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Abstract approved:

Rodney M. Cate

Redacted for privacy

Alan Sugawara

Ninety-six couples were studied during the transition to parenthood in order to assess a) relative contributions of equity and traditionality in sex role attitudes to marital satisfaction prior to parenthood, b) changes in marital satisfaction and equity after the birth of the infant and c) contributions of traditionality, equity, father involvement and infant temperament to marital satisfaction after the birth of the infant. All data were analyzed separately for males and females to examine differences in gender response. A series of hierarchical regressions were used to determine contributions of predictor variables to marital satisfaction both prebirth and postbirth. Repeated measures analysis of variance (gender x time) were used to evaluate changes in marital satisfaction and equity, and a contingency analysis was used to determine categorical changes in equity.

At the pretest equity contributed significantly to marital satisfaction for females only. While neither gender showed significant change in equity postbirth, both genders had a significant decline in marital satisfaction. Women's evaluations of their postbirth marital relationship was positively influenced by more non-traditional sex role attitudes and greater father involvement in infant care and negatively influenced by a more temperamentally active infant. Men's postbirth marital satisfaction was not influenced by any of these factors. Equity contributed significantly to the decline of postbirth marital satisfaction for both genders, though more for men than women. Father involvement in the care of the infant was very limited and did not relate to perceptions of equity. These results suggest that women's perception of marital satisfaction after parenthood is more complex than her spouse's, while the amount and significance of father's involvement with infant caretaking suggest little recent change in family practices of infant care.

Personal, Interpersonal and Infant Characteristics as Predictors of Marital Satisfaction During The Transition to Parenthood

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Patricia Short Tomlinson

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APPROVED:

Redacted for privacy

Rodney M. Cate, Associate Professor of Human Development and Family Studies in charge of major

Redacted for privacy

Alan Sugawara, Professor of Human Development and Family Studies in charge of major

Redacted for privacy

June Henton, Head of Human Development and Family Studies

Redacted for privacy

Dean of Graduate School

Thesis was presented May 30, 1984

Typed for Patricia Tomlinson by Lois M. Lundblade

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PERSONAL, INTERPERSONAL AND INFANT CHARACTERISTICS AS PREDICTORS OF MARITAL SATISFACTION DURING THE TRANSITION TO PARENTHOOD

INTRODUCTION AND REVIEW OF LITERATURE

Many research efforts over the past two decades have examined the effect of the birth of the first child on the marital relationship. Lemasters (1957), Dyer (1963), and Hobbs (1965) all found that the transition to parenthood was accompanied by varying degrees of crisis. Their investigations laid the groundwork for later research concerned with the negative impact of that crisis on marital satisfaction (Hobbs & Cole, 1976; Russell, 1974; Ryder, 1973). However, findings that not all couples face a crisis and that wives more than husbands experience a decline in marital satisfaction (Feldman, 1971, 1981; Lucky & Bain, 1970; Russell, 1974; Waldron & Routh, 1981) suggest that the relationship between transition to parenthood and marital satisfaction may be mediated by personal, interpersonal, and situational variables not previously included in this area of study.

For example, recent role shifts for both men and women suggest that sex role attitudes may play a part in determining the outcome of the transition to parenthood. Either a husband or wife approaching parenthood may question or reexamine beliefs about women's traditional role in relationship to achievement and domestic obligations, specifically those obligations related to childrearing. This, in turn, may create interpersonal conflict

because of a change in role expectations, tasks and responsibilities. In addition, at the interpersonal level, parenthood may pose new problems of equity in the marital relationship, dependent upon the father's involvement in the increased domestic tasks related to care of the infant. Finally, from the perspective of family systems dynamics there is some evidence that characteristics of the infant may also have an impact on parental relationships (Lerner & Spanier, 1979).

In order to understand the potential contributions of role orientation, equity, father involvement, and infant characteristics to marital satisfaction during transition to parenthood it is necessary to review two areas of theoretical and research literature. The first of these focuses upon transition to parenthood relative to its direct impact on marital satisfaction. These studies are important because they reflect changes in social attitudes and suggest that there are gender differences between men and women in their perceived satisfaction.

The second area of theoretical and research literature focuses on studies of traditionality, equity, father involvement and infant temperament which appear to be related to marital satisfaction during transition to parenthood. These studies are important because they establish a possible link which supports the association between attitudinal and situational factors and their contributions to outcomes in the marital relationship during transition to parenthood.

Transition to Parenthood

Family development theory provides the context for most transition to parenthood research. It is within this context that the relationship between parenthood as a crisis and the impact of parenthood on marital interaction has been examined and debated. The essence of the debate is the relative importance of this transition as a critical developmental period. For example, Nock (1981) suggests that all family transitions are accompanied by subjective evaluations of life which are negative. Compared to other life cycle transitions, he suggests that transition to parenthood is one of the more trivial changes a family undergoes relative to the members subjective evaluation of life, and thus may not warrant the research interest it has generated. On the other hand, Lupri and Frideres (1981) argue that childbearing represents a critical transition point in which specific role changes cause special structural strains in the marital dyad. By comparing patterns of marital quality over all stages of the family cycle in couples who have and do not have children, they conclude that children accelerate the speed and increase the magnitude of the decline in marital happiness which occurs in all marriages over time.

Despite these contrasting interpretations, there is agreement that parenthood is associated with a negative change in marital adjustment. However, there is inconsistent evidence to explain the cause of the negative impact in couples' response to parenthood. Research studies have attempted to explain this phenomenon for the past three decades. The initial studies did not examine change in

the marital relationship per se, but looked instead at the overall family crisis which accompanied the birth of the first child. For example, in LeMasters' (1957) non-random sample of 46 middle class couples, 83 percent of the couples reported extensive or severe crisis in adjusting to the birth of their first child. He noted that the subjects seemed to have romanticized perceptions of parenthood and felt little effective preparation for their parental roles. A major criticism of this often quoted research is that the data were collected five years after the birth of the child.

Dyer (1963), who replicated the LeMasters' study, concluded that a first child constituted a crisis event because couples were forced to reorganize many of their roles and relationships, thus suggesting that the change in the marital relationship may have been a significant factor in the crisis. Of the 32 middle class couples in his study, more than half reported extensive or severe crisis after the birth of the child and a third of the sample experienced moderate crisis. He found that the desirability or timing of the pregnancy was an important factor in determining the extent of the crisis, since only five of the seventeen couples in the extensive or severe category had planned or desired the pregnancy. He also determined that the level of marital satisfaction before becoming a parent was inversely related to the amount of crisis afterward.

Subsequent studies of parenthood transitions (Hobbs, 1965; Hobbs & Cole, 1976; Russell, 1974) did not fully support the earlier findings of LeMasters and Dyer in that only a slight to moderate degree of crisis was found in most families after the birth of the first child. Of these, Russell's (1974) study was a notable

contribution to this area of study for several reasons. First, her study was an improvement on earlier research designs with a random sample of 271 couples and an assessment of a marital pair's experience within the first year after the birth of their first child. Second, her study was the first to explicitly connect postbirth crisis and the marital relationship. Her results suggested that crisis and marital dissatisfaction were significantly associated. Finally, her results suggested a gender response to the post-birth crisis, since 25% of the males reported that parenthood constituted a crisis, while 39% of females reported a moderately high crisis state.

Evidence that women experience greater crisis than men after the birth of a child has also been reported by other investigators who have suggested that loss of power due to withdrawal from the work force may be a contributing factor (Waldron & Routh, 1981). Feelings of isolation, loneliness, and role conflict associated with declining marital satisfaction have also been reported by more women than men following the birth of the first child in a series of other studies (Feldman, 1971; Nevill & D'amico, 1977; Rossi, 1977).

Within the past decade several investigators have made additional conceptual and methodological contributions to the study of transition to parenthood by using improved research designs (Cowan, Cowan, Coie & Coie, 1978; Feldman, 1981; Miller & Ryder 1973). For example, Miller and Ryder's (1973) prospective experimental study, with a parent group and a convenience sample non-parent group, found no difference in general marital satisfaction between couples who had a child and those who did not,

except in a couple's satisfaction with companionship. Wives in the child group, regardless of whether they were high or low in overall marital satisfaction, showed a significant decrease in satisfaction with the companionship aspect of marriage after birth.

An alternate approach using case study methods, was used to assess eight married or cohabitating couples in depth for eight months before and after birth of their first child in order to examine the natural history of changes in a couple's relationship during transition to parenthood (Cowen et al., 1978). Using a weekly teaching support group with investigators who functioned both as therapists and participant observers for the entire study period, extensive observational and interview data were gathered. On the basis of their findings the investigators suggest that transition to parenthood is accompanied by a negative change in self-image for both men and women. For men a concern for career change and financial support of the family contributed to a decline in self image; while the change from work to full time home involvement created a downward shift in self esteem and decreased marital satisfaction for women.

A third study, by Feldman (1981), was also designed to determine the effects of parenthood on marriage by comparing a new parent group with a non-parent group. However, unlike the Miller & Ryder study (1973), the non-parent group was selected randomly from couples who planned to remain childless and were matched on age, education, and socioeconomic status. The new parent group were found to have fewer positive marital interactions and marital conversations than the non-parent group. Moreover, the decrease in

marital interactions also affected females in the parent group more negatively than males.

The most recent research to examine the marital satisfaction variable during transition to parenthood is a study by Belsky, Spanier and Rovine (1983). Their use of a longitudinal design and a sample similar to the current study makes their results especially relevant. As a whole their findings were similar to the previously cited studies, although they reported increased specificity regarding changes in the marital relationship. First, they found that transition to parenthood results in relatively modest but significant negative changes in the marital relationship, especially in the domains of companionship, sex, and affection. Furthermore, these changes were more marked within the first three months after the birth of the infant than in the subsequent six months. Moreover, they concluded that women's marital adjustment following childbirth is more responsive to the effects of a baby because of their relatively greater household and child care responsibilities.

The fact that the social role of women after birth has been noted to change more than men's social role may help explain why women may be more sensitive to the dimension of companionship in marital satisfaction (Belsky et al., 1983; Cowan et al., 1978; Miller & Ryder, 1973). Additionally, since the division of labor following the birth of a child has been noted to move couples to more traditional patterns after the birth of a first child (Cowan et al., 1978; Lamb, 1978; and Leifer, 1980), for women the involvement with infant care and maintaining the physical environment may mean less time for companionship with spouse. Furthermore, women's loss

of self esteem as the result of the change from work to home reported by Cowan et al. (1978) and the perceived loss of power which accompanies their decreased marital satisfaction reported by Waldron & Routh (1981), also support this interpretation. However, the Cowan et al. (1978) study presented provocative evidence that suggests that the transition to parenthood may also have a negative impact on men's self concept and assessment of marital satisfaction post birth.

Taken as a whole, this group of studies suggests that change in marital satisfaction during transition to parenthood is related not only to the impact of adding a new family member, but is also related to attitudinal variables relative to the new role of parent, and the corresponding acceptability of the role change within the marriage. It is within this context that the marital relationship may be influenced by individually held sex role attitudes, interpersonal transactions in marital equity, the added infant care responsibility, and unique characteristics of the infant.

Personal Characteristics

Traditionality

Historically, marital relationships have been characterized by traditional family sex roles in which men and women are assumed to possess distinctive sets of attributes associated with instrumentality and expressivity (Harrison, Guy & Lupfer, 1981; Spence & Helmreich, 1978). Traditionality in this sense refers to conforming to sex role attitudes which define a division in rights,

roles and privileges based on gender (Spence & Helmreich, 1978). Conversely, non-traditionality refers to female participation in the family and society as equal counterparts to men (Decker, 1978).

In the last two decades however, there has been a growing shift in attitudes about the rights and obligations of the sexes toward more non-traditional role definitions (Mason & Czajka, 1976). This shift has been more pronounced in women of both higher and lower status than in males (Araji, 1977; Mason & Czajka, 1976). Furthermore, these changes in sex role attitudes of women from 1964 to the present have been found to be more a function of education and employment than a result of changes in commitment to marriage and childbearing, although women's attitudes about family roles have also changed during these decades to include an achievement orientation (Schafer, 1980). However, despite these changes in attitudes toward employment and career patterns for women, the traditional view that men are expected to utilize their potential to the fullest and subordinate family and marital roles, while women are expected to place family roles above all other roles, is still prevalent (Broverman, Vogel, Broverman & Rosenkrantz, 1972; Pleck, 1979). In fact, research results on dual career couples consistently reflect a distribution of family work roles along traditional lines (Bryson, 1976; Perucci, 1978; Pleck, 1979). Thus, although both sexes express egalitarian or role sharing attitudes women often enact more of the family roles (Araji, 1977).

The prevalence of these role attitudes was supported in a recent investigation of the relationship between sex role orientation and preferences for traditional and non-traditional marital roles in a

survey of undergraduate students (Pursell, Banikiotes & Sebastian, 1981). While androgenous subjects showed a greater attraction to non-traditional than traditional marriages, there was a difference between the sexes. Regardless of sex role orientation, men's attraction toward egalitarian marriages was significantly lower than women. Men also showed greater attraction to the traditional husband's role than did women toward the traditional wife's role. These investigators concluded that egalitarian marriage is chiefly a women's issue.

Although the discrepancy between men and women's role attitudes has been observed in several studies, Decker (1978) examined it further in the context of the marital relationship and found a negative relationship between the extent of agreement between husband and wife regarding women's roles and the degree of marital adjustment. This suggests that the power relationship, and, to some extent marital satisfaction, is related to traditional views of sex role.

The extent to which sex role attitudes can be said to influence the marital relationship during the transition to parenthood is unclear. However, one can speculate that during the childless stage of marriage couples may be more egalitarian in their relationship, since most women today work prior to becoming a parent. However, after the birth of a child, unless a woman returns to work, she may perceive a substantial loss of power because of the low prestige placed on childrearing and homemaking. This shift in power relationships has been previously noted to negatively effect satisfaction in the marital relationship (Waldron & Routh, 1981).

This review of the relationship between decreasing traditionality in women's roles and marital relationships suggests that this may be a factor in studies of the contemporary forming family. Women's dissatisfaction in traditional marriages and apparent conflict with men around more egalitarian relationships appears to be an important contemporary issue in the family system. However, none of the reviewed studies on marital satisfaction during transition to parenthood included a measurement of sex role attitudes, despite evidence in recent marital satisfaction studies that there is a negative relationship between disparate husband and wife perceptions of feminism and marital satisfaction (Decker, 1978; Indvik & Fitzpatrick, 1982; Pursell, Banikiotes & Sebaston, 1981).

Interpersonal Characteristics

Equity

Social exchange theory has emerged in the last twenty years as a major theoretical orientation to explain small group and dyadic relationships (Simpson, 1977). There are a number of theoretical assumptions in exchange theory which make it particularly attractive for examining the issues of the close relationships in the forming family. One fundamental assumption is the importance of the reciprocal impact of one person upon another (Burgess & Huston, 1979). The theory of social exchange also assumes that close relationships are characterized by high interdependency (Huston & Cate, 1977), and a history of interactions (Burgess & Huston, 1979). A final assumption is that people in a close relationship

over time try to balance their overall costs with the benefits derived.

Equity theory, a derivation of social exchange theory, attempts to integrate exchange concepts with cognitive and psychoanalytic insights (Hatfield, Utne & Traupman, 1979; Walster, Walster & Berscheid, 1978). Equity theorists have taken the view that it is not only the exchange of resources but the perceived costs and rewards in a relationship which predicts its success (Hatfield et al., 1979). An assumption of equity theory is that individuals are satisfied in exchange relationships only when there is a reciprocal perception that the rewards made by each individual are proportional to his or her costs (Walster, et al. 1978). In other words, equity exists when individuals evaluate that their inputs or contributions to a relationship are equal to their outcomes (Hatfield et al., 1979). Inequity and dissatisfaction exists when the perceived outcomes are either higher or lower than those of their partner. Furthermore, according to equity theory, if outcomes are higher an individual will experience guilt; whereas, if outcomes are lower, an individual will experience anger (Walster et al., 1978).

There is limited agreement about the applicability of exchange theory, and more particularly equity theory, to the study of marital relationships because of the unique character of marriage. For example, the long-term nature of marriage makes the assessment of rewards and costs dependent upon the length of time partners may assess those factors, while the restoration of equity may have the goal of maintaining the relationship rather than maximizing individual outcomes (MacDonald, 1981). However, MacDonald also

argues that social exchange theory is relevant to marital studies because of the need to examine the social structure influences on cognitive orientations of marital partners and the subsequent exchange relationship. Blau (1964), Walster et al. (1978), and Hatfield et al. (1979) have also taken the position that equity theory has relevance for studying long-term committed relationships, despite the fact that equity principles may be affected by factors specific to the marital relationship.

