

Marital Satisfaction Across the Transition to Parenthood: Three Eras of Research

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Few events have the potential to transform a marriage as much as the arrival of a child. In a short span of time, the profound feelings of joy and awe that parents experience when bringing a new life into the world combine with unfamiliar but urgent child-care tasks, uncharted negotiations between sleep-deprived partners, reductions in leisure time, changes in work patterns, fluctuations in moods and desires for intimacy, increased interactions with medical professionals, financial challenges, and new relationships with friends and family members. How couples navigate these myriad changes is likely to affect the course of their relationship; the infant's experience of the family as a safe, nurturing, and predictable environment; and the maturing child's emotional development and social competence. Social scientists have long recognized the pivotal consequences that the first child's arrival has on couples and families, and with 50 years now having now passed since LeMaster's (1957) seminal study on this topic, it is time to take stock of the large and varied body of research that has accumulated. Doing so is valuable not simply because the first child's arrival provides a window into how marriages naturally change but also because understanding change during this period can strengthen the empirical foundation for psychoeducational interventions designed to promote healthy family formation and development.

Most of the work on the transition to parenthood can be linked to the following question: To what extent does the first child's arrival affect spouses' marital satisfaction? This question is critical to address given that marital satisfaction is strongly associated with the 50% divorce rate in the United States (U.S. Census Bureau, 2005), with spouses' psychological (e.g., depression, anxiety, alcohol abuse; e.g., Whisman & Uebelacker, 2006) and physical health (e.g., Kiecolt-Glaser & Newton, 2001), and with children's well-being (e.g., Amato & Keith, 1991). To address the effects of the first child on marital satisfaction, researchers have typically used one of two distinct methodological approaches. In the first approach, researchers compare couples with and without children to estimate the degree to which the child's arrival contributes to relationship satisfaction and relational processes, and they conduct repeated measures

between-group analyses to address this question. In the second and more recent approach, researchers have begun to map trajectories of relationship satisfaction and associated processes among parents and nonparents, with the goal of understanding not only group differences but also individual variability across time. Researchers using this approach tend to conduct intensive, multiwave, longitudinal designs and to use growth curve modeling techniques to explain the within-person or within-couple changes that occur over time. In this chapter, as we review the literature on the impact of the transition to parenthood on marital satisfaction, we organize our review around each of these methodological approaches and then consider the implications this work has for interventions.

Mean Group-Level Changes Across the Transition to Parenthood

The first attempts to examine empirically the effects of the transition to parenthood on marriage were grounded in the perspective that having a baby creates a crisis in a marriage (e.g., LeMasters, 1957). Hill (1949) defined a *family crisis* as a situation following a significant event in which family members find their usual behavior patterns unrewarding and in need of immediate change. Three factors determined whether a crisis had occurred: the family's definition of the event, the hardships associated with the event, and the availability of familial resources to respond to the event. Early findings suggested that marital satisfaction actually increased for many couples over the transition to parenthood (Hobbs, 1965) and that the degree of crisis was associated with levels of marital satisfaction postpartum (Dyer, 1963; Hobbs, 1965). These early investigations were critical to the development of the transition-to-parenthood literature; however, the inferential yield of these studies was limited by their cross-sectional and retrospective nature (see P. A. Cowan & Cowan, 1988a).

The next wave of research on the transition to parenthood developed from the recognition that (a) prospective longitudinal designs were needed to understand how families develop over this transition and (b) there is more to be gained from conceptualizing the first child's arrival as a potentially stressful transition rather than as a crisis or upheaval. Rossi (1968) in particular helped shift the conceptual focus from "crisis" to "transition" with the understanding that a transition implies a normative shift from one stage to another, in this case a movement from preparenthood to parenthood (for comprehensive reviews of this work, see P. A. Cowan & Cowan, 1988a; Michaels & Goldberg, 1988). These changes ushered in a new paradigm whereby data collection typically began late in pregnancy and ended sometime within the first postpartum year, with data collected at comparable time points for couples not having a child. Pioneering research by several teams—including the Becoming a Family Project headed by Philip and Carolyn Pape Cowan (e.g., C. P. Cowan & Cowan, 2000; P. A. Cowan & Cowan, 1988a, 1988b), the Pennsylvania Infant and Family Development Project headed by Jay Belsky (e.g., Belsky, 1985; Belsky, Lang, & Rovine, 1985; Belsky, Spanier, & Rovine, 1983), the Process of Adaptation in Intimate Relationships Project headed by Ted Huston and Susan McHale (e.g., MacDermid, Huston, & McHale, 1990; McHale & Huston, 1985), and research

by Martha Cox and colleagues (e.g., Cox, Paley, Burchinal, & Payne, 1999; Cox, Paley, Payne, & Burchinal, 1999)—was instrumental in using this methodological approach or some variant of it to shed light on mean changes in marital satisfaction over the transition to parenthood and on the factors that might predict or moderate these mean changes over time.

