moves—should be of great interest to analysts, especially to the degree that they measure specific aspects of context and relationship processes affected. In this regard, the Moving to Opportunities demonstration, which relocates poor families in non-distressed neighborhoods, offers researchers unprecedented opportunities to assess the effects of context. Another category of pertinent program evaluations includes studies of life planning and management curricula and counseling services designed to improve peoples' ability to deal with stressful events.

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