As a response to this growing interest in the general theory of equity, recent marital studies have examined equity in marital roles during the early years in the family life cycle. For example, Schaefer and Keith (1981) found that wives in young families perceive inequity that is unfavorable to them and husbands perceive inequity that is favorable. In an earlier study, inequity in family roles was found to be significantly related to higher distress on a measure of depression (Schaefer & Keith, 1980). These data suggest that inequity in a long term relationship is a salient factor and may create significant psychological distress in both husbands and wives.

Equity theory also has recently been applied to examining discrepancies in affective exchange in the marital relationship (Davidson, Balswick & Halvorson, 1983). Partners who were similar in their perception of affection indicated a better marital adjustment than those who were discrepant, regardless of the total amount of affection exchanged. The greatest dissatisfaction in the marital relationship accompanied discrepancies in the perception of this exchange.

Despite the recent application of exchange and equity theory to marital studies, neither theoretical framework has been specifically applied to explain the change which occurs in a marital relationship following the birth of the first child. However, due to the change in roles for both genders, role expectations, and the overall amount of time and work which is invested in early parenting, there may be an increased focus on the interpersonal transactions to reestablish equity in the martial relationship. Additional support for the potential contribution of equity to a change in the marital relationship during the transition to parenthood was found in the study by Cowan et al. (1982). An increased discrepancy between partners in their perception of costs in the relationship, in which each felt they were doing more of their share of the work than the other, was found to be the most potent source for conflict for all couples in the study.

Father Involvement in Infant Care

The division of infant care between mothers and fathers has gained increasing attention. However, the study of involvement of the fathers with their infants has typically been concerned with the effects of paternal nurturance on child development. Another important reason for examining this dimension of family transition is the indirect effect of father involvement with the infant on the mother's role and the relationship of this involvement to perceived equity in the marital relationship. Indeed, a number of family scholars have identified the lack of understanding of the interaction between father and infant and the marital relationship

to be one of the significant gaps in family research and theory (Lewis & Weinraub 1976; Pederson 1980).

There are differing hypotheses about what factors regulate father involvement with infants. Some researchers believe that stereotypic conceptions of family roles, specifically male and female, have minimized appreciation of the nurturing capacity of fathers with infants and limited males in their nurturant role within the family (Parke & O'Leary, 1976; Parke & Sawin, 1976; Pederson, 1980). Conversely, other investigators have tentatively concluded that gender may have a more important influence on parenting behavior than sex role or the amount of involvement (Lamb, 1977; Lamb, Frodi, Hwang & Forsstrom, 1982). Evidence which exists for both of these positions makes the relationship between father involvement with his infant and marital relationship difficult to assess.

Most father involvement studies have examined various dimensions of father-infant interaction. Caretaking, emotional investment, play, and affective interaction are some of the relational areas frequently studied (Pederson & Robson, 1969). High social involvement and low caretaking involvement is consistent with the traditional father role, while high caretaking is necessary for a shared non-traditional parenting role. Thus, caretaking and play are aspects of father involvement which have the potential to indirectly effect the marital relationship as well as to be most influenced by a couple's stereotypic role set. Therefore, the following review will focus on these dimensions of father involvement.

Data obtained regarding direct father involvement with their infants are inconsistent. For example, Pederson (1980) suggests that there are indications that middle class men in the U.S. today are likely to be more highly involved with infants in both caretaking and play activities compared to the recent past. As evidence, he cites fathers' increased participation in childbirth, dual career families and their changing sex role orientations. However, there is limited evidence to support his claim.

In a study of middle class first time fathers of eight month old infants, mothers reported that approximately 10% of fathers engaged in no caretaking activity, 10% engaged in two or more caretaking tasks a day, and the remaining 80% engaged in some but less than two tasks a day (Pederson & Robson, 1969). Almost a decade later in a similar study (Redina and Dickerscheid 1976), three hour observations of fathers and six-month-old infants in the home setting were made. The range of total father involvement was from 12% to 84% of the observed time (22 minutes to 2.5 hours). During the time fathers were actively involved with their infants they engaged in few caretaking tasks and were nearly three times as likely to be involved in play than in caretaking. These findings suggest that there has been relatively little change over the decade in father's involvement in caretaking activity.

The reasons for the relative lack of variability in father involvement in infant care are unclear. Although Parke and Sawin (1976) argue that social and cultural forces ascribe the traditional role for males, Lamb (1977) argues that fathers and mothers have inherent differences in their nuturant behaviors, which effects the

division of infant care responsibilities. Two recently completed Swedish studies examined differences between mother/infant and father/infant involvement in traditional families and in non-traditional families in which the father was the primary caretaker (Lamb et al. 1982a, Lamb et al. 1982b). Regardless of the gender of the primary caretaker, mothers were more likely to hold the infant, tend to infant's needs, and be more active in vocal and affectionate behavior with the infant. The investigators concluded that biological gender role may have a more important influence on parenting involvement than does sex role attitude.

Using the limited research that exists, the evidence suggests that father involvement with the infant may be relatively limited and may contribute to marital satisfaction within the context of the family system indirectly rather than directly.

Infant Temperament

The final factor which this study has considered a potential contributor to the transition to parenthood is the unique character of the infant. Over the past 15 years there has been increasing interest in the individual differences between infants. Investigators and clinicians have defined these differences within the construct of temperament. However, an explicit theoretical definition of temperament has not been universally accepted. There are those who argue that temperament is the domain of biologically inherited traits which are apparent in clinical assessments of differential traits at birth (Chess, 1967; Thomas, Chess & Birch,

1963). Others have concluded that objective assessments of infant behavioral style do not show ubiquitous heritability of temperamental characteristics (Plomin, 1982). Still others have suggested that temperament is a constitutionally based behavioral domain which is influenced by environmental factors, including pre-natal determinants (Carey & McDevitt, 1980).

Because of this lack of consensus most infant experts have moved away from the notion of a theoretical definition of infant temperament towards an operational one. Some have defined infant temperament on a qualitative continuum of easy to difficult relative to the effect on others (Carey, 1970; Thomas, Chess & Birch, 1963); while others define temperament as individual differences in reactivity and self regulation, without assumptions about the impact on the care-taker (Rothbart, 1981). In general, however, certain domains of infant behavior are recognized as contributing to the definition of temperament. These include: gross motor activity, emotionality or mood, adaptability, regularity and soothability. Of these, gross motor activity has been shown to be the most reliable measurement of temperament, while the mood categories appear to have more empirical validity (Hubert, Wachs, Peters-Martin & Gandour, 1982).

The degree to which infant temperament may effect transition to parenthood and the husband and wife interaction has not been widely studied. However, a number of studies support the notion that there may be an indirect effect of infant temperament on parental relationships. Wolkind & Desalis, (1982) showed a relatively direct effect of infant characteristics on maternal mental health. Mothers

of the most difficult infants (irregular and negative in mood) were significantly more likely to report physical fatigue than mothers of less difficult infants at four months, and were more likely to have developed a psychatric disorder by fourteen months post birth. These results suggest an indirect influence of the infant on the marital relationship through it's impact on the mother. Moreover, Feiring and Taylor (1976), found a negative correlation between perceived difficulty of infant temperament and mothers' emotional involvement with the infant. They also found that involvement of mothers with their infants was related to the extent to which they received emotional support from their spouse. This finding supports the notion that the more difficult an infant's temperament, the more likely there will be greater demands placed on the marital relationship.

However, there is evidence that mothers are not alone in their reaction to more difficult to manage infants. The cry of a temperamentally difficult infant has been found to be highly arousing and irritating to both males and females, particularly if the person is a first-time parent (Boukydis & Burgess, 1982). Another study of first-time parents coping with the everyday stresses during parenthood, found low soothability in the infant positively correlated with depression and anxiety in both parents of 2-3 month old infants (Ventura, 1982). Finally, Russell (1974) reported that fathers of more active and fussy infants were more likely to experience the transition to parenthood as a crisis than those who had rated their infant as quiet.

In summary, while there is little evidence of infant temperament having a direct influence on the parental relationship, there is evidence that infant individuality introduces an element into the family system which can influence the way parents cope with their new role and, perhaps, with each other.

Statement of Purpose

As suggested by the literature, transition to parenthood may be affected by variables which reflect a changing role for men and women within the context of the family as a system. Role orientation of men and women has changed, yet the effect of this change on parental roles and perceived marital satisfaction after childbirth is not adequately documented. The effect of perceived equity may be related to this role orientation shift, specifically as it is related to father's involvment with infant care. Infant characteristics themselves may also have an impact on marital interaction. Since all of these factors are likely to effect marital responses in the period of transition to parenthood, it is important to understand their potential contributions to marital satisfaction during this transition.

The general aim of this research was to explore the relative contributions of these personal, interpersonal and infant characteristics to marital satisfaction during transition to parenthood. The specific aims were to: (a) examine the contribution of traditionality and equity as predictors of marital satisfaction prior to the birth of the infant; (b) examine changes in equity and marital satisfaction as a result of the birth of the

child; and (c) examine the relative contributions of traditionality, equity, father involvement, and infant temperament as predictors of marital satisfaction after the birth of the first child.

The gender of the parent was of particular interest in this study since previous research indicates a consistent trend of lower marital satisfaction among females during transition to parenthood. Therefore, all data were analyzed separately for males and females in order to further examine this relationship and to determine if the gender differences helped explain the contributions of traditionality, equity, father involvement and infant temperament to marital satisfaction.

THE METHOD

Overview

There were three purposes in this study. The first was to examine the contribution of traditionality and equity to marital satisfaction in couples prior to the birth of their first child. For this purpose, approximately eight weeks before the expected date of the infant's birth, couples were asked to independently complete three questionnaires to assess their (a) sex role orientation, (b) perceived equity, and (c) marital satisfaction. These data provided separate assessments of their pre-parental marital satisfaction, attitudes about women's role, and perceived equity in the marriage.

The second purpose was to study interpersonal changes in equity and marital satisfaction as a result of the birth of the child. To accomplish this, three months following the birth of the infant, couples were again asked to independently complete the measures of perceived equity and marital satisfaction.

The final purpose was to study the contribution of traditionality, equity, father involvement in infant caretaking, and infant temperament to marital satisfaction after the birth of the child. For this purpose, in addition to the measures of equity and marital satisfaction completed by both mothers and fathers, fathers amd mothers were asked to complete a measure of behavioral interaction of fathers involvement with his infant based upon recall over the previous two weeks. The primary caretaker, usually the mother, was also asked to complete an assessment of their infant's behavior in the past two weeks for an evaluation of infant temperament.

The data collected after the birth of the infant provided several kinds of information. First, the data made it possible to assess the contribution of equity and role orientation to marital satisfaction before parenthood. Second, the data provided information regarding changes in self ratings of marital satisfaction and equity after the birth of an infant as well as information about differences between males and females during this point in family development. Finally, the data provided information about the relative contributions of role attitudes, equity, father involvement, and infant temperament to marital satisfaction during the early months of parenthood.

The study used a longitudinal design with a purposive sample of 96 couples approximately eight weeks before and twelve weeks after their first full-term pregnancy. All data were collected using survey instruments which were analyzed separately for males and females.

The dependent variable in the regression analysis was marital satisfaction after the birth of the first infant. The independent variables were: prebirth satisfaction, traditionality, prebirth equity, postbirth equity, infant temperament, and father involvement in the care of the infant. A series of 2X2 analyses of variance (gender x time) with a repeated measure on time were used to analyze data for gender differences and change of marital satisfaction and equity from pretest to posttest. A contingency analysis was used to examine categorical change in the postbirth distribution in equity classifications of underbenefited, equitable and overbenefited. A hierarchical regression analysis was used to determine the relative

contributions of each of the independent variables to marital satisfaction at both pretest and posttest.

Participants

Participants were 96 volunteer couples recruited from childbirth education classes in four urban counties in northwest Oregon. The following criteria were used in selecting participants for the study:

1) Only couples in which the female was in her first full-time pregnancy and the male had no child living with him from a previous marriage were accepted.

2) Both partners must have agreed to participate.

3) Only couples in which the pregnancy and birth were within normal limits were kept in the study.

4) The female could not be beyond her eighth month of pregnancy.

5) Following birth, the infant had to be within range of normal health standards for the family to remain within the study.

No age restrictions were applied since all couples had to be in the child-bearing age. Length of marriage was not controlled for, but was assessed for its relationship with marital satisfaction.

The purpose of excluding females with previous births and not excluding males was to control for the factor of other children in the home. Because it is far more prevalent for males than females who remarry to not have their child living with them, it seemed this would be one way to avoid excluding the previously married and unnecessarily biasing the sample.

The restriction on pregnancy and birth status was used to control for the possible adverse effects on the marriage of serious

health problems and/or prolonged hospitalization of the mother or infant. It was also used to control for the effect on the marriage of serious complications with the infant.

A total of 146 subject pairs volunteered to participate in the study. One hundred one subject pairs completed pretesting and 96 completed posttesting. The 30% attrition rate of volunteers prior to the pretest was partially due to late return, mail loss, failure of one spouse to participate, expected delivery date too late for inclusion, and a decision to not participate once forms were seen. A comparison of the non-response and response group on demographic factors could not be done since those data were only available on the subjects who completed pretesting. The 5% attrition rate from pretest to posttest was due primarily to subjects who moved and could not be located or subjects' difficulty in finding time to complete the surveys. There was no subject loss due to serious pregnancy or birth complications with the mothers. However, one infant died at birth and one was moderately premature. The first family was dropped from the study, the second was not, since the infant was only hospitalized three days longer than the average two-day hospitalization for all infants in the study.

The attrition rate at the posttest was extremely low and probably represents the effect of both the procedure which was used to keep subjects in the study and a sample which was highly motivated to participate in the research study. The degree to which the results of the study were affected by these sampling factors cannot be estimated. However, in order to test for the effects on sample bias of the small degree of attrition at the posttest, a

series of t tests were done on all variables between continuers and non-continuers [see Table L-2 Appendix L]. No significant differences were found; thus it can be estimated that subject loss did not affect the results of the study.

Characteristics of Participants

The characteristics of the participants were as follows [for a complete report, see Summary Table for Characteristics of Subjects, Appendix A]:

Age The mean age for males was 29.6 years and for females 27.7 years. This average age for females in their first pregnancy is higher than the average for all first pregnancies, but not significantly higher than for middle class women with some college education.

Education The average educational level for all participants was 14.9 years with males averaging a slightly higher educational status (15.1 years) than females (14.7 years). Approximately three-fourths of the total sample had some college education and almost one-fourth had education beyond the baccalaureate degree.

Income and Employment Status Over 50% of the sample has reported annual incomes greater than $30,000, while only 10% had annual incomes of less than $15,000. The distribution in the economic status is accounted for by the number of dual worker families and the distribution of occupations. Prior to the birth of the infant,

approximately 57% of the female sample was employed and over 95% of the male sample were full time wage earners.

Marital Status For the majority (81.3%) of couples this was their first marriage, while 16.7% of the couples had been married previously. Only two couples (2%) were unmarried and cohabiting. The mean duration of marriage was 4.1 years with a range from nine months to 14 years. The length of marriage was positively associated with more traditional attitudes towards women for both males and females (Pearson's r, males .26, $p < .01$, females .30, $p < .01$) but was not associated with postbirth marital satisfaction. None of the females had children from a prior marriage, while approximately 5% of the male sample had from one to four children, none of whom lived with the subject.

Occupational status In the occupational distribution, as expected from the income levels, there was a high representation from the upper socioeconomic strata. Using a self-rating scale, approximately 40% of the sample who were employed rated themselves professionals, 13% rated themselves white collar managers, 21% clerical or craftsmen, 9% homemakers and the remaining 13% considered themselves in semiskilled and unskilled occupations.

Ethnicity This was a homogeneous sample, predominantly Caucasian (94%) with only 6% of the subjects belonging to other ethnic groups (Hispanic, Native American, Asian and other).

Taken as a whole, this sample distribution was not surprising. While it is not representative of all childbearing couples, it is

fairly representative of the profile of couples who participate in the private childbirth education programs which provided access to the subjects in this study[1]. Participants tend to be white middle class professional or white collar workers. The socioeconomic status of this sample may have contributed to the results of this study since for females there was a positive association between income and postbirth marital satisfaction ($r=.28$, $p < .01$) and for males a positive relationship between occupational status and marital satisfaction ($r=.18$, $p < .05$).

Infant characteristics

In the infant sample, there was an approximately even distribution of males (n=47) and females (n=49). Two sets of twins were born. Because only a single infant could be used in the analysis, a twin member in each set was selected randomly. Infant birth weight was considered a variable worth appraising since it is a factor in determining prematurity which can effect infant behaviors. The distribution of infant weights of the sample was from 1674 grams to 5959 grams, with a mean of 3589 grams. This mean weight is slightly over eight pounds, which is well over averagebirth weights for all infants born. Part of this was accounted for by five infants who ranged from just under ten to over thirteen pounds. This distribution, while not typical, is more

1. Demographic data is not routinely gathered on participants in the Prepared Childbirth Association classes which provided access to subjects for this study. However, in a personal communication with the Executive Director, Gloria Hirshberg, in January 1984, the class membership was described as representing primarily middle class couples.

likely to occur with a middle class sample and is associated with very early prenatal care as well as the high socioeconomic status which characterized this sample. Only one infant was under 1792 grams (2.4 pounds), and considered low birth weight. However, because that infant did not remain in the hospital, the family was kept in the study.