Do Marriages Change Across the Transition to Parenthood?

Researchers engaged in this wave of longitudinal studies typically began data collection during late pregnancy and ended data collection sometime within the first postpartum year. Although many of these studies examined aspects of individual change over the transition to parenthood (e.g., self-esteem, self-concept, depression, work status) and aspects of the parent–child relationship, in this review we focus only on aspects of marital change. We review the studies in which mean changes in marital variables were examined over the transition to parenthood and organize this section into two categories of marital change—changes in marital satisfaction and changes in marital processes.

Changes in Marital Satisfaction

In sharp contrast to the findings of the early, cross-sectional, retrospective studies, most of these longitudinal studies demonstrated declines in marital satisfaction from the last trimester to postpartum periods. Notable here is a series of studies by Belsky and colleagues (e.g., Belsky et al., 1983; Belsky & Rovine, 1990) conducted on three cohorts of couples undergoing the transition to parenthood. Across these studies, marital satisfaction declined over the transition to parenthood. Additionally, husbands, wives, and couples tended to maintain their rank order across time with regard to marital satisfaction; that is, spouses who were relatively more satisfied prenatally compared with the rest of the sample tended to remain relatively more satisfied postnatally compared with the rest of the sample.

Researchers examined not only mean changes in marital satisfaction but also changes in subjective evaluations of other relationship qualities, including changes in marital stress, in positive feelings about one's spouse and/or the relationship, in evaluations of positive and negative aspects of the marriage, and in the ways in which partners characterize their marriages (i.e., partners' perceptions of the relationship as a friendship, partnership, or romance). In general, feelings of love for one's spouse decline moderately over time during the transition to parenthood, whereas feelings of ambivalence, marital stress, and perceptions of the relationship as a partnership—as opposed to a romance or friendship—increase (Belsky et al., 1983; Belsky et al., 1985).

We note three caveats to the consistent findings with regard to mean changes in marital satisfaction and subjective evaluations described. First, although the declines in marital satisfaction were generally significant across these studies, the magnitude of the effects was typically small to moderate in size. However, even small declines in satisfaction can be important during the early years of family formation, as this is a time when enduring patterns of

family interaction are established (Klennert, Gavin, Wamboldt, & Mrazek, 1992). Second, Wallace and Gotlib (1990) presented a more complicated picture in their study of 97 primiparous couples (first-time parents) assessed during pregnancy and at 1 and 6 months postpartum. They demonstrated that marital adjustment (assessed with the Dyadic Adjustment Scale; Spanier, 1976) for husbands and wives peaked 1 month after the birth of the first child, representing a significant increase from pregnancy levels, and had decreased significantly by 6 months postpartum. Wallace and Gotlib hypothesized that the relatively low levels of satisfaction at 6 months postpartum did not necessarily represent an overall decline in marital satisfaction but rather a return to prepregnancy levels. They suggested that researchers evaluate this possibility by recruiting couples who are not yet pregnant and studying them over time, a recommendation that has rarely been adopted. Of note, Wallace and Gotlib's findings do not necessarily contradict those of the other researchers cited in this section; rather, their findings argue for the need to conduct multiple assessments at closer intervals across the transition and over longer periods of time than previously considered. The third caveat is that in addition to demonstrating declines in marital satisfaction across the transition to parenthood, McHale and Huston (1985) noted similar declines for nonparent couples and argued that there is no evidence of a unique effect of the transition on feelings of love or marital satisfaction. Additional support for this assertion comes from other studies that have included childless comparison groups and have demonstrated that the declines in marital satisfaction experienced by parents are similar to those experienced by nonparents over time (Kurdek, 1993; White & Booth, 1985). In sum, some controversy exists over whether declines in relationship satisfaction are attributable to the transition to parenthood or simply reflect normative changes that occur in relationships over time.