Infant health was measured to control for its effect on the variables of this study, specifically as they related to infant temperament, father activity, and marital satisfaction. These relationships were considered important since prematurity or illness could make temperament assessment invalid, might interfere with father's involvement in infant care, and could create unusual stresses on the marriage during the early months of parenthood.

Health of the infant was examined with the Infant Health Rating Form [see Appendix B]. Of a total possible score of 80 points which would indicate serious medical problems that had required hospitalization and/or continued medical care, the mean score was 5.4 with a range of 3 to 14. These results indicate a very low incidence of health problems. Of the eight infants who scored more than ten points, most were for ear infections and upper respiratory infections. Thus, no serious illness or hospitalization was reported which would indicate interference with any of the variables previously cited.

The final infant characteristic examined was the infant temperament. As previously discussed in the Methods section, measurement limitations imposed restrictions on the complete assessment of this factor and only characteristics of the infants'

motor activity responses were measured. As a whole, on the basis of this assessment, this group of infants were within the expected normal range of temperament with a mean group score of 3.78 and a standard deviation of .81 on a standardized scale of 1 to 7 (Rothbart, 1978). Additional summary statistics of this infant characteristic is shown in Table L-1, Appendix L.

Measurement of Variables

Demographic Variables

Personal and demographic characteristics of the participants were measured at the pretest. These variables included; age, education and income of participants, socioeconomic status of the marital pair, ethnicity, length of marriage and work status of the wife. These variables functioned as descriptive variables [see Background Data Form, Appendix C].

Marital Satisfaction

In this study marital satisfaction was defined as a measure of the quality of the dynamic relationship of marital adjustment between marital partners as perceived by both members of the dyad. The Dyadic Adjustment Scale (DAS) (Spanier, 1976) [see Appendix D] was used to measure this variation because of its properties which test qualitative aspects of marriage and the process which results from differences between members of a marital dyad in attitudes and values important to marital functioning (Spanier, 1976).

In this context marital adjustment is a broader concept than the usual definition of martital satisfaction when applied to the quality of marital relationships. It is an outcome which includes satisfaction but which is dependent upon preceding interaction processes over time (Rollins and Galligan 1978).

The DAS is a 32-item paper and pencil self-administered instrument which takes approximately 5-10 minutes to complete. Spanier's measure also includes a four factor construct conceptually important to this study. The scale includes four subscales derived from a factor analysis. These subscales; dyadic satisfaction, dyadic consensus, dyadic cohesion and affectional expression can be used independently. The satisfaction subscale measures overall satisfaction and commitment to the relationship; the consensus subscale reflects values and decision making; the dyadic cohesion subscale measures a companionship dimension; and the affectional expression subscale measures both the sexual relationship and the exchange of affectionate behavior.

The total scale yields a composite score based on a theoretical range of 0-151 with response formats for interval scores ranging from 0 - 4 and 0 - 5. The total scale determines the respondents' perception of the adjustment of the relationship as a functioning group. Each subscale score determines the perception of the adjustment of the relationship in that relational function.

An internal consistency reliability of .96 has been reported using Cronbach's coefficient alpha for the total DAS. Internal consistency reliability estimates for the subscales were equal to .94, .90, .86, and.73 for dyadic satisfaction, dyadic consensus,

dyadic cohesion, and affectionate expression, respectively (Spanier, 1976). Alpha coefficients (Cronbach's alpha) for the total DAS in the current study were .85 for both males and females on the pretest and .87 and .88 respectively for males and females on the posttest.This is lower than Spanier's reported reliability, but still within respectable limits of test reliability (Nunnally, 1967).

Test retest reliability has not been reported. Construct and concurrent validity were established using a factor analysis to develop the subscales (see above) and correlation (r=.88) with a frequently used marital adjustment scale (Spanier, 1976). Additional construct validity was established by comparing mean scale scores of married and divorced samples. Total scores were significantly different at the $p < .001$ level (Spanier 1976).

Scoring of the scale was standardized on a married and divorced middle income sample of 268 subjects (Spanier 1977). The mean score for the married sample was 114.8 and for the divorced sample 70.7. In this study individual scores for males and females were used to measure both prebirth-marital satisfaction and postbirth-marital satisfaction.

Traditionality

The Attitude Toward Women Scale (AWS) (Spence & Helmreich, 1972) [see Appendix E] was used to measure the dimension of traditionality in sex role attitudes. The AWS includes items describing roles and patterns of conduct in major areas of activity in which women and men are capable of being granted equal rights (Spence & Helmreich,

1972). Thus, the concept of traditionality used in this study refers to a sex role orientation which ascribes differential roles to men and women relative to work, education, autonomy, and sexual behavior, based on gender.

The original (55-item) scale was standardized on both men and women. Construct validity was established with a factor analysis for male and female groups separately. Concurrent validity has not been established (Spence & Helmreich, 1978).

Because of the number of scales subjects were required to complete, the short form of the AWS was used. This form is a 15-item self-administered test, with a response format of 0-4. The scale has seven theme categories, including vocational roles; educational and intellectual roles; freedom and independence; dating and courtship; drinking, swearing, and dirty jokes; sexual behavior; and marital relationships and obligations. The fifteen item version has been found to have a correlation of .91 with the original AWS and an internal consistency estimate of .89 using Cronbach's alpha (Spence & Helmreich, 1978).

In this study internal consistency estimates were .90 and .86 (Cronbach's alpha) for males and females respectively. In scoring the AWS each subject's score was obtained by summing the values for individual items resulting in a possible range from zero to 45, with zero being the most traditional and 45 being the most non-traditional.

Equity

Equity was measured using Walster's Global Measures of

Participants Inputs, Outcomes, and Equity/Inequity (Walster, Walster and Berscheid, 1978) [see Appendix F].

This scale consists of the following questions about each partner's inputs and outcomes in their marital relationship:

1) All things considered, how would you describe your contributions to your relationship?
2) All things considered, how would you describe your partner's contributions to your relationship?
3) All things considered, how would you describe your outcomes from your relationship?
4) All things considered, how would you describe your partner's outcomes from your relationship?

This scale measures the subject's perception of equitableness of an intimate relationship - in this case, with the marital partner. According to this scale, an equitable relationship exists if the participants perceive they are receiving equal relative gains from the relationship (Walster, et al., 1978). Inequity can occur from being either underbenefited or overbenefited. Inequity/underbenefited exists when perceived outcomes are less than deserved outcomes. Inequity/overbenefited exists when perceived outcomes are more than deserved outcomes.

Using this scale, subjects were asked to rate their perceptions of their relationship. Each item was scored on an 8-point Likert scale that ranged from -4 (extremely negative) to +4 (extremely positive). Two methods of scoring were used to determine equity. The first was the original scoring method; and the second was a

derivation of the standard method in which raw scores were converted to quadratic terms.

For the original score of equity the corrected computational formula developed by Walster was used (Walster 1975). This formula estimates the individual deserved outcomes based on individual's inputs, partner's inputs and partner's outcomes, as follows:

$$\hat{O}_B = I_B + \frac{(|I|)^{K_B}(O_A - I_A)}{(|I_A|)^{K_A}}$$

where $\hat{O}_B$ represents deserved outcomes, I_B and I_A represent the perception of subject and partner's inputs, O_A represents the subject's perception of partner's output. Exponents K_A and K_B take on the values +1 or -1 according to the difference of outputs and inputs. Scores can theoretically range from -31.00 to +31.00. As recommended by Walster et al (1978) for the original scores, zero represented equity, any negative score to -.31 or positive score to +.31 represented slight inequity and any score greater than -.31 or +.31 represented greater inequity.

The purpose of the quadratic form of equity was to change the curvilinear relationship between equity and marital satisfaction into a linear relationship for the part of the analysis which required a linear relationship among the variables. By squaring each score the sign was removed and the quadratic term made the distribution easier to interpret within the context of a multivariate analysis. The quadratic form of scoring resulted in a scale that ranged from 0, representing equity to a positive value of 49 which represented the greatest amount of inequity.

Male and female equity were measured separately at both the pretest and posttest with the pretest measure referred to as Pre-equity and the posttest measure as Post-equity.

Internal consistency estimates for this measure have not been established and were not measured in this study. However, the measure has been frequently used in recent research studies (Cate, 1982; Lloyd, 1982; Walster, 1978).

Father Involvement

The Father Behavioral Self-Report Questionnaire (FBSRQ) (Furneaux, 1982) was adapted for use in this study to assess the amount of father involvement in infant caretaking [see Appendix G]. The original form was a 14-item non-forced choice ordinal scale which measured the number of times a day the respondent engaged in specific activities with their infant in a two week period. These included fathers' involvement in routine infant caretaking (e.g., putting the infant to bed, feeding, changing diapers, changing clothes, bathing the infant, putting the infant down for a nap, and attending to the infant at night when he/she cries); playing with the infant (e.g., with or without toys); and various other types of interactions (e.g., talking, reading, soothing, strolling, and spending time alone with the infant).

On the original measure face validity was established and concurrent validity was assessed by comparing father's reported involvement with mother's perception of father's involvement. Pearson's product moment coefficients ranged from .66 to .97 for all items except those relating to playing and bathing.

As with all preceding measures, reliability and validity were assessed for use with the sample in this study. Internal consistency reliability estimates were .20 and .19 for mean inter-item correlation with alpha coefficients (Cronbach's alpha) of .77 and .76 for males and females respectively. To test for concurrent validity the relationship between total male and female scores was examined. The correlation was .65 (Pearsons r).

In this study subjects were asked to rate the number of times they engaged in activities with their infant in the past two weeks, using a response format of 0 - 10 or more. Ten items reflect infant care tasks and three items reflect play or interaction with the infant. Two additional items assess total interaction time alone or jointly with partner. The theoretical score range is from 0-160. A score of 160 reflects maximum involvement of a father in all areas.

Infant Temperament

Two subscales of the Infant Behavior Questionnaire (IBQ) (Rothbart, 1978) were used to measure infant temperament[2]. The IBQ measures the properties of temperament as individual differences in reactivity, self-regulation and soothability of the infant, which are assumed to have a constitutional basis. This biological substrate as it is influenced over time by life experience and maturation (Rothbart, in press), distinguishes this tool from other standard measures in current use (Carey, 1970; Thomas, Chess, & Birch, 1963). The total scale was standardized on 463 infant subjects in age groups of 3, 6, 9, and 12 months.

2. The IBQ is copyrighted. Copies can be obtained from Mary Rothbart, Ph. D., University of Oregon, Eugene, Oregon.

The scale consists of 94 items which reflect six dimensions of infant behavior represented by the following subscales: activity level, positive emotionality, duration of orienting, soothability, fear, and distress to limitations. Each item is scaled on a 7 point symmetrical interval scale which indicates the frequency of the reported behavior. Both the estimate of relative frequency of concrete behaviors and the inclusion of reverse items helps minimize response bias.

Internal consistency estimates (Cronbach's alpha) for each subscale have been measured at .73, .72, .84, .72, .72, and .85 respectively for a sample of 3 months old infants (Rothbart, 1981), with interrater reliability coefficients of .69, .66, .60, .54, .45, and .46 for each respective subscale. Test-retest stability estimates using a 3 month old infant group (with a 3-month interval between testing) was obtained for 4 out of the 6 scales. Three month measures of the activity subscale and smiling and laughter subscale were highly predictive of behaviors at 6, 9, and 12 months ($p < .0001$).

Because this tool is designed to measure distinct conceptual dimensions which have been tested empirically, there is no total score for infant temperament. Therefore, for this study each infant was scored separately on those scales found to have the most reliability in the current study sample. Since there was a problem with reliability on most of the scales in this study as a result of incomplete behavioral observations due to the age of the infant, the mean inter-item correlation and alpha coefficients established with this sample and the stability coefficients of 3-6-9 months

established by Rothbart (1977) were used to select the subscales which were used to measure temperament. The Activity Subscales had inter-item correlations of .17 and .28 and coefficients (Cronbach's alpha) of .76 and .85 respectively. The 3-6-9 month stability coefficients established by Rothbart (1977) were .57, .60, and .48. Therefore, temperament as discussed in the remainder of this report refers to the Activity Subscale only. The score for that subscale ranged from 16-112. Thus, a high score on the temperament scale indicates only high activity with a high "arousal potential" or sensitivity to stimulation which may indicate a somewhat difficult temperament (Rothbart, personal communication, July 1983).

Procedure

Recruitment of Subjects

Subjects were recruited over a four month period by the investigator and an assistant in ten childbirth education classes in the greater Portland and Salem metropolitan areas. Approximately ten minutes of the class period was used to explain the purpose and procedure of the study. To maintain consistency, the recruiters followed a standard protocol [see Appendix H for Study Recruitment Procedure]. The primary purpose of the study was described as an attempt to learn more about the effect of parenthood on the marital relationship and the effect of changing roles for women and men in the new family. Potential subjects were asked to volunteer only if they met the criteria of the study and both partners wished to participate. Time was allowed for partners to discuss together

their participation before signing a volunteer form. Potential subjects could volunteer immediately or request more information. Those who wished to volunteer immediately were given the pretest packet with instructions to return it in three weeks. Those who wished further information were called within a week, questions were answered and those who wanted to participate were sent packets. At that time those who did not wish to participate were not contacted further.

Data Collection

For those couples who volunteered to participate data were collected at two times. Couples were pretested on an average of eight weeks prior to the birth of the infant. The mean time for the posttest was 12 weeks after the birth of the infant.

The pretest at approximately 8 weeks prior to the birth of the infant was chosen since potential subjects were in childbirth preparation classes and available for recruitment. Data collection earlier in pregnancy would also have been less desirable since pregnancy symptoms of fatigue and nausea might have had an impact on every-day marital activities, while data collected later in the pregnancy (i.e., beyond the 8th month) might have been influenced by the impending delivery event.

Three months after delivery was chosen for the posttest because it was past the immediate adjustment period, both the father and mother had time to adjust to the novelty of the situation. Furthermore, it could be assumed that the infant had matured neurologically enough that behavior patterns were somewhat regulated

and thus less disruptive to family life than would have been the case earlier.

Pretest measures included the Dyadic Adjustment Scale (DAS), the Global Measure of Participation (Equity), the Attitude Toward Women Scale (AWS) and a brief background questionnaire including demographic information and the estimated birthdate of the infant in order to establish eligibility to participate. Instructions on the completion of the forms were included and participants were informed of their human subject rights [see Appendix I and J]. It was estimated that questionnaires took approximately thirty minutes to complete.

Subjects were requested to complete their forms independently of each other in order to control for joint responses. It was recognized that mailing data forms concurrently to couples and asking them to complete them separately does not insure independence. The steps that were taken in this study to discourage joint responses were to explain to the subjects that there were no correct answers and that individual perceptions were necessary to increase validity of the findings. Assuming that intimate dyads were likely to exchange information, subjects were instructed that they could discuss their individual perceptions after completing the forms, with the request that they not change any of their answers. An alternative procedure of mailing out questionnaires to first one partner and waiting for its return to test the other partner was considered and rejected because of time restrictions, since subjects needed to be recruited and pretested before the birth of the infant.

Before the posttest, and a month after the infant's estimated

birthdate, each couple was sent a brief Postbirth Screening Form [see Appendix K]. The purpose of this form was to determine the exact birthdate of the infant to more accurately determine posttest timing, to assess the health status of the mother or the infant during and after the birth event, and to maintain subject interest in the study.

Posttest data on the sample was collected over a six month time span when the average age of the infant was 12 weeks. Posttest measures included the Dyadic Adjustment Scale (DAS) and Global Measure of Participation (Equity). Two new measures were added at the posttest to assess variables related to the infant; the Father Activity Questionnaire (FAQ) and the Infant Behavior Questionnaire (IBQ).

If responses had not been returned within three weeks after the post test questionnaires were sent, a follow-up phone call was made by the investigator to make certain that the family was all right and to remind them to send in their material. If questionnaires were not received in another week, a letter was sent. Finally, if questionnaires were not returned after another two weeks, a final phone call was made and questionnaires were picked up.

The telephone calls were useful since two non-respondents were found whose forms had been lost in the mail. Of the total sample at posttest (n=96), ten were called once, fourteen were called and received a letter, and seven required an additional phone call after the letter. Thus, approximately 30% of the subjects had some form of follow-up and of these, about 20% had follow-up which included both phone calls and a letter.

RESULTS AND DISCUSSION

Overview

The statistical analyses were done in three phases. In the first phase two hierarchical regression analyses were performed to determine the relative contributions of prebirth equity and traditionality to prebirth marital satisfaction. In the second phase, a series of 2x2 analysis of variance (gender x time) with repeated measures on time were performed to assess change in equity, change in total marital satisfaction and change in subscale domains in marital satisfaction. In addition, pretest to posttest scores on equity were examined with Chi square analyses to explore categorical changes in equity using the underbenefited, equitable, and overbenefited classifications of equity proposed by Walster et al. (1978).

In the third phase of the analyses, a series of hierarchical regressions were performed to determine the relative contributions of prebirth marital satisfaction, prebirth equity, postbirth equity, father involvement and infant temperament to postbirth marital satisfaction. All analyses were done separately for males and females to determine if the variables functioned differentially by gender.

Predictors of Marital Satisfaction Before Birth of Infant

In order to determine the relative contributions of equity and traditionality to marital satisfaction before parenthood, two hierarchical regressions were used. In this analysis, presented in

Table 1, equity and traditionality were examined for their unique contributions using both a raw score and quadratic score for equity. Since in a hierarchical regression analysis, the unique contribution of a variable is determined by entering it last, the following procedure was used. In the initial analysis as a first step traditionality was entered last. In the second step the raw equity score was entered last. In the post hoc analysis this procedure was repeated, substituting the quadratic equity score for the raw equity score.

The results when using the raw score for equity did not show any significant contribution of traditionality or equity to marital satisfaction. However, when the quadratic score for equity was used, equity contributed significantly to the variance in prebirth marital satisfaction of females, $F(1, 93) = 7.84$ $p < .01$, but not of males, $F(1,93) = .60$ n.s. It should be noted that when the quadratic score is used, the negative correlation in the simple r means that the closer a score is to 0, which represents absolute equity, the higher is the marital satisfaction score. This finding is congruent with equity theory which suggests that inequity is associated with greater distress in the relationship (Walster et al., 1978).

However, these results, as well as the results which include the use of the quadratic score for equity in later analyses, should be interpreted with some caution because of the psychometric properties of the equity measure in which the scaling format used in the equity measure results in a possible range of scores from -31 to +31. This format makes outliers highly likely. The presentation of the

Table 1

Summary Table of Relative Contributions
of Traditionality and Equity (Raw and Quadratic Scores)
to Prebirth Marital Satisfaction[a]

Predictor Variable	Simple r		R^2		ΔR^2		df		F	
	f	m	f	m	f	m	f	m	f	m
Traditionality	-.10	*.03*	.03	*.00*	.01	*.00*	1,93	*1,93*	1.29	*.08*
Equity (raw)	.14	*-.06*	.03	*.00*	.02	*.00*	1,94	*1,94*	2.27	*.24*
	post hoc analysis									
Traditionality	-.11	*.03*	.09	*.00*	.00	*.00*	1,93	*1,93*	.95	*.08*
Equity (quadratic)	-.28	*-.08*	.09	*.01*	.08	*.01*	1,93	*1,93*	7.84**	*.60*

a Results for males shown in italics
** $p. < .01$

distribution of scores for prebirth equity in Table 2 illustrates this problem. The kurtosis (Male 21.80, Female 9.07) in the distribution shows a clustering of scores around the midpoint while the standard deviations (Male 1.02, Female .70) suggest the presence of outliers. This distribution was examined with a scattergram which showed that the combined effect of the distribution and outliers was exaggerated using the quadratic score, because the outliers affected the regression line and both the magnitude and direction of the correlations. The resulting measurement problem could have been handled by dropping the outliers. However, since the equity measure is designed to include extreme scores to assess significant inequity, that solution was discarded because the purposes of the study may have been compromised. Moreover, Belsey, Kuh & Welsch (1981) have advised against wholesale deletion of outliers and routine transformation of the data since that does not add to the understanding of the way the data influence the results. Furthermore, they argue that although outliers are potential sources of error, "...outlaying data points may be legitimately occurring extreme observations ... with valuable information that improves estimation efficiency by (its) presence (Belsey, Kuh & Welsch, 1981, p. 47)," and suggest that the relationship of outliers to the main body of data be examined relative to the regression slope.

Using their suggestions, these data were examined with the scattergram. Outliers had different effects for males and females and were a source of influence which supplied crucial information. Among males, the outliers contributed to the strength of the association and did not change the slope of the regression. Among

Table 2

Distribution of Prebirth Equity Scores

Variable	Mean	Median	Mode	Standard Deviation	Skew	Kurtosis
Prebirth Equity						
Male	.17	.02	0	1.02	2.28	21.80
Female	.06	.01	0	.70	-2.08	9.07

females, the estimated regression slope was more affected by the extreme points. Because of this finding, throughout the remainder of the study interpretations of female results using equity scores should be made with caution.

Changes In Equity and Marital Satisfaction

Equity

Table 3 presents a summary of prebirth and postbirth mean equity scores for both genders. Females showed a greater change than males, and neither gender showed a postbirth decline in equity. These scores were analyzed to determine significance and gender differences in change using a 2x2 (gender x time) repeated measures ANOVA [Table 4]. There were no significant main effects for time, F (1,180) = 1.90, $p < .25$ or gender, F (1,180) .09, $p < .25$. There were also no significant interactions, F (1,180) = 2.08, $p < .25$. Thus, the birth of the baby did not cause a significant shift in equity when looking at the group as a whole.

However, since the use of group mean scores is an estimation which may conceal changes in meaningful subgroups, a crossbreak analysis was used to examine change in the distribution of subjects at postbirth in the equity categories of underbenefited, equitable and overbenefited suggested by Walster (1978). The distribution of equity postbirth was first examined for individual change in categories which would indicate a decrease or increase of status relative to Walster's categories of under or over benefitedness. The distribution presented in Figure 1 shows that the greatest

Table 3

Summary of Prebirth/Postbirth Mean Scores for Equity

Scale	Male		Female	
	Prebirth	Postbirth	Prebirth	Postbirth
Equity	.17	.18	.06	.35

Table 4

Summary Table of F Values of Equity
for Males and Females

Dependent Variable	Independent Variables		
	Gender	Time	Gender x Time
Equity	.088	1.90	2.08

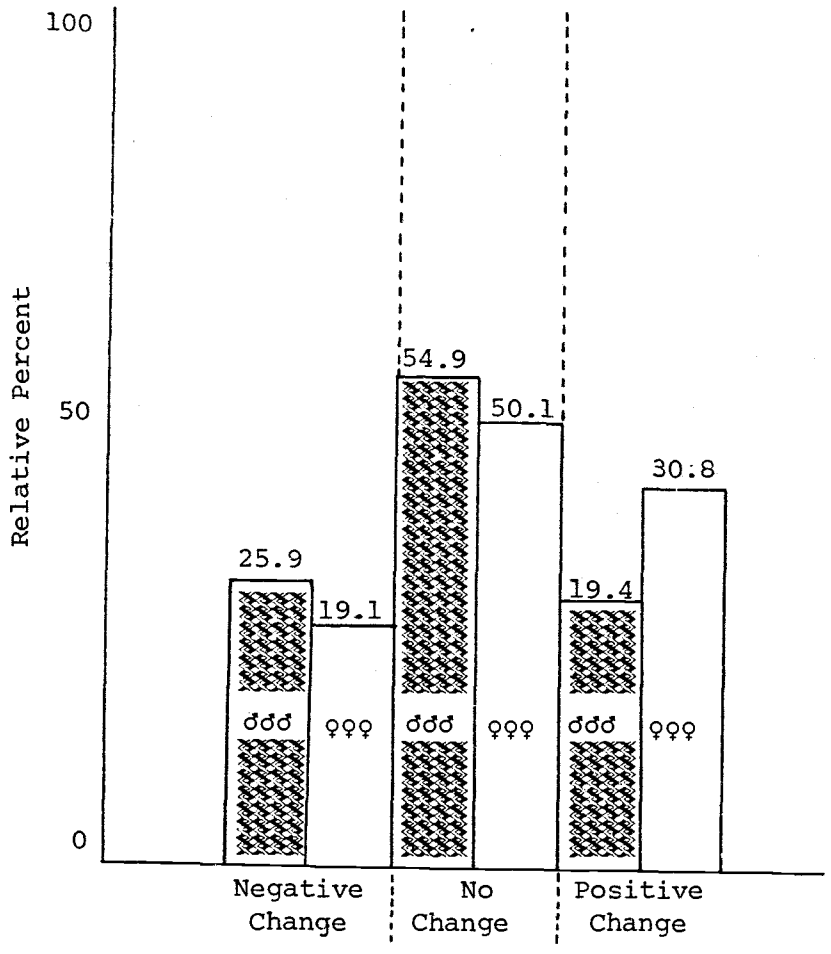

Figure 1 Change in Equity From Prebirth to Postbirth in Males and Females.
(n=93) (n=93)

percentage of all subjects reported no change in equity status, while more males than females reported a negative change and more females than males reported a positive change.

Because the Chi square analysis is an omnibus test of relationships between different levels of a variable (Kerlinger, 1973) it was suitable to examine these changes in equity categories and compare change in each gender subgroup. This analysis of prebirth group membership by postbirth group membership revealed significant changes in distribution for males ($X^2 = 13.4$ $p < .01$) but not for females ($X^2 = 3.39$ $p. < .49$). The results of this analysis presented in Table 5 shows in more detail the patterns of change for both males and females. For example, for females who did not change categories, 36.3% were equitable and 13.8% were overbenefited both pretest and posttest. Similarly, for males in which there was no change, 30.1% were equitable, 23.7% were overbenefitred and 1.1% underbenefited both pretest and posttest. For these subjects it can be considered that transition to parenthood did not affect equity status.

Since the X^2 statistic was nonsignificant for females no further interpretation can be made of that distribution. However, for males the significant X^2 allows further interpretation. The distribution of the marginals in Table 5 shows that more males were underbenefited at postbirth (14.1%) than prebirth (7.6%) and fewer were equitable at postbirth (45.2%) than prebirth (53.8%), while approximately the same number were overbenefited prebirth and postbirth.

Table 5

Categorical Change in Equity at Postbirth
for Males and Females

♂ Postbirth Equity

♂ Prebirth Equity	Under-benefited	Equitable	Over-benefited	
Under-benefited	1.1%	2.2%	4.3%	7.6%
Equitable	10.8%	30.1%	12.9%	53.8%
Over-benefited	2.2%	12.9%	23.7%	38.7%
	14.1%	45.2%	40.9%	100.0%

Male $X^2 = 13.41$ $p.<.01$

♀ Postbirth Equity

♀ Postbirth Equity	Under-benefited	Equitable	Over-benefited	
Under-benefited	0.0%	5.3%	6.4%	11.7%
Equitable	3.2%	36.3%	19.1%	58.6%
Over-benefited	2.1%	13.8%	13.8%	29.7%
	5.3%	55.4%	39.3%	100.0%

Femals $X^2 = 3.39$ $p.<.49$

Thus, on the whole, for males, underbenefitedness nearly doubled postbirth while membership in the equity category decreased. Since there was no control group, it is impossible to say for certain that birth of the infant caused the change for these subgroups. However, this interpretation, though made with caution, suggests that for some males childbirth may negatively affect the perceptions of equity. While female change in distribution was not significant, a visual examination of the marginal totals on Table 5 suggests that in the distribution of equity scores females tend to be more overbenefited at postbirth.

Change in Marital Satisfaction

Table 6 presents the change in mean scores in both total marital satisfaction and the domains of marital satisfaction represented by the DAS subscales. These results indicate that marital satisfaction after birth of the baby was lower than marital satisfaction prebirth for both males and females. However, as Figure 2 shows, postbirth marital satisfaction mean scores for both genders (male 117.0, female 118.0) were above the average standardized mean score (115) established by Spanier (1976) for a non-distressed marriage. As a result, the declines in mean scores did not suggest that postbirth marital satisfaction ratings indicated marital distress.

In order to test the significance of the change in marital satisfaction scores were examined with a 2x2 ANOVA (gender x time) with time as the repeated measure. Table 7 presents a summary of the results of these analyses. A significant main effect for time was found, F (1,188) = 25.38, $p < .001$. There was no significant

Table 6

Summary of Prebirth/Postbirth Mean Scores
for Marital Satisfaction and Marital Satisfaction Subscales

SCALE	Male		Female	
	Prebirth	Postbirth	Prebirth	Postbirth
DAS	119.3	117.0	122.0	118.0
Consensus	50.4	49.6	51.7	50.3
Affectionate expression	9.2	8.6	9.7	8.8
Satisfaction	42.6	42.1	43.1	42.4
Cohesion	17.4	16.7	17.6	16.6

Note: slight discrepancies between total score and subscale scores due to rounding errors.

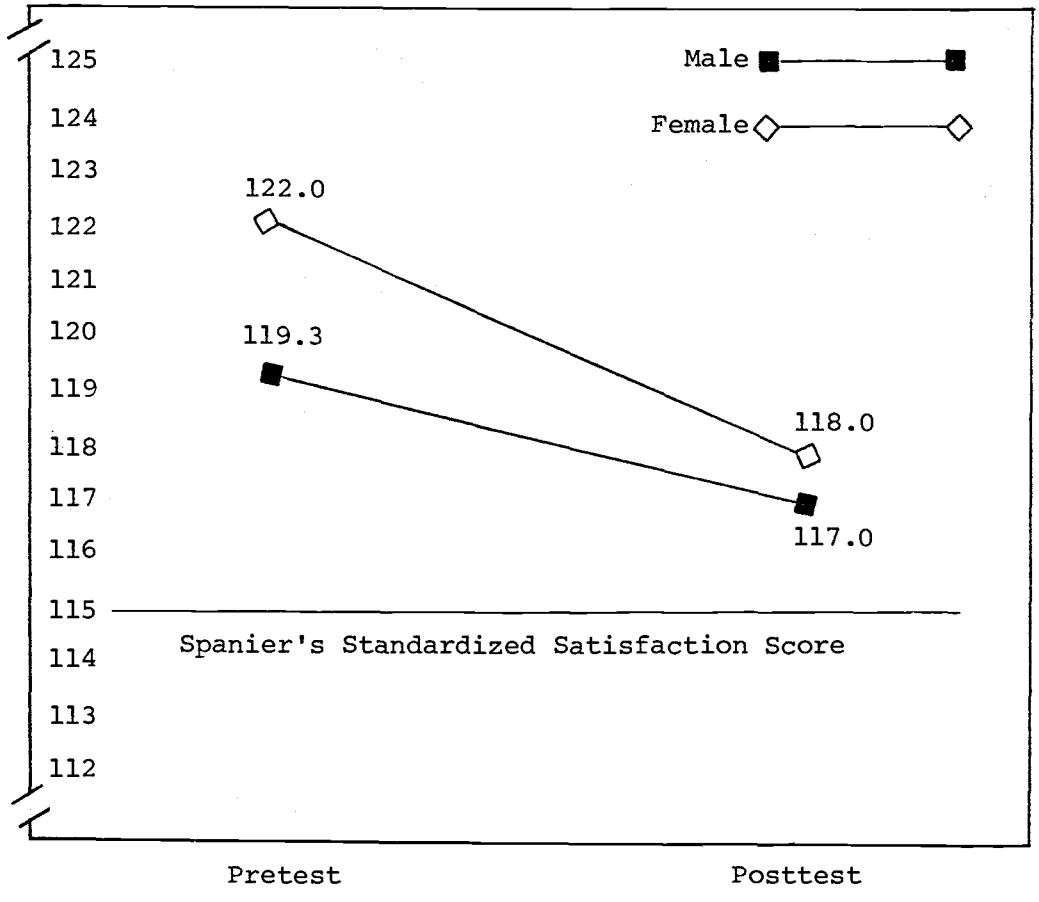

Figure 2 Mean Scores of Male Versus Female Subsamples: Dyadic Adjustment Scales (n=96 couples)

Table 7

Summary Table of F Values for Marital Satisfaction and Marital Satisfaction Subscales

Dependent Variable	Independent Variable		
	Gender	Time	Gender x Time
Marital satisfaction	2.20	25.35***	1.46
Cohesion	.17	21.81***	.52
Affectionate expression	3.35	42.81***	.71
Consensus	3.06	7.82***	.42
Satisfaction	.64	8.33**	.49

** $p < .01$
*** $p < .001$

main effect for gender and no significant interaction between gender and time. Therefore, there was no need to perform an analysis of covariance to control for possible pretest differences in marital satisfaction.

In order to determine if change in marital satisfaction represented a change in specific domains of the marital relationship, a series of repeated measures 2x2 ANOVA (gender x time) were done using the four subscales of the Dyadic Adjustment Scale: cohesion, consensus, affection, and satisfaction. Table 7 shows the results on each of these analyses. Only significant main effects for time were found for each respective domain: Cohesion, $\underline{F}$ (1,188) = 21.81 $\underline{p} < .001$; Consensus, $\underline{F}$ (1,199) = 7.82 $\underline{p} < .001$, Affectionate Expression, $\underline{F}$ (1,188) = 42.81, $\underline{p} < .001$, and Satisfaction, $\underline{F}$ (1,188) = 8.33, $\underline{p} < .01$.