Changes in Marital Processes

Research on mean changes in marital processes across the transition to parenthood has included investigations of the division of labor, positive and negative behaviors expressed during problem-solving discussions, joint activities, and spousal support and intimacy. Division of household labor is one of the more thoroughly researched marital processes, with much of the work conducted within the framework of role theory and published by the Cowans and by Belsky and colleagues. The results from these studies suggest that the division of household labor becomes more traditional after the child is born, with wives assuming significantly more household responsibilities postpartum than they did during pregnancy (e.g., Belsky et al., 1985). Two studies were sufficiently unique in their designs to warrant special attention here. In the first, P. A. Cowan and Cowan (1988b) examined tasks across multiple domains (household tasks, child-care tasks, "outside-the-family work" tasks) among 47 first-time parents during pregnancy and at 6 and 18 months postpartum. They found that couples' divisions of labor changed in traditional and nontraditional ways over the transition. Specifically, husbands' participation in household tasks and outside-the-family work increased from pregnancy to 6 months postpartum. Husbands' participation in household tasks decreased from 6 to 18 months postpartum, but their participation in child-care tasks increased during this same

period. Across the entire period of the study, women were doing the majority of the housework and child care, whereas men were doing the majority of outside-the-family work. In the second study, Goldberg, Michaels, and Lamb (1985) assessed the division of labor of 39 primiparous couples twice, during pregnancy and at 3 to 4 months postpartum. They found that the division of labor changed in a curvilinear (U-shaped) pattern, such that the least traditional sex role arrangements were reported during late pregnancy, with a return to more traditional levels in the postpartum period. Goldberg et al. (1985) interpreted the shift toward a less traditional division of labor during pregnancy as "an adaptive response to the physical limits imposed by the pregnancy" (p. 499), arguing that the patterns present in the late pregnancy stage may not be representative of couples' prepregnancy divisions of labor. This interpretation suggests that in the majority of transition-to-parenthood studies, when the division of labor is typically assessed for the first time during pregnancy, researchers may be overestimating change attributable to the transition to parenthood. With regard to mean changes in positive and negative behaviors over the transition to parenthood, existing research suggests that positive behaviors tend to decline, negative behaviors tend to increase, and spouses tend to become increasingly dissatisfied with the amount of positive and negative behaviors displayed by their partners (e.g., Belsky et al., 1985; Belsky, Rovine, & Fish, 1989; C. P. Cowan et al., 1985; Cox, Paley, Burchinal, & Payne, 1999).

In contrast with the relative wealth of research on the division of labor and on positive and negative behaviors expressed during conflict, there has been little attention to joint activities or spousal support and intimacy as critical marital processes that may change over the transition to parenthood. The few studies on joint activities suggest that joint leisure (i.e., recreational) activities tend to decline and joint instrumental activities (e.g., household tasks, child-care responsibilities) tend to increase over the transition (Belsky et al., 1983; Kurdek, 1993; MacDermid et al., 1990; McHale & Huston, 1985). The minimal data on support and intimacy suggest that support, emotional intimacy, and sexual intimacy decline from pregnancy to postpartum (Goldstein, Diener, & Mangelsdorf, 1996; Hackel & Ruble, 1992; O'Brien & Peyton, 2002; Rhoads, Simpson, Campbell, & Grich, 2001). However, these data are difficult to interpret because they generally do not include an examination of prepregnancy levels of support and intimacy. For example, it is possible that levels of spousal support and emotional intimacy increase from prepregnancy to pregnancy and then return to prepregnancy levels postpartum.

What Factors Predict Change Across the Transition to Parenthood?

Researchers have investigated two types of predictors of mean changes in satisfaction across the transition to parenthood: general and transition-specific. *General predictors* are not unique to couples undergoing the transition to parenthood; that is, they would be expected to affect the marriages of all couples regardless of parental status. Such predictors include spouses' demographic background (e.g., age, education, income), spousal characteristics (e.g., family-of-origin characteristics, personality traits, psychiatric symptomatology), dyadic character-

istics (e.g., prenatal marital satisfaction, division of labor, conflict, spousal support), and contextual factors (e.g., work–family interference, stressful life events, social support). *Transition-specific predictors* are unique to the transition to parenthood; that is, they represent experiences that are only salient to parent couples, such as degree of pregnancy planning, infant characteristics (e.g., temperament), individual parental characteristics (e.g., prenatal expectations and violations of those expectations), dyadic characteristics (e.g., division of child care), and contextual factors (e.g., family structure, parental stress).

General Predictors

Of the general predictors, prenatal marital satisfaction and division of labor have received the most empirical attention. Indeed, prenatal marital satisfaction appears to be the strongest single predictor of postpartum satisfaction for husbands and wives (Wallace & Gotlib, 1990; Wright, Henggeler, & Craig, 1986). With regard to the division of labor, this division tends to become more traditional over the transition to parenthood, but the impact of this shift yields a complicated picture that differs for husbands and wives. For example, husbands who do less housework and more child care relative to their peers at 6 months postpartum evaluate their marriages more positively (P. A. Cowan & Cowan, 1988b). For wives, the more traditional the division of labor becomes from pregnancy through 3 months postpartum, the more wives' evaluations of the positive aspects of their marriages decline (Belsky, Lang, & Huston, 1986). Additionally, wives' investment in the parent role interacts with husbands' involvement in household and child-care tasks to predict wives' marital satisfaction at 18 months postpartum (P. A. Cowan & Cowan, 1988b).