The finding relative to the affectionate expression and cohesion subscales replicates results of Belsky et al. (1983) who also found significant changes in sex, affection, and marital communication during the transition to parenthood. Furthermore, they found that declines in the affectionate expression subscale were most marked during the first three months postbirth, with only slight change from three to nine months postbirth, and concluded that the birth of a baby exerts its greatest impact in this domain early in a couple's experience with a new child. In view of their findings, the decline of scores in the affectionate expression domain in the current study warrants further discussion. The items which comprise this subscale appraise marital satisfaction in both the sexual and affectional relationship. The inclusion of both sets of items makes the results

on this subscale difficult to interpret. It is clearly evident that pregnancy and childbirth interrupts established coital patterns. Thus, progressive declines in sexual interest by women during pregnancy which have been documented (Solberg, Butler & Wagner, 1973; Tolar & deGrazia, 1976) may help explain male's drop in sexual satisfaction during pregnancy. However, there is evidence that women's sexual interest and activity may increase postpartum, which suggests that the sexual relationship should be rectified within three to six months postpartum (Solberg, Butler & Wagner, 1973; Tolar & DiGrazia, 1976). Thus affection needs, rather than sexual needs, may be reflected in these significant declines.

The decline on the cohesion subscale suggests that both husbands and wives perceive a significant change in joint activities and exchange of ideas, whereas the change in consensus suggests that they experience greater disagreements in aims, goals, and handling family affairs after the birth of the baby. The decrease in satisfaction ratings suggests a general dissatisfaction with the relationship.

Relative Contributions of Personal, Interpersonal and Infant Factors to Postbirth Marital Satisfaction

Table 8 presents the summary of the final step of the analyses. In this step a series of hierarchical regression analyses were done to determine the relative contributions of traditionality, equity, father involvement and infant temperament to marital satisfaction after birth of the infant. A separate analysis was performed with each independent variable by entering it last in the regression

Table 8

Summary Table of Relative Contributions of Traditionality, Father Involvement, Equity and Infant Temperament to Postbirth Marital Satisfaction[a]

Predictor Variable	Simple r		R^2		ΔR^2		Beta		F to remove or enter	
	f	m	f	m	f	m	f	m	f	m
predictor entered first										
Prebirth Marital Satisfaction	.69	*.61*	.48	*.37*	.48	*.37*	.62	*.64*	81.74**** (p=.000)	*52.03**** (p=.000)*
predictor entered last										
Pre Equity (raw)	.21	*-.06*	.55	*.39*	.01	*.00*	.01	*-.03*	.01 (p=.93)	*.07 (p=.80)*
Traditionality	.09	*-.06*	.55	*.39*	.02	*.00*	.15	*-.07*	3.79* (p=.06)	*.65 (p=.42)*
Father Involvement	.14	*.00*	.55	*.39*	.00	*.00*	.02	*-.06*	.06 (p=.81)	*.48 (p=.49)*
Infant Temperament	-.11	*-.15*	.55	*.39*	.01	*.00*	-.11	*-.07*	2.22 (p=.14)	*.57 (p=.45)*
Post Equity (raw)	-.27	*-.01*	.55	*.39*	.02	*.01*	.14	*.08*	.85 (p=.36)	*.75 (p=.39)*
predictor entered last: post hoc analysis										
Pre Equity (quadratic)	-.35	*-.08*	.57	*.44*	.01	*.00*	-.11	*-.02*	1.84 (p=.18)	*.05 (p=.83)*
Traditionality	.09	*-.06*	.57	*.44*	.02	*.01*	.14	*-.11*	3.73* (p=.06)	*1.55 (p=.22)*
Father Involvement	-.00	*-.00*	b	*.44*	b	*.00*	b	*-.05*	b	*.33 (p=.56)*
Infant Temperament	-.11	*-.15*	.57	*.44*	.01	*.00*	-.12	*-.03*	2.85* (p=.10)	*.09 (p=.76)*
Post Equity (quadratic)	-.42	*-.16*	.57	*.44*	.03	*.06*	-.20	*-.25*	5.76** (p=.02)	*8.34*** (p=.01)*

[a] Results for males shown in italics

[b] No beta weight or R^2 is listed for this predictor because the F value to enter this predictor is less than the default option of .05.

* $p < .10$, ** $p < .05$, *** $p < .01$, **** $p < .001$.

formula. In so doing, the unique contribution of each variable to the dependent variable was accounted for. At this step the procedure used was similar to the prebirth analysis with a first series of analyses using the raw score for equity and a post hoc analysis in which the procedure was repeated substituting the quadratic equity score for the raw equity score. Appendix L presents summary tables for each of the regression analyses.

For each of these analyses, prebirth marital satisfaction was entered first in order to control for its effects on postbirth marital satisfaction. Prebirth marital satisfaction was found to contribute 48% of the variance of postbirth marital satisfaction for females and 37% for males. The large contribution of prebirth marital satisfaction is highly significant, and is by far the most powerful predictor of postbirth satisfaction of all predictor variables used in this model. In addition, by partialling out prebirth marital satisfaction from postbirth marital satisfaction at the first step, the degree to which the remaining predictors accounted for the remaining variance in postbirth marital satisfaction could be determined. Using the raw score for equity the remaining predictors accounted for only 6% of the total remaining variance for females and 1% for males while in the post hoc analysis the remaining predictors accounted for 7% of the total remaining variance for each gender. However, the variables measured contributed differentially for males and females. For males, postbirth equity alone accounted for 6% of postbirth marital satisfaction, $F=7.41$, $p < .01$; whereas, for females, traditionality, $F=3.79$, $p < .10$, infant temperament, $F=2.85$, $p < .10$, and postbirth

equity, $F=4.60$, $p < .05$, contributed significantly to the postbirth marital satisfaction ratings. In summary, the fact that this model accounts for 55% of the total variance for females and only 44% for males, suggests that it is more sensitive to factors which contribute to females' postbirth marital satisfaction than it is to males'.

The results from the regression analyses suggest several interpretations. First, despite the absence of change in equity mean scores postbirth, the fact that equity contributed to postbirth marital satisfaction which had declined for both genders suggests there is a change in the impact of equity after birth of the infant. Second, it appears that traditional sex role orientation contributed negatively to postbirth marital satisfaction for women, but not for men. The overall minimal effect of sex role attitudes as a contributor to marital satisfaction after the birth of the infant and the direction of the relationship is somewhat surprising. Previous reports have suggested there may be a stronger negative relationship between non-traditional attitudes towards women's role and marital satisfaction as a result of mothers' greater ambivalence about their role and women's loss of negotiating power after birth of the first infant (Bardwick, 1971; Decker, 1978; Waldron and Routh, 1981).

Additionally, this analysis showed that father involvement in infant care was not a factor which contributed to the declines in marital satisfaction scores. This result can be interpreted in two ways. First, it may be due to a measurement problem. The mean number of all interactions reported by fathers in this study over a

two week period was 5.41, which reflects a minimal amount of father-infant interaction. It may be that these scores were affected by a restriction of range, since the response format used an upper limit of 10. However, it is interesting to note that the level of father involvement reported in the study is consistent with most similar research (Lamb, 1982; Parke & Sawin, 1976; and Rebelsky & Hanks, 1971).

An alternative interpretation has been suggested by Lamb (1977, 1982), who contends that father-infant interaction differs not only quantitively, but also qualitatively from mothers' interaction. He furthermore suggests that these differential roles are necessary, and that father involvement in infant caretaking may not be comparable to mothers' activities with the infant, nor desirable. These suggestions may help explain the lack of contribution of father's involvement with his infant on marital satisfaction outcomes in the current study.

Finally, the fact that infant temperament accounted for relatively little of the variance on postbirth marital satisfaction for mothers may be partially due to the restriction of scale measurement on the IBQ due to the reliability problems. Because others have found relationships which suggest that a difficult temperament infant might adversely affect marital satisfaction in the transition (Russell, 1974; Ventura, 1982; Wolkind & Desalis, 1982) the lack of contribution of overall infant temperament to postbirth marital satisfaction in this study should be interpreted with caution. However, it should be noted that these data suggest

that mothers may be somewhat more influenced by the infants' behavior than are fathers.

Summary

In summary, there were a number of findings which suggest that childbearing had an effect on both men and women. First, although for the total group, males' perception of equity did not change significantly, a greater percent than expected who were equitable before birth shifted to an underbenefited category after the birth of the infant. Second, there was a significant decline in marital satisfaction at postbirth for both genders. Third, while prebirth marital satisfaction was the single most powerful predictor of how a couple would weather the transition to parenthood, postbirth equity also contributed significantly to marital outcomes for both genders. In other words, the more inequitable a relationship, the lower postbirth marital satisfaction was from what would be predicted on the basis of prebirth marital satisfaction scores. Finally, mothers' more negative evaluation of the marital relationship after the transition to parenthood was significantly influenced by her perceptions of equity postbirth, her traditional orientation towards women's role, and higher activity in the temperament characteristics of her infant.

It is interesting to note that the direction of the relationship between sex role attitudes and marital satisfaction is a positive one. This suggests that traditional women were likely to assess their marital relationship more negatively after the birth of the infant than did more non-traditional women. Taken as a whole, these

differential effects of the variables by gender suggest that women's satisfaction in marriage after parenthood is affected by her relationship with her husband, her perception of her infant, and her appraisal of her sex role, while for men the decline in marital satisfaction is related only to some factor within the interpersonal sphere of equity with his spouse.

Limitations of the Study

Limitations of these data obviously exist. First, generalizing the findings of the study is limited because of the sampling method used. Volunteer subjects from private childbirth education classes are not representative of the population at large since the demographic data showed a positively skewed distribution toward higher income and education levels. Furthermore, all subjects were urban couples and data may reflect attitudes more congruent with urban life than attitudes of rural subjects. However, since subjects were recruited in ten sites which covered a four county area, there was more control for systematic influence on the data due to some unknown factor than if only one site had been used. Additionally, since the measures used in this study were standardized on middle class subjects, they were appropriate for use in this investigation. However, because marital patterns and sex role expectations vary between social classes the results from this study cannot be applied to different social strata.

A second limitation was in the design of the study. This was an exploratory investigation. Thus, changes in marital satisfaction

and contributions of the predictor variables during transition to parenthood cannot with certainty be claimed to be the result of the birth of the infant. The variations in marital satisfaction and its determinants suggested by this study may be unrelated to the transition to parenthood and only represent variations which occur over time in all marriages. Furthermore, the lack of a pretest measure before the pregnancy occurred makes the interpretation of these results only applicable to changes in marital satisfaction relative to conjugal adjustment during pregnancy. There is little knowledge about the effect of pregnancy on either male or female assessment of their marriage, thus it is not possible to be certain that the reduction in satisfaction scores is not a return to pre-pregnancy levels rather than a true change.

A third limitation in the study was in data collection. Because this study was a survey there was relatively little control for independence of data with each couple. Consequently, male and female group scores must be considered to have been subject to some influence from the other. However, the influence of that contamination should be in the direction of greater consensus, not greater discrepancy. Thus, the influence of this limitation may have functioned to temper the gender differences and to minimize discrepancies between genders in marital satisfaction declines which have been found by other investigators (Belsky et al., 1983; Russell, 1974).

An additional limitation of this study was in the measurement and analyses of the equity and infant temperament variables. The Walster equity measure has the advantage of determining the

direction of perceived equity which is an accurate reflection of the theory which it is designed to test. However, the curvilinear relationship of the equity and marital satisfaction score makes it difficult to interpret in analyses based on linear correlations, because it violates one of the assumptions of multiple regression. Using the quadratic score corrects for this but loses some of the theoretical precision which is a strength of the measure.

A related limitation existed in the measurement of infant temperament. Despite Rothbart's (1981) report of scale reliability on a sample similar to the current study, in this investigation the reliability coefficients of most of the scales, though similar, were not adequate because of the failure of the majority of subjects to complete enough items to satisfy reliability requirements. Thus, the temperament measure in this study was a limited assessment of motoric responses of the infant, and the results cannot be interpreted to suggest that all domains of infant behavior were measured.

IMPLICATIONS

This study was an attempt to build on previous research which has provided repeated evidence that the birth of the first child is accompanied by a statistically significant decline in marital satisfaction, particularly for women. Therefore, the study began with the goal of understanding more about selected contextual factors of the emerging family which might contribute to a couple's perceptions of marriage during the transition to parenthood. Prior marital satisfaction research outside the specialized area of marital relationships during transition to parenthood have suggested that factors relative to equity might influence the decline in marital satisfaction (Cowan et al., 1982; Davidson et al., 1983; Waldron & Routh, 1981). Furthermore, because this study was concerned with the family system in change due to childbirth, it seemed reasonable that both the characteristics of the infant and the division of responsibilities for infant care between parents could also be influential contributors to postbirth marital relationship. Some of these variables were found to influence the marital relationship during transition to parenthood; others were not. Nevertheless, these results have implications for previous research, as well as for future research relative to family formation.

Implications for Transition to Parenthood Research

The findings of this study, as well as findings of previous research (Belsky et al., 1983; Cowan et al., 1978; Russell, 1974)

have again demonstrated that the transition to parenthood which accompanies the birth of the first child results in modest, but statistically significant declines in marital satisfaction. Unlike LeMasters (1957) and Dyer (1963) who concluded that transition to parenthood was accompanied by a severe crisis, part of which may have been experienced in the marital relationship, this study, like others (Miller & Ryder, 1973; Russell, 1974) found little evidence of parenthood having a severe impact on the marriage for the majority of the subjects. First, despite the statistically significant marital satisfaction declines, mean scores of postbirth marital satisfaction remained well above the level suggested by Spanier as indicative of marital dysfunction (Spanier, 1976). Second, in this study, by partialling out the prebirth marital satisfaction, the effect of other predictor variables was modified and the effect of pre-existing marital satisfaction before parenthood was found to be the best single predictor of marital satisfaction postbirth.

The importance of pre-existing marital satisfaction has not been given adequate attention in most previous studies which have only examined change in satisfaction (Cowan et al., 1978; Russell, 1974). It should be noted that Belsky et al. (1983) reported similar results. Their findings of high stability coefficients in the DAS and its subscales also suggest that while mean group levels of marital satisfaction may change, individual differences may remain somewhat stable. An important implication of the findings in both the Belsky and the current study is that transition to

parenthood probably does not generally improve a bad marriage or make a good marriage markedly worse.

Another implication of this study was the absence of significant gender differences in the change of marital satisfaction postbirth. While the findings of this study supported previous research relative to the modest but consistent changes in marital satisfaction for the group as a whole, these results were not totally consistent with other investigators' conclusions that females experience a greater decline in marital satisfaction than do their male partners. (Feldman, 1971; Miller & Ryder, 1973; Nevill & D'Amico, 1977; Rossi, 1977; Russell, 1974). In this study, the analysis of variance showed that while both males and females declined in marital satisfaction, there was no difference between them on either total DAS scores or in subscale domains of affection, cohesion, consensus and satisfaction.

Furthermore, the gender differences found in the X^2 analysis suggested that there were noticeable shifts of individuals in the male group in the direction of being underbenefited. This finding contradicts the results of Belsky et al. (1983) that a wife is more sensitive to the effects of adding a baby to the family than is the husband. However, as expected, a wife's postbirth marital adjustment was more sensitive to other contributing factors such as the infant's temperament and sex role attitudes than was her husband's. These findings suggest that both males and females are sensitive to the change engendered by the birth of the infant, but for somewhat different reasons.

There are further implications for explaining the significant postbirth changes within the four domains of marital satisfaction identified in the four subscales of the DAS. Like previous studies, this study found change in the affectionate expression and cohesion domains of postbirth marital satisfaction (Belsky et al., 1983; Miller & Ryder, 1973). Because the domains of affectionate expression and cohesion are related to sexual satisfaction, affection, and communication between the marital partners, these findings have some significance for understanding the potential problem areas that new parents may experience.

The significant declines in the sexual and affectionate domains suggest that this area is affected by the change to parenthood. As in this study, the change to parenthood has also been found to decrease communication and companionship (Cowan, et al., 1978; Feldman, 1981; Miller & Ryder, 1973) and to increase disagreement in solutions of problems (Waldron & Routh, 1981). Since these findings have been replicated in a number of studies, these results have implications for programs and services for new parents. The information could help couples understand where stresses may occur in the marriage as the result of becoming parents. This information could be used specifically in childbirth classes and new parenting groups as a preventative measure in preparation for the role change.

Another potentially important finding of this study for transition to parenthood research is the impact of parenthood on the relative importance of sex role attitudes and equity as contributors to marital satisfaction. In this study, despite the relative absence of an association between equity, traditionality, and

marital satisfaction prebirth, and the lack of change in perceived equity three months after the birth of the infant, both male's and female's perceptions of equity contributed significantly to their appraisals of marital satisfaction postbirth. Moreover, an unexpected finding was that more traditional attitudes towards women's role also contributed to a more negative appraisal of the marriage for women after the birth of the baby. The implications of these results are that parenthood may have increased the relative impact of equity and traditionality on perceptions of marital satisfaction. Therefore, although the amount of variance in marital satisfaction accounted for by these contributing factors was not large, taken as a whole, the results suggest that both equity and traditional attitudes towards women are influential variables which may operate with greater potency after parenthood than before.

Finally, the inclusion of father participation in infant care as a contributing factor to postbirth marital satisfaction was an additional departure from previous studies of this genre and an exploratory attempt to determine the saliency of the father-infant relationship to the marriage. The finding that the frequency and type of father interaction with his infant was very similar to repeated findings of limited interactions between fathers and infants in the first three months of life in earlier studies (Parke & Sawin, 1976; Pederson & Robson, 1969; Redina & Dickerscheid, 1976) was not consistent with more recent claims of an increasingly more active role of fathers with their infants (Pederson, 1980; Rebelsky & Hanks, 1981) Therefore, contrary to the increased emphasis on the changing roles of mothers and fathers, the findings of this study as

well as findings from previous studies, suggest that the change in father participation in infant care may be more an attitudinal change than a change in actual family practice. Furthermore, these findings are possibly significant in light of the negligible contribution of father's involvement with infant care to postbirth marital satisfaction. An implication of this finding suggests that mothers did not perceive limited help with infant care a problem during the early months of parenthood. These findings support the conclusion of Lamb et al. (1983) that for women being primary caretakers of infants during the early months postbirth may be a suitable arrangement regardless of the definition of sex roles between spouses.

Implication for Methodology and Theory Development

The attempt in this study to systematically measure the contributions of equity in the transition to parenthood is also a departure from previous studies in transition to parenthood which has potential theoretical implications for family research. Although equity theorists have proposed that equity principles operate to modify long-term intimate relationships (Blau, 1964; Hatfield, et al., 1979; Traupman, 1978; Walster, 1978) no previous study has examined its contribution to marital quality after the addition of an infant to the family. Therefore, despite the modest contributions of equity to postbirth marital satisfaction found in this study, the fact that equity was a contributing factor to postbirth marital satisfaction provides additional information regarding the function of equity during this life transition. These

results have implications for the use of equity theory with intimate dyads in family studies by supporting previous investigators' claims that equity is a dynamic variable which is sensitive to family change (Davidson et al., 1983; Hatfield, 1979; Schaefer & Keith, 1980; Schaefer & Keith, 1981; Walster, 1978).

Perhaps the most interesting implication of these findings from a theoretical point of view, however, is that ratings of postbirth equity for both males and females were far more likely to be in the direction of being overbenefited than underbenefited. The significance of this direction, according to equity theory (Hatfield et al., 1979; Walster et al., 1978), is that the restoration of equity when overbenefited is accomplished through increasing contributions to the relationship. In light of the principles of equity, a logical interpretation of these data is that those subjects who perceive themselves to be overbenefited will invest more in the marital relationship. Consequently, the findings in this study relative to equity suggest that there may be a tendency for couples to work toward building the marital relationship after the birth of a child. These are particularly important implications which support MacDonald's (1981) position that social exchange in intimate dyads occurs within the context of maintaining a relationship rather than maximizing individual outcomes.

Finally, the findings from this study have implications for family systems research during the family formation period beyond the consideration just discussed. The theoretical importance of studies regarding the impact of parenthood contribute to theories of adult development, adaptation and the family life cycle. Despite

the relatively modest changes in marital satisfaction and the fact that the declines are not sufficient to suggest that marital stability is at risk, from a broader point of view, this study, as well as most previous studies, contribute to life cycle research through examining the effect of parenthood on the primary marital dyad. The consistent results of repeated studies show a postbirth decline in marital satisfaction which suggests that there is a general negative effect of childbearing on marriage. A number of investigators have demonstrated that the decline in postbirth marital satisfaction begins a trend of decreasing marital satisfaction over the family life cycle of marriage during the parenting years (Lupri & Frideres, 1981; Olson et al., 1983). If that is the case, the potential contributions of equity and sex role to the statistically significant decline in marital satisfaction postbirth in this study is also theoretically significant to family scholars interested in the complexity of change in marriage and family systems across the life cycle (Olson et al., 1983).

Implications for Future Research

The results of this study and its relationship to previous studies also have implications for future research. First, this data set is a source for secondary analyses to examine a number of related research concerns. For example, a limitation of this research and of past research is related to the difficulties in measuring the family as a unit of analysis. In an attempt to overcome the validity problem of using only one family member to report on the dyadic relationship, this study was designed to

capture more of the marital system by comparing husband's and wife's descriptions of marriage. However, the transformation of individual data into a form that best represents the marital dyad as a whole for the unit of analysis remains a challenging task for family researchers (Gillis, 1983; Olson et al., 1983; White & Brinkerhoff 1977, 1978). A methodological study could be designed using a paired data set of couple's scores in which the current data could be evaluated using different means of combining individual scores. Comparison of results using different combinations of scores would increase the understanding of family measurement when a dyad is the unit of analysis. As an example, difference in scores could be analyzed, since other investigators have suggested that it is the discrepancy between couple's sex role attitudes and expectations of the partner in the marital role which contributes most to a negative appraisal of marriage (Decker, 1978; White & Brinkerhoff, 1978).

Another logical extension of this study would be to replicate this investigation by using a control group of non-parents with a longitudinal design beyond the third month postbirth. Since prebirth marital satisfaction scores in this study were considerably above the expected average scores for couples without children (Spanier, 1976) the question of whether the regularly found declines are a true decline or only a return to pre-pregnancy status should be investigated. By using a control group, the potential effect of a pregnancy to artifically inflate marital satisfaction scores could be assessed. Additionally, a posttest beyond the third month needs to be done since there is some evidence that at three months it may be too early to examine issues of equity or father involvement

because of the "honeymoon aspect" of early parenthood (Belsky et al., 1983).

Future researchers may also want to assess changes in the measurement of sex role attitudes relative to transition to parenthood. The assumption that attitudes towards women's role is a stable trait guided the decision in this study to measure traditionality only on the pretest, without taking into account possible changes in role attitudes due to the role shift to parenthood. However, since there is previous evidence that transition to parenthood may have a differential traditionalizing effect on women (Cowan et al., 1978; Feldman, 1981), a repeated measure on the traditionality variable could yield important information about the effect of parenthood on sex role attitudes.

Further exploration of the equity variable may also be warranted since this study has contributed results which suggest a link between equity and changes in marital satisfaction. However, because the measurement of equity posed problems in this study future researchers may want to explore the relationship between equity and marital satisfaction by using more than one level of measurement for the assessment of equity. For example, a study which measured the equity construct with both the Walster measure and an interview to help explore the equity measure's sensitivity would be a contribution to research in this area. These multiple levels of measurement have been used in previous research with newlyweds (Traupman 1978) with results which suggest that equity measurement in intimate relationships benefits from a multiple measure approach.

Finally, a similar study with a lower socioeconomic group might yield different findings and increase information about the possible relationships between social status, the effect of a child on the integrity of marriage and the contributions of role attitudes and equity during transition to parenthood when there are greater socioeconomic stresses on the marital relationship. Although the current study found demographic variables as a whole to have been unrelated to marital satisfaction outcomes, the fact that income for females and occupational status for males were positively associated with postbirth marital satisfaction suggests that work and financial status may be variables worthy of further study. Studies of social class differences in marital adjustment have suggested that in marriages among the lower socioeconomic class there is more emotional isolation between spouses, more disparity in marital values, and less joint participation both within the home and outside of the home (Irelan, 1971). All of these differences are related to the dimension of the measurement of marital satisfaction in this study. These class differences in marital values also reinforce the lack of generalizability of findings from this study beyond the middle class and suggest that a comparative study could increase information in this important domain. This suggested extension of the current study would be an important departure from the general area of transition to parenthood research which has focused mainly on the middle class experiences during transition to parenthood.

In summary, this study has contributed to the transition to parenthood field by adding knowledge to the complex changes that

occur to a married couple as the result of becoming parents. Specifically, it has described the changes which parenthood brings to the impact of equity in the marriage and has more fully described subtle differences between men and women in adaptation to parenthood. It has shown that sex role attitudes are not a particularly important source of variation in marital satisfaction after the birth of an infant. Finally, the study provides some exploratory findings from which additional research can be conducted.

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Appendices

Appendix A

Characteristics of Subjects Summary Table

Characteristics of Subjects Summary Table

Variable	Male	Female	Mean
Age (yrs)	29.6	27.7	28.7
Education (yrs)	15.1	14.7	14.9
Income[a] (rel %)			
$ 0 - 15,000			10.1
15,001 - 30,000			38.3
30,001 - 40,000			24.2
> - 40,000			27.3
Employment Status (pre birth)			
(Full Time %)	88.2	56.9	72.6
Marital Status			
First Marriage (%)	79.4	83.3	81.3
Remarriage (%)	18.6	14.7	16.7
Cohabiting (%)	2.0	2.0	2.0
Length of Marriage (yrs)	4.1	4.1	4.1
Number of Children Born[b]	5.0	0	N/A
Occupation[c]			
Professional (%)	36.3	42.2	39.3
Manager (%)	20.6	5.9	13.3
Clerical/Craftsman (%)	14.5	27.5	21.0
Homemaker (%)	0	18.6	9.3
Semiskilled/Service (%)	17.6	5.9	11.8
Student (%)	2.0	0	1.0
Ethnicity			
Caucasian (%)	94.1	94.0	94.0
Hispanic (%)	1.0	1.0	1.0
Native American (%)	3.9	2.0	3.0
Asian (%)	0	2.0	1.0
Other (%)	1.0	1.0	1.0
Infant Characteristics			
Infant Gender	47	49	N/A
Infant Weight			3589 Gms

[a] Based on report of males
[b] This figure represents children born before current infant
[c] Based on Duncan Reiss Socioeconomic Index categories

Appendix B

Infant Health Rating Form

Infant Health Rating Form

Please answer the following questions regarding your infant's health by circling the appropriate response and answering briefly the questions asked. The purpose of this form is to give an estimate of your baby's general health since birth.

Today's Date _____
Day Month Year

Baby's Birth Weight _____ _____
Pounds Ounces

1. Did your baby go home from the hospital with you?

   a. yes
   b. no

   If no, what was the reason? _____

2. If your baby stayed in the hospital, how long was that hospitalization? _____

3. Has your baby been ill or had any kinds of problems since coming home from the hospital?

   a. yes
   b. no

If no, proceed to item #5

4. Has your baby been diagnosed with any of the following problems? Please circle all those that apply and check the kind of medical care your baby received.

	Did not require medical care beyond one visit	required continued medical care	required hospitalization	still under care
a. birth defect. Please Explain	_____	_____	_____	_____

	Did not require medical care beyond one visit	required continued medical care	required hospitalization	still under care
b. failure to gain weight				
c. vomiting				
d. diarrhea				
e. convulsions. Please explain:				
f. flu				
g. asthma				
h. allergy				
i. Pneumonia				
j. ear enfections				
k. other - Please describe:				

5. Does your baby have any of the following problems which are currently worrisome to you? Please circle all those that apply and check the kind of medical care the baby received?

a. rashes				

	Did not require medical care beyond one visit	required continued medical care	required hospitalization	still under care
b. frequent colds	_____	_____	_____	_____
c. constipation	_____	_____	_____	_____
d. excessive crying	_____	_____	_____	_____
e. eating problems - Please explain:	_____	_____	_____	_____
f. sleeping problems - Please explain:	_____	_____	_____	_____
g. problems in developing and learning - Please explain:	_____	_____	_____	_____
h. problems with his/her eyes - Please explain:	_____	_____	_____	_____
i. problems with his/her ears - Please explain:	_____	_____	_____	_____
j. accident - Please explain:	_____	_____	_____	_____

k. other: _____

_____

6. Is your baby now under a doctor's or nurse practitioner's care?

   a. yes, for regular checkups
   b. yes, for other reasons than regular checkup
   c. no

7. Please rate your perception of the overall health of your infant now.

   a. very good
   b. good
   c. fair (Please explain) _____
   d. poor (Please explain) _____

Thank you for your responses to this health questionnaire.

Appendix C

Background Questionnaire

Male (I) - Female (II)

Background Questionnaire (male)

1. Age _____ Date _____

2. Education Last Grade Completed:

4	5	6	7	8
Grade School				
9	10	11	12	
High School				
1	2	3	4	
College				
1	2	3	4	5
Postgraduate				

3. Please indicate your marital status:
   1. married for the first time
   2. remarried
   3. not married, living with partner

4. How long have you and your current partner been together?

   _____

In answering the following questions, please circle the number in front of the answer which best applies:

5. Religious Preference:
   1. Catholic
   2. Jewish
   3. Protestant
   4. Other _____
   5. None

6. Ethnic Origin:
   1. Caucasian
   2. Hispanic
   3. Black
   4. Native American
   5. Asian
   6. Other _____

7. What is your present employment status?
   1. not employed
   2. employed, part time
   3. employed, full time
   4. unemployed but seeking or would like employment
   5. student

8. What is your occupation? (If a student please indicate field of employment planned upon graduation)

   1. professional
   2. manager or owner of business
   3. farmer (owner, manager of at least 100 square acres
   4. clerical person, salesperson, technician
   5. skilled craftsman, foreman
   6. operative, semi-skilled
   7. service worker
   8. unskilled and farm laborer
   9. homemaker
   10. student - field of employment planned _____

9. Approximately what is your current yearly family income?

   1. $ 1 - 6,000
   2. 6,001 - 10,000
   3. 10,001 - 15,000
   4. $15,001 - $20,000
   5. 20,001 - 30,000
   6. 30,001 - 40,000
   7. 40,000 or above

10. Will this be your first child?

    1. yes
    2. no

11. If no, how many living children do you now have?

    1 2 3 4 or more

12 What kind of help with the care of the baby do you expect to give your partner?

   1. shared responsibility for care
   2. occasional regular help with care
   3. little or no help with care

13. Many people have a definite preference for a particular sex. What do <u>you</u> hope for?

   1. no preference
   2. girl
   3. boy

14. How much experience have you had taking care of a young infant under 6 months of age?

   1. extensive: frequent contact
   2. some: occasional babysitting
   3. little or none: 1 to 2 contacts

15. How well do you think you are prepared to care for a baby?

   1. very well prepared
   2. moderately well prepared
   3. moderately unprepared
   4. very unprepared

16. Sometimes a pregnancy is planned, sometimes unplanned. Which was yours?

    1. planned
    2. no plans for baby, but did not use birth control
    3. partner became pregnant while using birth control

17. If planned, who first initiated the interest in having a baby?

    1. you
    2. your partner
    3. mutual agreement

18. People have a wide range of reactions when they find out they are going to have a baby. What were some of your thoughts when you first discovered you were to be a father?

    1. accepted at once
    2. had mixed feelings
    3. had very negative feelings

19 Have you or are you now attending any type of childbirth education classes?

    1. yes
    2. no

Thank you for completing this questionnaire. Please return this questionnaire with the other questionnaires in the enclosed self-addressed stamped envelope

Background Questionnaire (female)

1. Age _____ Date _____

2. Estimated date of delivery _____

3. Education Last Grade Completed:

4	5	6	7	8
Grade School				
9	10	11	12	
High School				
1	2	3	4	
College				
1	2	3	4	5
Postgraduate				

4. Please indicate your marital status:
   1. married for the first time
   2. remarried
   3. not married, living with partner

5. How long have you and your current partner been together?

   _____

In answering the following questions, please circle the number in front of the answer which best applies:

6. Religious Preference:
   1. Catholic
   2. Jewish
   3. Protestant
   4. Other _____
   5. None

7. Ethnic Origin:
   1. Caucasian
   2. Hispanic
   3. Black
   4. Native American
   5. Asian
   6. Other _____

8. What is your present employment status?
   1. not employed outside the home
   2. employed, part time
   3. employed full time
   4. unemployed but seeking or would like to be employed
   5. student

9. What is your occupation? (If a student, please indicate the field of employment planned upon graduation) 99

1. professional
2. manager or owner of business
3. farmer (owner, manager of at least 100 square acres)
4. clerical person, salesperson, technician
5. skilled craftsman, foreman
6. operative, semi-skilled
7. service worker (gas station attendant, cook, janitor)
8. unskilled and farm laborer
9. homemaker
10. student - field of employment planned _____

10. Approximately what is your current yearly family income?

1. $ 1 - $6,000
2. 6,001 - 10,000
3. 10,001 - 15,000
4. $15,001 - $20,000
5. 20,001 - 30,000
6. 30,001 - 40,000
7. 40,000 or above

11. After the baby is born, what are your employment plans?

1. do not plan to return to or begin work
2. plan to return to or begin work but not within 2-3 years
3. plan to return to or begin work but not within 1 year
4. plan to return to or begin work but not within 6 months
5. plan to return to or begin work but not within 3 months
6. plan to return to or begin work in less than 3 months
7. do not plan to return to work but may have to
8. undecided

12. If you plan to return to or begin work, what would you say is the primary reason for that choice?

1. we need the money but would stay home if we didn't
2. afraid of interrupting my career but would stay home if that wasn't a factor
3. I see no reason to stay home with the baby and I like to work

13. If you do not plan to return to work, what would you say is the primary reason for that choice?

1. I wish to be a full time mother because it meets my need
2. I believe my child needs me at home
3. my husband does not want me to work
4. my friends would not approve

14. What kind of help with the care of the baby do you expect to get from your partner?

1. shared responsibility for care
2. occasional regular help with care
3. little or no help with care

15. Many people have a definite preference for a particular sex. What do you hope for?

    1. no preference
    2. girl
    3. boy

16. How much experience have you had taking care of a young infant under 6 months of age?

    1. extensive: frequent contact
    2. some: occasional babysitting
    3. little or none: 1 to 2 contacts

17. How well do you think you are prepared to care for a baby?

    1. very well prepared
    2. moderately well prepared
    3. moderately unprepared
    4. very unprepared

18. Sometimes a pregnancy is planned, sometimes unplanned. Which was yours?

    1. planned
    2. no plans for a baby, but did not use birth control
    3. became pregnant while using birth control

19. If planned, who first initiated the interest in having a baby?

    1. you
    2. your partner
    3. mutual agreement

20. People have a wide range of reactions when they find out they are going to have a baby. What were some of your thoughts when you first discovered you were pregnant?