In contrast to the abundance of research on prenatal satisfaction and division of labor, few researchers have examined individual characteristics, dyadic processes, and contextual factors as predictors of marital change. On the basis of the research that does exist, dyadic processes such as problem-solving behavior, spousal support, and marital friendship appear to significantly predict mean levels of and mean changes in marital satisfaction across the transition to parenthood (Cox, Paley, Burchinal, & Payne, 1999; Rhoads et al., 2001; Shapiro, Gottman, & Carrere, 2000). However, the magnitudes of these effects are small. The limited research on individual characteristics has yielded inconsistent findings and is sufficiently methodologically heterogeneous to render it difficult to integrate (e.g., Belsky & Isabella, 1985; Wallace & Gotlib, 1990). Finally, the few existing studies of contextual factors suggest that spousal perceptions of the extent to which one's job interferes with the transition to parenthood affect marital satisfaction across the transition, but stressful life events and social support may not (e.g., Belsky & Rovine, 1990; Levy-Shiff, 1994).

Transition-Specific Predictors

In the category of individual predictors, we include spouses' prenatal expectations and violations of those expectations with regard to the transition to parenthood. Researchers have examined a variety of violated expectations, including

how a child will affect one's marriage, how competent one will be as a parent, expected divisions of child-care tasks, and anticipated ease of pregnancy. A large body of literature documents the links between violated expectations and mean changes in marital satisfaction over the transition to parenthood. For example, Belsky (1985) assessed prenatal expectations of how the birth of a child would affect couples' lives. Couples whose postnatal experiences were less positive than they expected experienced greater declines in marital satisfaction, and these declines were particularly notable for wives from pregnancy to 3 months postpartum. In a study of couples from pregnancy through 4 months postpartum, violated expectations concerning the division of household and child-care responsibilities were significantly negatively associated with change in marital satisfaction over the transition to parenthood (Hackel & Ruble, 1992). Wives who were doing more housework and child care than they had expected to do, and who were the most committed to their original expectations, were less maritally satisfied postpartum.

Existing data on the link between pregnancy planning and mean changes in marital satisfaction are mixed, with some studies demonstrating links between planning and marital decline (e.g., Cox, Paley, Burchinal, & Payne, 1999; Snowden, Schott, Awalt, & Gillis-Knox, 1988; Wright et al., 1986) and others yielding no such link (Belsky & Rovine, 1990; Mebert & Kalinowski, 1986). However, measurement of pregnancy planning differed markedly across these studies, which may account for some of the inconsistent results.

Infant characteristics comprise health, sex, temperament, and behavior of the infant (both observed by investigators and perceived by parents). Infant temperament and sex are associated with changes in marital satisfaction across the transition to parenthood such that the birth of a girl or a more temperamental infant is associated with significantly greater decline in marital satisfaction (e.g., Belsky & Rovine, 1990; Cox, Paley, Burchinal, & Payne, 1999; Klinnert et al., 1992). In general, infant health and behavior do not appear to be associated with such decline (e.g., Klinnert et al., 1992; Moss, Bolland, Foxman, & Owen, 1986).

Transition-specific dyadic predictors include length of marriage prior to childbirth and observed parental behaviors (e.g., positive and negative affect exhibited during marital conflict). The limited data available suggest that parental behavior predicts change in satisfaction, whereas associations between length of marriage and satisfaction are inconsistent (e.g., Klinnert et al., 1992; Moss et al., 1986). Within the category of contextual predictors, we include family structure (e.g., children from previous marriages, second marriages) and perceptions of parental stress. The existing data suggest that these factors do influence changes in marital satisfaction across the transition (e.g., Klinnert et al., 1992; Wallace & Gotlib, 1990).

Efforts to Integrate This Research

Belsky and Rovine's (1990) study is noteworthy for the investigators' efforts to differentiate and predict distinct patterns of marital change over the transition to parenthood. Data on marital satisfaction were collected during pregnancy and at 3, 9, and 36 months postpartum, and four distinct patterns of change across

the transition to parenthood were noted: accelerating decline, linear decline, no change, and modest positive increase. By using discriminant function analyses, a combination of prenatal predictors (demographics, personality traits, and marital characteristics) predicted which couples were classified as demonstrating declines versus increases in marital satisfaction. This study represents one of the earliest attempts to move beyond the examination of central tendencies to (a) identifying individual differences in marital change across the transition and (b) specifying the developmental antecedents or predictors of these individual differences.