    1. accepted at once
    2. had mixed feelings
    3. had very negative feelings about the pregnancy

21. What month of this pregnancy were you in when you had your first prenatal visit?

    1 2 3 4 5 6 7 8 9 10

22. Have you or are you now attending any type of childbirth education classes?

    1. yes
    2. no

Thank you for completing this questionnaire. Please return this questionnaire with the other questionnaires in the enclosed self-addressed stamped envelope.

Appendix D

Spanier's Dyadic Adjustment Scale (DAS)

Most persons have disagreements in their relationships. Please indicate below the approximate extent of agreement or disagreement between you and your partner for each item on the following list.

	Always Agree	Almost Always Agree	Occa-sionally Disagree	Frequently Disagree	Almost Always Disagree	Always Disagree
1. Handling family finances						
2. Matters of recreation						
3. Religious matters						
4. Demonstrations of affection						
5. Friends						
6. Sex relations						
7. Conventionality (correct proper behavior)						
8. Philosophy of life						
9. Ways of dealing with parents or in-laws						
10. Aims, goals, and things believed important.						
11. Amount of time spent together						

	Always Agree	Almost Always Agree	Occa-sionally Disagree	Frequently Disagree	Almost Always Disagree	Always Disagree
12. Making major decisions						
13. Household tasks						
14. Leisure time interests and activities						
15. Career Decisions						

	All the time	Most of the time	More often than not	Occa-sionally	Rarely	Never
16. How often do you discuss or have you considered divorce, separation, or terminating your relationship.						
17. How often do you or your mate leave the house after a fight?						
18. In general, how often do you think that things between you and your partner are going well?						
19. Do you confide in your mate?						
20. Do you ever regret that you married? (or lived together).						

	All the time	Most of the time	More often than not	Occa-sionally	Rarely	Never
21. How often do you and your partner quarrel?	_____	_____	_____	_____	_____	_____
22. How often do you and your mate get on each other's nerves?	_____	_____	_____	_____	_____	_____

	Every Day	Almost Every day	Occa-sionally	Rarely	Never
23. Do you kiss your mate?	_____	_____	_____	_____	_____
24. Do you and your mate engage in outside interests together?	_____	_____	_____	_____	_____

How often would you say the following events occur between you and your mate?

	Never	Less than once a month	Once or twice a month	Once or twice a week	Once a day	More often
25. Have a stimulating exchange of ideas?	_____	_____	_____	_____	_____	_____
26. Laugh together?	_____	_____	_____	_____	_____	_____
27. Calmly discuss something?	_____	_____	_____	_____	_____	_____
28. Work together on a project?	_____	_____	_____	_____	_____	_____

These are some things about which couples sometimes agree and sometimes disagree. Indicate if either item below caused differences of opinions or were problems in your relationship during the past few weeks. (Check yes or no).

	YES	NO	
29.	___	___	Being too tired for sex.
30.	___	___	Not showing love.

The dots on the following line represent different degrees of happiness in your relationship. The middle point, "happy", represents the degree of happiness of most relationships. Please circle the dot which describes the degree of happiness, all things considered, of your relationship.

0	1	2	3	4	5	6
Extremely Unhappy	Fairly Unhappy	A Little Unhappy	Happy	Very Happy	Extremely Happy	Perfect

31. _____ I want desperately for my relationship to succeed and would go to almost any length to see that it does.

_____ I want very much for my relationship to succeed, and will do all I can to see that it does.

_____ I want very much for my relationship to succeed, and will do my fair share to see that it does.

_____ It would be nice if my relationship succeeded, but I can't do much more than I'm doing now.

_____ It would be nice if it succeeded, but I refuse to do any more than I am doing now.

_____ My relationship can never succeed, and there is no more that I can do to keep it going.

Subscale I _____

Subscale II _____

Subscale III _____

Subscale IV _____ Score

Appendix E

Spence and Helmreich's Attitude Toward Women Scale (AWS)

The statements listed below describe attitudes toward the roles of women in society which different people have. There are no right or wrong answers, only opinions. You are asked to express your feeling about each statement by indicating whether you (A) agree strongly, (B) agree mildly, (C) disagree mildly, or (D) disagree strongly.

1. Swearing and obscenity are more repulsive in the speech of a woman than a man.

A	B	C	D
Agree Strongly	Agree Mildly	Disagree Mildly	Disagree Strongly

2. Under modern economic conditions with women being active outside the home, men should share in household tasks such as washing dishes and doing the laundry.

A	B	C	D
Agree Strongly	Agree Mildly	Disagree Mildly	Disagree Strongly

3. It is insulting to women to have the "obey" clause remain in the marriage service.

A	B	C	D
Agree Strongly	Agree Mildly	Disagree Mildly	Disagree Strongly

4. A woman should be as free as a man to propose marriage.

A	B	C	D
Agree Strongly	Agree Mildly	Disagree Mildly	Disagree Strongly

5. Women should worry less about their rights and more about becoming good wives and mothers.

A	B	C	D
Agree Strongly	Agree Mildly	Disagree Mildly	Disagree Strongly

6. Women should assume their rightful place in business and all the professions along with men.

A	B	C	D
Agree Strongly	Agree Mildly	Disagree Mildly	Disagree Strongly

7. A woman should not expect to go to exactly the same places or to have quite the same freedom of action as a man.

A	B	C	C
Agree Strongly	Agree Mildly	Disagree Mildly	Disagree Strongly

8. It is ridiculous for a woman to run a locomotive and for a man to darn socks.

A	B	C	D
Agree Strongly	Agree Mildly	Disagree Mildly	Disagree Strongly

9. The intellectual leadership of a community should be largely in the hands of men.

A	B	C	D
Agree Strongly	Agree Mildly	Disagree Mildly	Disagree Strongly

10. Women should be given equal opportunity with men for apprenticeship in the various trades.

A	B	C	D
Agree Strongly	Agree Mildly	Disagree Mildly	Disagree Strongly

11. Women earning as much as their dates should bear equally the expense when they go out together.

A	B	C	D
Agree Strongly	Agree Mildly	Disagree Mildly	Disagree Strongly

12. Sons in a family should be given more encouragement to go to college than daughters.

A	B	C	D
Agree Strongly	Agree Mildly	Disagree Mildly	Disagree Strongly

13. In general, the father should have greater authority than the mother in the bringing up of children.

A	B	C	D
Agree Strongly	Agree Mildly	Disagree Mildly	Disagree Strongly

14. Economic and social freedom is worth far more to women than acceptance of the ideal of femininity which has been set up by men.

A	B	C	D
Agree Strongly	Agree Mildly	Disagree Mildly	Disagree Strongly

15. There are many jobs in which men should be given preference over women in being hired or promoted.

A	B	C	D
Agree Strongly	Agree Mildly	Disagree Mildly	Disagree Strongly

Appendix F

Walster, Walster and Berscheid Global Measure of Participation (Equity)

Plèase answer by circling the appropriate number in the following according to how you feel today about your marriage.

(1) All things considered, how would you describe your contribution to you relationship?

-4	-3	-2	-1	+1	+2	+3	+4
Extremely Negative							Extremely Positive

(2) All things considered, how would you describe your partner's contributions to your relationship?

-4	-3	-2	-1	+1	+2	+3	+4
Extremely Negative							Extremely Positive

(3) All things considered, how would you describe your outcomes from your relationship?

-4	-3	-2	-1	+1	+2	+3	+4
Extremely Negative							Extremely Positive

(4) All things considered, how would you describe your partner's outcomes from your relationship?

-4	-3	-2	-1	+1	+2	+3	+4
Extremely Negative							Extremely Positive

Appendix G

Father Activity Questionnaire (FAQ)

Father's Forms (I)
Mother's Forms (II)

Father Activity Questionnaire I

Please estimate the approximate number of times in the past two week period you have done the following activities in relationship to your infant.

1. Put the infant down for the night:	1	2	3	4	5	6	7	8	9	10 or more
2. Fed the infant:	1	2	3	4	5	6	7	8	9	10 or more
3. Changed diapers:	1	2	3	4	5	6	7	8	9	10 or more
4. Read stories to the infant:	1	2	3	4	5	6	7	8	9	10 or more
5. Changed the infant's clothes:	1	2	3	4	5	6	7	8	9	10 or more
6. Gave the infant a bath:	1	2	3	4	5	6	7	8	9	10 or more
7. Put the infant down for a nap:	1	2	3	4	5	6	7	8	9	10 or more
8. Attended to the infant at night when he/she cries:	1	2	3	4	5	6	7	8	9	10 or more
9. Spent time alone with the infant, including sleeping periods, (without other family members present)	1	2	3	4	5	6	7	8	9	10 or more
10. Soothed the infant (i.e. held or rocked)	1	2	3	4	5	6	7	8	9	10 or more

Please estimate how many times a day in the past two week period you have done the following activities in relationship to your infant.

11. Talked to the infant:	1	2	3	4	5	6	7	8	9	10 or more
12. Played with the infant with toys:	1	2	3	4	5	6	7	8	9	10 or more
13. Played with the infant without toys:	1	2	3	4	5	6	7	8	9	10 or more

14. Please estimate how many minutes _____ or hours _____ you spend interacting (i.e. attending to, talking to, disciplining, etc.) with your baby per day.

15. Please estimate how many minutes _____ or hours _____ you spend jointly with your partner interacting with the baby.

Please describe any other activities you might engage in with your infant that are not included on this list.

Father Activity Questionnaire II

Please estimate the approximate number of times in the past two week period that your partner has done the following activities in relationship to your infant.

1. Put the infant down for the night:	1	2	3	4	5	6	7	8	9	10 or more
2. Fed the infant:	1	2	3	4	5	6	7	8	9	10 or more
3. Changed diapers:	1	2	3	4	5	6	7	8	9	10 or more
4. Read stories to the infant:	1	2	3	4	5	6	7	8	9	10 or more
5. Changed the infant's clothes:	1	2	3	4	5	6	7	8	9	10 or more
6. Gave the infant a bath:	1	2	3	4	5	6	7	8	9	10 or more
7. Put the infant down for a nap:	1	2	3	4	5	6	7	8	9	10 or more
8. Attended to the infant at night when he/she cries:	1	2	3	4	5	6	7	8	9	10 or more
9. Spent time alone with the infant, including sleeping periods, (without other family members present)	1	2	3	4	5	6	7	8	9	10 or more
10. Soothed the infant (i.e. held or rocked)	1	2	3	4	5	6	7	8	9	10 or more

Please estimate how many times a day in the past two week period your partner has done the following activities in relationship to your infant.

11.	Talked to the infant:	1	2	3	4	5	6	7	8	9	10 or more
12.	Played with the infant with toys:	1	2	3	4	5	6	7	8	9	10 or more
13.	Played with the infant without toys:	1	2	3	4	5	6	7	8	9	10 or more

14. Please estimate how many minutes _____ or hours _____ your partner spends interacting (i.e. attending to, talking to, disciplining, etc.) with your baby per day.

15. Please estimate how many minutes _____ or hours _____ you spend jointly with your partner interacting with the baby.

Please describe any other activities you might engage in with your infant that are not included on this list.

Appendix H

Study Recruitment Procedure

Study Recruitment Procedure

1. Explain who is conducting the study.

2. Explain the purpose of the study. The project is examining the influence of becoming a parent on marriage in today's society.

3. Explain the requirements for volunteering:

    a. the couple needs to be married or cohabiting
    b. the mother needs to be in her first full time pregnancy
    c. the subjects need to be between the 4th and 8th month of pregnancy
    d. there can be no other children living with the couple
    e. both partners need to agree to participate

4. Explain the expectation for participation:

    a. timetable of data collection: within the next 3 weeks and 3 months after birth of the infant.
    b. type of data to be collected: standardized paper and pencil questionnaire
    c. amount of subject's time required: approximately 30 minutes/person at both pretest and posttest.

5. Human Subjects Concerns:

    a. potential benefits: increasing knowledge about parenthood in today's family
    b. level of intimacy of the information requested
    c. anonymity and confidentiality of the data
    d. rights to withdraw from the study

6. Explain the procedure for volunteering:

    a. couples will be given the opportunity to discuss together informally their potential participation
    b. couples can volunteer now (and receive pre-test packets) or request additional information through a phone call

7. Ask for questions for clarification

8. Handout volunteer information forms and data collection packets.

Appendix I

Instructions for Questionnaire Completion

Thank you for agreeing to participate in this study--The Transition to Parenthood. The following instructions will help you to complete the questionnaires.

1. Please sign the enclosed consent forms (both partners must sign), seal in the envelope provided and return with the packet of questionnaires. The consent forms with your name will be kept separate so your answers will never be identified with your name. Only the code numbers will be used in analyzing the data.

2. Fill in the enclosed questionnaires. It is vitally important that you complete the tests independently in order that each of you will answer according to your own experience. If you find that you do discuss your answers with your partner after you have filled out your forms, please do not change your responses. Remember that there are no right or wrong answers. We are only interested in your individual ideas.

3. When all forms are completed return them to the Parent/ Infant Research Project in the self-addressed stamped envelope provided.

4. If you move in the next six months, please fill in the card enclosed indicating your address change and mail to our office. Because your participation in the second part of this study is so important, we need to know how to locate you. As you can see, your name will not appear with your code number so you can not be identified with your data. This information will only be used to update our records.

5. In approximately six months similar packets will be sent to you with instructions for completion. Those instructions will be similar to ones for this set of questionnaires.

Your participation in this study will be important in helping us learn more about the experiences of first time parents. While the results of this study may not be of immediate benefit to you, it is hoped that the study will help other first time parents. Results of the study will be shared with you if you desire. An opportunity to request a copy of the results will be offered to you on the last set of questionnaires.

Thank you for your participation.

Appendix J

Human Subjects Consent Form

The Oregon Health Sciences University Informed Consent

We agree to participate in the investigation: "The Transition to Parenthood" under the direction of Patricia Short Tomlinson, R.N., M.N., Associate Professor of Nursing. This study aims to explore the adjustments made by a husband and wife when becoming parents for the first time.

I understand participation involves answering a set of questionnaires regarding my perception of marriage and some attitudes about myself on two occasions; now and in approximately 6 months.

I understand the major purpose of this study is to contribute new knowledge that may benefit parents in the future and that this study may be of no immediate benefit to me. The only risk involved is the possibility that the personal nature of some of the questions may cause some temporary discomfort. However, I understand that confidentiality will be maintained in all the information I give and my anonymity will be protected.

Patricia Short Tomlinson has offered to answer any questions I might have regarding my participation in the study. I also understand I am free to participate or withdraw from participation at any time and it will in no way affect my relationship to or treatment at The Oregon Health Sciences University.

It is not the policy of the Department of Health and Human Services or any other agency funding the research project in which you are participating, to compensate or provide medical treatment for human subjects in the event research results in physical injury. The Oregon Health Sciences University, as an agency for the State, is covered by the State Liability Fund. If I suffer any injury from the research project, compensation would be available to me only if I establish that the inuury occurred through the fault of the Center, its officers, or employees. If you have further questions, please call Dr. Michael Baird, M.D., at (503) 225-8014.

I have read the foregoing and agree to participate in this study.

_____ _____

Signature of Wife Date

_____ _____

Signature of Husband Date

Appendix K

Postbirth Screening Forms

Thank you for your continued participation in the study Transition to Parenthood. According to my records, by now you have had your baby and have had a chance to get to know each other. I will be sending out the second series of tests in a few weeks and hope you will find time again in your new and very busy schedule to answer the questionnaires. It is extremely important to the study to have them returned because your impressions now are as important to the study as were your first answers.