A meta-analytic review of many of the studies examining group changes in marital satisfaction demonstrated that overall levels of marital satisfaction are lower among parents compared with nonparents (Twenge, Campbell, & Foster, 2003). Further, some demographic variables acted as potential moderators (e.g., age, socioeconomic status [SES], number of children). This review was an important step toward quantitatively synthesizing the literature on change in marital satisfaction across the transition to parenthood based on the first methodological approach we presented—comparing couples with and without children using repeated measures, between-group analytic strategies. Future reviews might build on this effort by integrating longitudinal, multiwave investigations of individual variability in trajectories of relationship satisfaction and associated processes among parents and nonparents. We review this latter group of studies in the next section.

Within-Person Trajectory-Based Changes Across the Transition to Parenthood

Several researchers have attempted to go beyond examining central tendencies to identifying individual differences in marital satisfaction change across the transition and to specifying the developmental antecedents or predictors of these individual differences. Using growth curve analyses, these researchers aim to account for individual variability in initial levels of marital variables (intercepts) and in rates of change in these variables (slopes) over the transition to parenthood.

Adopting this approach, Cox, Paley, Burchinal, and Payne (1999) investigated depressive symptoms, infant sex, pregnancy planning, and problem-solving skills as predictors of trajectories of marital satisfaction across the transition to parenthood in a sample of 136 primiparous men and women during pregnancy and at 3, 12, and 24 months postpartum. Similar to the conclusions of Belsky and Rovine (1990), who noted the importance of considering multiple determinants of marital change, Cox, Paley, Burchinal and Payne concluded that for both men and women, combinations of factors were associated with marital decline and poorer problem-solving interactions over time. The important role of depression as a risk factor during the transition to parenthood was emphasized, as was the importance of constructive problem-solving communication strategies in maintaining marital satisfaction during the transition to parenthood. Couples in which neither partner was rated as showing effective problem-solving skills during pregnancy had the lowest prenatal marital satisfaction and the most negative change in marital satisfaction across the transition.

Shapiro et al. (2000) examined potential buffers against marital decline over the transition to parenthood. At 9 months of marriage, couples ($N = 130$) completed the Oral History Interview (Krokoff, 1984), which was later coded on dimensions of positivity (i.e., fondness/affection, "we-ness," expansiveness) and negativity (i.e., negativity, disappointment/disillusionment, chaos). Couples also completed measures of satisfaction within the first 9 months of marriage and once per year thereafter, up to either the 4th or 6th year of marriage (depending on when in the course of the study they were recruited). Couples who became parents ($n = 43$) were also assessed during pregnancy and at 3 months postpartum and compared with a childless control group ($n = 39$). Growth curve analyses demonstrated a systematic decline in marital satisfaction over the transition that was particularly pronounced for wives. Given that parent wives had higher initial marital satisfaction, Shapiro et al. (2000) concluded that wives who are more maritally satisfied as newlyweds are more likely to have children within the first 4 to 6 years of marriage. Finally, the positive and negative dimensions were conceptualized as dynamic variables that influence a couple's ability to successfully navigate the transition to parenthood (Shapiro et al., 2000).

Van Egeren (2003, 2004) conducted a trajectory-based analysis focusing on the development of marital and coparenting relationships across the transition to parenthood. Couples were all first-time parents assessed during the third trimester and at 1, 3, and 6 months postpartum. On average, coparenting experiences tended to be positive and stable over the first 6 months of parenthood, and fathers were significantly more satisfied with coparenting than were mothers. The prenatal marital relationship was an important predictor of the extent to which parents felt supported and validated in their coparenting. Further, changes in postpartum marital experiences were inversely related to changes in coparenting experiences, suggesting that one aspect of the couple relationship was maintained at the expense of the other aspect. Van Egeren (2003) then examined prenatal predictors of coparenting experiences across four data points using growth curve analyses. For mothers, coparenting experiences were associated with age, paternal education, concerns around child rearing, differences in child-rearing philosophy, and reactance (lack of susceptibility to influence by others). For fathers, coparenting experiences were related to occupation, complexity of maternal ego development (a semiprojective measure of personality), their reports of coparenting in their families of origin, and both parents' motivation to raise children.

Lawrence, Rothman, Cobb, Rothman, and Bradbury (2008) conducted growth curve analyses on marital satisfaction data collected twice before and twice after the birth of the first child and at corresponding points for voluntarily childless couples ($N = 156$ couples). Spouses who were more satisfied before pregnancy had children relatively early in marriage, and parents experienced greater declines in marital satisfaction compared with nonparents. Couples with planned pregnancies had higher prepregnancy satisfaction scores, and planning predicted less marital decline postpartum for husbands but did not buffer marital decline for wives. In sum, parenthood appeared to hasten marital decline—even among relatively satisfied couples who select themselves into this transition—and planning status and prepregnancy marital satisfaction generally did not protect marriages from these declines.

Lawrence, Nylen, and Cobb (2007) examined associations among prenatal expectations, the extent to which expectations were confirmed or disconfirmed, and trajectories of marital satisfaction 7 to 11 times over the transition to parenthood in a sample of newlywed couples. They conducted piecewise growth curve analyses to examine levels of marital satisfaction at the beginning of marriage and rates of change over two periods: from the beginning of marriage through the third trimester of pregnancy and from the third trimester of pregnancy through 18 months postpartum. Postpartum marital decline was greater than decline from marriage through pregnancy. Spouses who were more satisfied at the beginning of marriage reported higher expectations. There was marked variability in the extent to which prenatal expectations were confirmed: Some expectations were unfulfilled, others were met, and still others were surpassed. Associations between the extent to which expectations were confirmed and rates of change in marital decline differed as a function of the specific type of expectation.

Finally, Doss, Kline Rhoades, Stanley, and Markman (2009) compared multiple statistical models to clarify the effect of the birth of the first child on relationship functioning in 218 couples over the first 8 years of marriage. Compared with prebirth levels and trajectories, mothers demonstrated sudden deterioration following birth on measures of relationship satisfaction, self-reported problem intensity, self-reported conflict management skills, observed negative communication, and relationship confidence. Fathers showed significant sudden deterioration on measures of marital satisfaction, dedication, and negative observed communication, and gradual deterioration (increases) in problem intensity. The deterioration in these variables was small to medium in size and tended to persist throughout the remaining years of the study. The amount of postbirth deterioration in relationship functioning varied systematically by several characteristics of the individual, the marriage, and the pregnancy itself. In a group of couples who did not have children, results indicated more gradual deterioration in relationship functioning during the first 8 years of marriage without the sudden changes seen in parents, suggesting that the results seen in the parent sample may be due to the birth of the child.

Critique and Recommendations for Future Research

The large body of literature on the transition to parenthood has yielded important insights about the challenges that married couples face with the arrival of their first child, but ambiguity remains over whether this transition adversely affects marital satisfaction beyond the normative effects of time. As research continues clarifying the nature of these changes, we recommend that researchers implement a series of methodological refinements to maximize internal and external validity.

Internal Validity

With regard to maximizing internal validity, we recommend three design changes: better efforts to control sources of variability in samples and measures,

judicious selection of control groups or comparison conditions, and greater attention to the timing of data collection. (See Lawrence et al., 2008, for a detailed discussion of internal validity issues.) With regard to controlling sources of variability, four issues are worth highlighting. First, the use of samples that comprise couples expecting their first child and couples expecting their second or third child may restrict our ability to pinpoint changes in marital satisfaction associated specifically with the transition to parenthood because observed changes may be confounded with those related to the addition of a later child to the family. Second, the inclusion of couples in first, second, and later marriages within the same sample may also obscure patterns. Third, marital duration often varies widely across couples in a given sample. Fourth, because children of different ages exert different demands on their parents' time and energy, variation in the age of the focal child within a given sample (e.g., aggregating across couples with a 3-month-old and couples with a 1-year-old) makes it difficult to identify changes in the marital relationship occurring at specific points within the transition period. Given that these factors are likely to moderate the effects of the transition to parenthood on marital satisfaction, we recommend that researchers either examine these factors systematically or design studies in which these factors are controlled via recruitment strategies and eligibility criteria.

We raise four issues with regard to the selection of comparison groups. First, relatively few studies have included childless comparison groups, which is relevant because changes in marriage that normally occur with the passage of time might be attributed mistakenly to the transition to parenthood. Second, it is important to distinguish between couples who are voluntarily and involuntarily childless because these groups may differ systematically from parent couples in ways that would likely be related to marital satisfaction. Third, many studies with childless comparison groups have not matched parent and nonparent groups on marital duration, resulting in childless comparison groups that may have been married for significantly different lengths of time than parent groups. Fourth, the majority of studies either do not include information on whether pregnancies were planned or they report percentages of planned versus unplanned pregnancies in their samples but do not take this factor into account in their analyses.

Finally, we call for researchers to pay greater attention to the timing of data collection. Most studies begin during pregnancy, typically during the last trimester. This approach is efficient for identifying a sample of couples who will undergo the transition to parenthood, yet it assumes that an assessment of marital satisfaction during pregnancy is an appropriate baseline for evaluating change in marriage. This approach also precludes evaluation of hypotheses relating marital functioning prior to pregnancy to marital functioning over the transition to parenthood, and it forces investigators to identify comparison couples with a recruitment method different from that used to recruit pregnant couples, introducing another source of variability.