In order to know a little more about your recent birth experience, I have enclosed a brief questionnaire and self-addressed stamped envelope which needs to be returned as soon as possible for our records.

Thank you again for participating in this study.

Date of Baby's Birth _____

1. How would you describe your labor?

   1. very easy and overall a very good experience
   2. more difficult than I had anticipated but still a good experience
   3. more difficult than I had anticipated and a difficult experience
   4. very hard and a bad experience
   5. unable to recall experience

2. How would you describe your delivery?

   1. overall a very good experience
   2. more difficult than I had anticipated but still a good experience
   3. more difficult than I had anticipated and a difficult experience
   4. very hard and a bad experience
   5. unable to recall experience

   If #3, #4, or #5 circled, please give reason _____

   _____

3. Did the baby go home from the hospital with you?

   1. yes _____
   2. no _____

4. If no, what was the reason? _____

   _____

5. Has the baby had any health problems since coming home from the hospital?

   1. yes _____
   2. no _____

6. If yes, please describe the health problem? _____

   _____

7. Have you experienced any illness since the birth of the baby?

   0 = none
   1 = hemorrhage
   2 = uterine infection
   3 = breast infection
   4 = post-operative complications
   5 = other (please list)

   _____

Appendix L

Assorted Tables

List of Tables

Table L-1

Summary Statistics of Marital Satisfaction, Marital Satisfaction Subscales Traditionality, Equity, Father Involvement and Infant Temperament

Variable	Mean	Median	Mode	Standard Deviation	Skewness	Kurtosis
Dyadic Adjustment						
Male	119.3(117.0)	119.0(116.0)	119.0(116.0)	9.3(10.5)	.11(-.30)	.39(.73)
Female	122.0(118.0)	121.3(118.3)	129.0(108.0)	9.4(10.7)	-.22(-.78)	-.03(2.98)
Consensus						
Male	3.88(3.82)	3.92(3.84)	3.92(3.77)	.36(.44)	.42(-1.21)	.55(.01)
Female	3.98(3.88)	3.99(3.86)	4.0 (3.85)	.36(.41)	.00(-.19)	-.46(.73)
Affectionate Expression						
Male	2.31(2.16)	2.37(2.18)	2.50(2.0)	.41(.52)	-.54(-.30)	-.08(-.67)
Female	2.44(2.22)	2.46(2.31)	2.50(2.50)	.36(.04)	-.27(-.89)	-.63(1.32)
Satisfaction						
Male	4.26(4.21)	4.27(4.24)	4.20(4.30)	.04(.36)	-.02(-.34)	.42(-.28)
Female	4.31(4.24)	4.31(4.20)	4.50(4.20)	.33(.38)	-.55(-.82)	.13(1.96)
Cohesion						
Male	3.47(3.35)	3.42(3.37)	2.80(3.40)	.58(.55)	-.22(-.31)	-.54(.09)
Female	3.53(3.34)	3.47(3.4)	3.40(3.40)	.56(.57)	-.02(-.61)	-.17(.96)
Traditionality						
Male	32.01	32.33	38.0	8.61	-.55	-.19
Female	35.07	35.67	42.0	6.92	-.45	-.69
Father Involvement	5.41	5.17	5.0	1.48	.42	-.20
Equity						
Male	.17(.18)	.02(.02)	-0-	1.02(.70)	2.28(-.92)	21.80(2.31)
Female	.06(.35)	.01(.01)	-0-	.70(.66)	-2.08(1.80)	9.07(4.79)
Infant Temperament	3.78	3.73	3.81	.81	.48	-.05

Note: Figures in parentheses are from posttest.

Table L-2

Comparison of Pretest Mean Scores of Continuers (n=96) and Non-continuers (n=6) on Selected Demographic Variables and Independent Variables for Male and Female Subsamples

Variable	Mean	Standard Deviation	t	Prob.[b]
Age				
Male	29.65	5.43	.19	.86
	29.33[a]	*3.93*		
Female	27.68	4.44	-.10	.93
	27.83	*3.55*		
Education				
Male	15.19	2.68	.86	.42
	14.33	*2.34*		
Female	14.65	2.45	-.41	.69
	15.00	*2.0*		
Income				
Male	20-30,000	[c]	.64	.55
	15-20,000			
Female	20-30,000	[c]	.64	.57
	15-20,000			
Traditionality				
Male	31.95	8.81	-.49	.64
	33.0	*4.78*		
Female	35.18	6.8	.49	.64
	33.33	*9.05*		
Equity				
Male	.17	1.05	.04	.97
	.17	*.28*		
Female	.06	.72	-.68	.51
	.14	*.22*		
Marital Satisfaction, Pre-birth				
Male	119.23	9.53	-.11	.91
	119.50	*5.24*		
Female	121.9	9.43	-.50	.62
	124.0	*9.63*		

[a] Italic style indicates data for the non-continuers
[b] two-tail test
[c] not estimated on ranked data

Table L-3

Correlation of Marital Satisfaction, Traditionality, Equity, and Demographic Variables at Prebirth

Pretest Study Variables	Demographic Variables				
	Age	Education	Income	Occupation	Length Married
Marital Adjustment					
Male	.02	-.12	.02	.12	-.02
Female	-.22***	-.08	.07	.17**	-.18**
Traditionality					
Male	.32***	.53***	.19**	-.29***	.30***
Female	.38***	.40***	.34***	-.28***	.26***
Equity					
Male	.04	-.09	.14	.05	-.01
Female	-.11	-.11	.02	.04	.11

Note: All correlations are based on a sample of 101 males and 101 females.

** $p \leq .01$
*** $p \leq .001$

Table L-4

Relationship Between Selected Demographic Factors and Marital Satisfaction Before and After the Birth of the First Infant

Variable	Pretest (n=100)		Posttest (n=91)	
	Male	Female	Male	Female
Age	.02	-.26***	-.01	-.11
Education	-.12	-.08	-.09	.12
Income	.02	.07	.00	.28**
Occupational Status	.12	.17**	.18*	-.02
Length of Marriage	-.02	-.18**	-.03	.02

* p. <.05
** p. <.01
*** p. <.001

Table L-5

Influence of Outlying Scores on Equity
Using Pearson's r and Kendall's Tau Correlation

	Pearson's r	Kendall's Tau
Pre/Post Marital Satisfaction		
Male	.68 (.001)	.49 (.001)
Female	.64 (.001)	.51 (.001)
Pre/Post Equity		
Raw		
Male	-.26 (.006)	-.04 (.33)
Female	.10 (.17)	.24 (.003)
Quadratic		
Male	.39 (.001)	.09 (.15)
Female	.02 (.42)	.35 (.001)
Pre Equity/Pre Marital Satisfaction		
Raw		
Male	.14 (.09)	.03 (.34)
Female	-.06 (.28)	-.05 (.26)
Quadratic		
Male	-.29 (.003)	-.12 (07)
Female	-.03 (.21)	-.15 (.03)
Post Equity/Post Marital Satisfaction		
Raw		
Male	-.26 (.005)	-.01 (.44)
Female	05 (.33)	-.09 (.13)
Quadratic		
Male	-.41 (.001)	-.06 (.23)
Female	-.14 (.08)	-.16 (.02)
Pre Equity/Post Marital Satisfaction		
Raw		
Male	.21 (.02)	.02 (.42)
Female	-.04 (.33)	-.05 (.27)
Quadratic		
Male	-.34 (.001)	-.09 (.13)
Female	-.07 (.25)	-.19 (.008)

Table L-6

Results of the Gender by Time Repeated Measures Analysis of Variance for Equity

Source	SS	df	MS	F
Between Groups				
A (Gender)	.055	1	.055	.0875
Subjects within group	112.787	180	.627	
Within Groups				
B (Time)	1.086	1	1.086	1.896
AB (Gender x Time)	1.188	1	1.188	2.075
Subjects within group	103.081	180	.573	

TABLE L - 7

Results of the Gender by Time Repeated Measures
Analysis of Variance for Total Marital Satisfaction

SOURCE	SS	df	MS	F
Between Groups				
A (gender)	370.07	1	370.07	2.20
Subjects within group	31642.04	188	161.31	
Within Groups				
B (time)	882.21	1	882.21	25.38 ***
AB (gender x time)	50.85	1	50.85	1.46
Subjects within group	6534.44	188	34.76	

*** $p < .001$

Table L-8

Results of the Gender by Time Repeated Measures Analysis of Variance for Cohesion

Source	SS	df	MS	F
Between Groups				
A (Gender)	.081	1	.081	.166
Subjects within groups	91.688	188	.488	
Within Groups				
B (Time)	1.522	1	1.522	21.807***
AB (Gender x Time)	.07	1	.07	.542
Subjects within group	25.049	188	.133	

*** $p < .001$

Table L-9

Results of the Gender by Time Repeated Measure Analysis of Variance for Consensus

Source	SS	df	MS	F
Between Groups				
A (Gender)	.742	1	.742	3.06
Subjects within groups	45.596	188	.243	
Within Groups				
B (Time)	.495	1	.495	7.815***
AB (Gender x Time)	.027	1	.027	.423
Subjects within groups	11.898	188	.063	

*** p. <.001

Table L-10

Results of the Gender by Time Repeated Measures Analysis of Variance for Affectionate Expression

Source	SS	df	MS	F
Between Groups				
A (Gender)	1.001	1	1.001	3.352
Subjects within group	56.424	188	.300	
Within Groups				
B (Time)	3.224	1	3.223	42.810***
AB (Gender x Time)	.053	1	.053	.709
Subjects within group	14.161	188	.075	

*** $p < .001$

Table L-11

Results of the Gender by Time Repeated Measures Analysis of Variance of Satisfaction

Source	SS	df	MS	F
Between Groups				
A (Gender)	.139	1	.139	.638
Subjects within groups	40.889	188	.217	
Within Groups				
B (Time)	.293	1	.293	8.328**
AB (Gender x Time)	.017	1	.017	.486
Subjects within groups	6.613	188	.035	

** p.<.01

Table L-12

Comparison of Mean Scores on Self-reported Father Involvement[a] and Mother Reported Father Involvement with Infant at Three Months

	Mean	S.D.	Median	Mode	Range	Skewness	Kurtosis
Father Self-Report	5.41	1.48	5.17	5.0	6.54	.42	-.20
Mother Report	5.09	1.51	5.10	3.92	7.39	.22	-.50

[a]total number of times father engaged in activities in a two-week period.

TABLE L - 13

Frequency of Father Involvement Episodes
in Caretaking, Play, and Other Social Interactions

Activity	Mean	S.D.	Median	Mode	Skewness	Kurtosis	Range
Total interaction episodes	5.41	1.48	5.17	5.0	.42	-.20	6.54
Caretaking	4.75	2.04	4.72	3.29	.35	-.41	9.43
Play	6.59	2.82	6.46	10.00	-.12	-1.35	8.5
Other social interaction	5.98	1.35	5.97	5.25	.18	.19	7.5

Sample size N=96
Note: These means represent the number of interaction episodes reported by fathers over a two week period.

Table L-14

Correlation of Marital Satisfaction, Equity (Quadratic Score) Father Involvement and Infant Temperament for Males & Females[a]

	Female 1	2	3	4	5	6	7
1. Premarital Satisfaction	-	-.11 (n=94)	-.29** (n=95)	-.29** (n=95)	.14 (n=95)	-.02 (n=95)	.68*** (n=96)
2. Traditionality	.03 (n=95)	-	.03 (n=94)	-.11 (n=93)	.07 (n=93)	.00 (n=93)	.11 (n=94)
3. PreEquity	-.08 (n=94)	-.07 (n=95)	-	.39*** (n=94)	-.09 (n=94)	-.05 (n=94)	-.34*** (n=95)
4. PostEquity	.12 (n=93)	-.20* (n=94)	.02 (n=93)	-	-.17 (n=94)	-.12 (n=94)	-.41*** (n=95)
5. Father Involvement	.15 (n=94)	.15 (n=95)	.01 (n=94)	.09 (n=94)	-	-.05 (n=94)	.14 (n=95)
6. Infant Temperament	-.11 (n=94)	.06 (n=95)	.09 (n=94)	-.12 (n=93)	-.06 (n=94)	-	-.10 (n=95)
7. PostMarital Satisfaction	.64*** (n=95)	-.01 (n=96)	-.07 (n=95)	-.15 (n=95)	.04 (n=95)	-.11 (n=95)	-

Male

[a] Correlation coefficients above the diagonal describe relationships within the male sample Below the diagonal represent co-relation coefficients for the female sample.

* p.<.05
** p.<.01
*** p.<.001

Table L-15

Relative Contributions of Pretest Marital Satisfaction
to Marital Satisfaction After the Birth of the First Infant

	Simple r		R^2		ΔR^2		Beta		F to remove or enter	
	f	m	f	m	f	m	f	m	f	m
Traditionality	.09	-.06	.01	.00	.01	.00	.15	-.07	.76 (p=.385)	.38 (p=.541)
Post Equity	-.28	-.01	.08	.03	.07	.00	-.14	-.04	7.11 (p=.009)	.02 (p=.896)
Father Involvement	.14	-.00	.09	.03	.01	.00	.02	-.06	1.10 (p=.296)	.48 (p=.489)
Infant Temperament	-.11	-.15	.11	.03	.01	.02	-.11	-.06	1.33 (p=.252)	1.88 (p=.174)
Pre-equity	.21	-.06	.14	.03	.02	.01	.09	.03	2.73 (p=.102)	.54 (p=.463)
Prebirth Marital Satisfaction	.69	.61	.55	.39	.41	.36	.66	.62	76.00 (p=.000)	50.00 (p=.000)

Table L-16

Relative Contribution of Traditionality
to Postbirth Marital Satisfaction

	Simple r		R^2		ΔR^2		Beta		F to remove or enter	
	f	m	f	m	f	m	f	m	f	m
Prebirth marital satisfaction	.69	.61	.48	.37	.48	.37	.62	.62	81.74**** (p=.000)	52.03**** (p=.000)
Postbirth equity	-.42	-.16	.53	.43	.05	.05	-.20	.11	9.58*** (p=.003)	8.13*** (p=.005)
Father participation	a	.00	a	.43	a	.00	a	-.06	a	.56 (p=.46)
Infant temperament	-.11	-.15	.55	.43	.02	.00	-.12	-.07	2.79 (p=.10*)	.17 (p=.69)
Prebirth equity	-.35	-.08	.57	.43	.01	.00	.08	-.04	1.55 (p=.22)	.01 (p=.91)
Traditionality	.09	-.07	.57	.44	.02	.01	.14	-.07	3.73* (p=.06)	1.55 (p=.22)

*p .10
**p .05
***p .01
****p .001

Note: All results in this regression analysis are based on n=91 couples

[a]No values listed for this predictor because the F value to enter the predictor is less than the default option of .05

TABLE L - 17

Relative Contribution of Father Participation[a] to Postbirth Marital Satisfaction

	Simple r		R^2		ΔR^2		Beta		F to remove or enter	
	f	m	f	m	f	m	f	m	f	m
Prebirth marital satisfaction		.61		.37		.37		.64		52.03**** (p=.000)
Prebirth equity		-.08		.37		.00		-.02		.06 (p= .82)
Traditionality		-.07		.38		.01		-.11		1.87 (p= .18)
Postbirth equity		-.16		.43		.05		-.25		8.13*** (p= .005)
Infant temperament		-.15		.43		.00		-.03		.08 (p= .78)
Father participation		-.00		.43		.00		-.05		.34 (p= .56)

* $p < .10$
** $p < .05$
*** $p < .01$
**** $p < .001$

Note: All results in this regression analysis are based on n=91 couples

[a]No values for females are listed for this predictor because the F value to enter the predictor is less than the default option of .05

TABLE L - 18

Relative Contribution of Infant Temperament to Postbirth Marital Satisfaction

	Simple r		R^2		ΔR^2		Beta		F to remove or enter	
	f	m	f	m	f	m	f	m	f	m
Prebirth marital satisfaction	.69	.61	.48	.37	.48	.37	.67	.64	81.74**** (p=.000)	52.03**** (p=.000)
Postbirth equity	-.42	-.16	.53	.42	.05	.05	-.20	-.25	9.58*** (= .003)	8.13*** (p=.005)
Traditionality	.09	-.07	.55	.43	.02	.01	.14	-.11	3.48* (p= .07)	1.87 (p= .18)
Prebirth equity	-.35	-.06	.56	.37	.01	.00	-.11	-.02	1.76 (p=.19)	.06 (p=.81)
Father participation	a	-.00	a	.43	a	.00	a	-.05	a	.33 (p= .57)
Infant temperament	-.11	-.15	.57	.43	.01	.00	-.12	-.03	2.85 (p= .10)	.09 (p= .76)

* $p < .10$
** $p < .05$
*** $p < .01$
**** $p < .001$

Note: All results in this regression analysis are based on n=91 couples

[a]No values listed for this predictor because the F value to enter this predictor is less than the default option of .05