External Validity

With regard to external validity, we recommend the study of low-income and nontraditional families navigating the transition to parenthood. Most research

to date has been limited to couples who are heterosexual, middle-class, Caucasian/non-Hispanic, and married. It is likely that factors such as low SES, family structure (e.g., two-parent vs. single-parent families), and relationship status (e.g., cohabiting couples vs. married couples) influence parents' ability to navigate the transition to parenthood. We know that such factors often place couples at greater risk for declines in marital satisfaction over the early years of marriage, so it is reasonable to hypothesize that such factors would interact with stressful transitions, such as having a baby, to affect relationship satisfaction. For example, to the extent that SES is associated with access to prenatal care (e.g., Wasserman, Bender, & Lee, 2007), low SES may also be associated with a more difficult transition to parenthood. Similarly, cohabiting couples report greater rates of physical aggression and lower rates of relationship satisfaction than married couples (e.g., Cohan & Kleinbaum, 2002); consequently, cohabiting couples might have more difficulty navigating the transition to parenthood compared with married couples. In sum, our knowledge of how couples navigate this important life change, and the factors that predict how well they will navigate this change, might be highly skewed as a function of our samples to date.

In one notable exception, Goldberg and Perry-Jenkins (2004) examined violations of expectations of division of household and child-care duties across the transition to parenthood among women in working-class, dual-earner relationships. Violated expectations in the division of child care were a stronger predictor of women's depression and anxiety symptoms than were actual divisions of child care or housework postpartum in this sample. More important, the interrelations among divisions of labor, expectations, and women's well-being were markedly different from the relations among these variables published in studies with middle-class women, highlighting the need to diversify our samples to understand more fully the impact of the transition to parenthood on the full array of couples experiencing it.

What Is the Status of Current Intervention Work on the Transition to Parenthood?

More recently, researchers have begun to address the importance of developing empirically derived tertiary (e.g., Glade, Bean, & Vira, 2005) and prevention strategies (e.g., Feinberg, 2002) for couples undergoing the transition to parenthood. A few such efforts have been published (e.g., Bryan, 2002; Hudson, Campbell-Grossman, Fleck, Elek, & Shipman, 2003) with promising results. However, we know of only one published randomized control trial of an intervention targeting marital satisfaction during the transition to parenthood. In their prevention program, Schulz, Cowan, and Cowan (2006) randomly assigned expecting couples to intervention ($n = 28$) and comparison ($n = 38$) groups to assess the efficacy of a couples intervention and to examine marital satisfaction trajectories across the transition to parenthood. The couples groups began at the start of the third trimester of pregnancy and met weekly for 2.5 hours over 24 weeks. The group coleaders introduced topics including how participants viewed themselves and their relationships, division of family labor, communication and problem-solving behaviors, ideas about parenting and actual parenting

practices, work and social support outside of the family, and the influence of experiences from one's family of origin on parenting and on the couple's relationship (for more details, see C. P. Cowan & Cowan, 2000). Couples completed measures of marital satisfaction at five time points from the third trimester through 66 months postpartum. Growth curve analyses yielded a normative linear decline in marital satisfaction. Intervention participants experienced significantly less decline than comparison participants, providing support for the efficacy of the intervention. Comparable childless couples ($n = 13$) did not demonstrate declines in marital satisfaction.

Schulz et al.'s (2006) study is the most methodologically sound transition-to-parenthood intervention study conducted to date. The authors collected prospective longitudinal data and assessed couples at least once prenatally and several times postpartum. Couples were followed up to 5.5 years after the birth of their first child. The study used statistical techniques (growth curve analyses) that allowed for the identification of factors that account for individual differences in initial levels of outcome variables as well as differences in rates of change in these variables over time. Schulz et al. included a no-treatment control group and a nonparent control group and used a primary prevention strategy.

These latter two decisions suggest that Schulz and colleagues embrace the perspective that the transition to parenthood is a significant stage in the development of marriages and families (C. P. Cowan & Cowan, 2000; Huston & Vangelisti, 1995). The baby's arrival produces changes in the quality of the marital relationship, to varying degrees among different couples, as determined by their capacity to contend with the new adaptive challenges (Belsky & Rovine, 1990; Kurdek, 1993; White & Booth, 1985). Quantitative changes in the marital relationship are expected, and these changes may be long lasting (or at least last through the first 5 years of the first child's life; P. A. Cowan & Cowan, 1988a; Cox, Paley, Burchinal, & Payne, 1999). Embracing this perspective suggested the need to focus on the nature of control groups required to document the effects of the baby's birth on the marriage, on the need for relatively homogeneous samples of couples, and on moderating variables that help to isolate the effects of this transition (Belsky & Rovine, 1990; P. A. Cowan & Cowan, 1988a; Cox, Paley, Burchinal, & Payne, 1999; Feeney, Alexander, Noller, & Hohaus, 2003). Interventions derived from this perspective are likely to emphasize education and prevention as a means of helping couples anticipate the changes that might occur in their marriage as a result of becoming parents (Schulz et al., 2006).

In What Ways Can the Research Reviewed Here Enhance These Interventions?

The results of the research presented in this chapter suggest that there are many ways in which psychologists can effectively help couples navigate the transition to parenthood. For example, the data suggest that helping couples develop realistic expectations for this transition, improve problem-solving strategies, and manage stress are all essential to maintaining a sense of individual well-being and satisfaction within the marriage. Unfortunately, the vast majority of prenatal programs available to first-time parents focus on the phys-

ical aspects of labor and delivery, failing to incorporate discussions of the social and emotional changes and stressors that new parents often experience. Given the consistent finding that the transition to parenthood is associated with a decline in marital satisfaction and an increase individual distress, even among parents who are considered "low risk," there is a great need for programs that address these issues as they relate to new parents (C. P. Cowan & Cowan, 1995). One possibility is that prenatal classes begin to incorporate sessions focused on these aspects of becoming a parent, as well as encouraging communication between partners regarding their expectations of parenthood.

Relatedly, although a high percentage of first-time parents attend pregnancy and childbirth classes, there is still a proportion of pregnant women who do not participate in such programs. For this reason, women's prenatal health care also offers a unique opportunity to educate women and their partners about the transition to parenthood. The nurse health visitor model currently in place in the United Kingdom provides an ideal example to emulate in the United States (see <http://www.healthvisitors.com/hv/25/508>). The role of health visitors is to promote healthy living and prevention of illness. As such, one arm of this National Health Service program caters to mothers and families with young children in the United Kingdom. Identified during pregnancy, women are matched with a "visitor" who remains in contact with the woman through pregnancy and into the postpartum period. All families with children under the age of 5 are assigned health visitors who come to the home at various points throughout the postpartum period and beyond, providing physical care, social support, education, and advice about child rearing (e.g., growth and development, safety, sleeping, and feeding issues), and perhaps facilitating self-efficacy indirectly. In addition, health visitors have been successful in implementing procedures designed to identify and treat women suffering from postnatal depression (Appleby et al., 2003; Cullinan, 1991; Elliot, Gerrard, Ashton, & Cox, 2001; Holden, Sagovsky, & Cox, 1989).

Conclusion

The transition to parenthood provides a tremendous opportunity to contribute to the emotional well-being of new parents and their children through education and intervention aimed at helping them to identify and manage some of the changes in roles, expectations, and relationship satisfaction that the new transition stimulates. Fulfilling this potential requires an understanding of the changes in the marital system over this period and of which processes can be changed, so that well-grounded interventions can be devised and tested. Basic research is building on earlier discoveries to clarify how new parents as a group change and to explicate individual variability in this change across new parents. On the whole, prospective longitudinal studies of the transition to parenthood that include at least one prenatal and at least one postpartum data point reveal modest but significant declines in marital satisfaction across the transition. The research on individual variability in trajectories of marital satisfaction, which to date includes only five studies, involves using statistically sophisticated techniques such as growth curve analyses to examine individual

trajectories of marital variables through the transition as well as predictors of these trajectories. Future research on the transition to parenthood should take advantage of these perspectives and these recently available statistical techniques. With the adoption of such approaches, we can expect that basic questions about the transition to parenthood will be addressed more effectively and that increasingly sophisticated theories about the nature of this transition can be developed and refined.

Another promising development is the emerging integration between the historically disparate literatures on marriage and the transition to parenthood, which is occurring in part because marital researchers are moving beyond interaction-based analyses and starting to recognize the role of stress in the longitudinal course of marital satisfaction (for a review, see Story & Bradbury, 2004). In particular, marital researchers are starting to conceptualize the transition to parenthood as one such stressor that affects marital development. Relatedly, researchers investigating the transition to parenthood are beginning to conceptualize this transition as part of the larger course of marital development. Continued shifts in conceptualization and integration among heretofore disparate fields should greatly improve our understanding of how the transition to parenthood influences marital development over time.

Basic research is beginning to influence intervention development, but stronger links between basic research on the transition to parenthood and intervention efforts are sorely needed. Given the promise of early intervention studies, we call for additional efforts to develop empirically grounded interventions. Moreover, although we have focused this chapter on how basic research can inform therapists' interventions, it is also important to examine how intervention efforts can inform future basic research. We call for clinicians to forge more alliances with hospital-based programs and other types of public health agencies (see chaps. 10 & 13, this volume) with the goal of developing and implementing evidence-based, interdisciplinary intervention efforts.

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