

1-1-1998

Factors affecting paternal adjustment during the transition to parenthood

Linda D. Seltzer-Sucher

Follow this and additional works at: http://digitalcommons.wayne.edu/oa_dissertations

Recommended Citation

Seltzer-Sucher, Linda D., "Factors affecting paternal adjustment during the transition to parenthood" (1998). *Wayne State University Dissertations*. Paper 1261.

This Open Access Dissertation is brought to you for free and open access by DigitalCommons@WayneState. It has been accepted for inclusion in Wayne State University Dissertations by an authorized administrator of DigitalCommons@WayneState.

FACTORS AFFECTING PATERNAL ADJUSTMENT
DURING THE TRANSITION TO PARENTHOOD

by

LINDA D. SELTZER-SUCHER

DISSERTATION

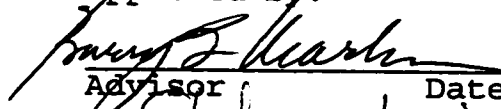
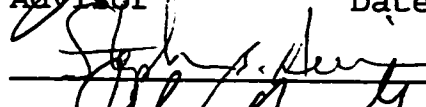


Submitted to the Graduate School
of Wayne State University,
Detroit, Michigan
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

1998

MAJOR: EDUCATIONAL PSYCHOLOGY

Approved by:

	10/14/98
Advisor	Date
	10/14/98
	
	10/14/98

©COPYRIGHT BY
LINDA D. SELTZER-SUCHER
1998
All Rights Reserved

DEDICATION

Personally, I dedicate this work to my husband, David, whose difficult adjustment during his transition to parenthood (yet very successful recovery), provided my inspiration for research in this area. I also dedicate this paper to my children Adam, Allie and Erik, who have sacrificed much "mommy-time" for the completion of this research. My third dedication is to my mother, Pearl, who always smiles and expresses pride and joy in any goal that I am currently striving to achieve. My fourth dedication is to my father-in-law, Sheldon, who always provides encouragement to continue and motivation to succeed. And my last dedication is to my father, Joe, who instilled in me the belief that although life may be short, it is the meaning within a relationship we have with others, as opposed to our accomplishments, which make us truly successful people.

ACKNOWLEDGEMENTS

A very special thank you to my advisor, Barry Markman, PhD., who provided me with endless wisdom, support and encouragement to accomplish my endeavors, especially while facing his own challenges. Many thanks to my other committee members - Stephen Hillman, PhD., John George, PhD., and Laurence Stettner, PhD. - for their expertise, direction and feedback. I give special thanks to Jim O'Neill, PhD my "informal" committee member, who was very educational throughout this experience. Additionally, I thank Andrew Markowitz, M.D., Steve Dean, M.D., Laura Gruskin, M.D., Lon Katz, M.D., Lester Voutsos, M.D. and Lawrence Prussack, M.D. for their permission and assistance in passing out my research questionnaires to their obstetric patients.

TABLE OF CONTENTS

Dedication	ii
Acknowledgements	iii
List of Tables	vi
Introduction	1
Literature Review	6
Hypotheses	32
Methodology	35
Sample	35
Procedure	37
Instrumentation	39
Data screening	44
Data analysis	45
Results	46
Preliminary analysis	46
Hypothesis testing	54
Discussion	61
Limitations of the Study	76
Implications for prevention	77
Conclusion	78
Appendices	79
Appendix A-Letter of Introduction	79
Appendix B-Summary of Instructions	81
Appendix C-Informed Consent	84
Appendix D-Name & Address Form	87
Appendix E-Birth Announcement Postcard	89

Appendix F-Expectant Father's Questionnaire	.	91
Appendix G-Expectant Mother's Questionnaire	.	99
Appendix H-Summary of Instructions-(Post)	.	103
Appendix I-Father's Questionnaire	.	105
Appendix J-Mother's Questionnaire	.	116
References	.	124
Abstract	.	135
Autobiographical Statement	.	137

LIST OF TABLES

1.	Characteristics of the Sample	36
2.	Demographic data related to predictors of paternal stress	46
3.	Spousal opinion regarding current pregnancy	47
4.	Infant gender preference between spouses	48
5.	(A) Intercorrelation among predictor variables in the paternal, maternal, and external domains	50
	(B) Intercorrelation among infant temperament and the predictor variables	52
6.	Hierarchical regression examining relation of predictor variables to paternal stress	56
7.	Hierarchical regression examine the influence of dyadic adjustment subscale scores on paternal stress	59

CHAPTER 1

INTRODUCTION

The adjustment which challenges new parents as they enter the transition to parenthood is often dramatic, and has an impact on the entire family system which is often unparalleled (Goldberg, 1988). As the dyad becomes a triad, changes in responsibilities, role performance, socializing, and emotional well-being are all involved. This experience involves accommodating, acclimating and settling into the new role as a parent. During this transitional adjustment period, the goal is to resolve and fulfill these personal challenges. Goldberg, Michaels and Lamb (1985), stated that adaptation to the new role as a parent occurs when the overall adjustment to this process has been united into the life of the couple. There is a vast amount of research which has studied mothers' and couples' expectations, perceptions and influential factors affecting adjustment to parenting, but very few research studies have been geared toward understanding this process involved in the transition to fatherhood.

It has been observed that early in their wives' pregnancy, men experience ambivalence regarding becoming a parent (May, 1982; Orbutz, 1976). At approximately the beginning of the third trimester of the pregnancy, this notion of ambivalence fades and the pregnancy becomes "real", thus the fathers begin to exhibit role transition and begin exhibiting paternal behaviors (May, 1982; Orbutz, 1976). Sherwen (1986), noted that fathers work through

their concerns of early pregnancy by daydreaming, but as the pregnancy becomes more real and the father's involvement increases, the amount of time daydreaming, decreases. It has been noted that emotional involvement with the pregnancy has been correlated with four "readiness" factors for becoming a father including: (1) a sense of closure with the childless part of the marriage, (2) a perceived stable marital relationship, (3) a desire to become a parent and (4) feelings of financial security (May, 1984). It has further been identified that the more involvement a father has during his wife's pregnancy and childbirth, the easier the adjustment to the transition to fatherhood (Nichols, 1992). Thus, the developmental process of becoming a father involves the reordering of roles and relationships.

The actual experience of parenting may be similar to, more positive or more negative than previously anticipated during the prenatal period. This divergence between the prenatal expectations of parenting and postpartum experiences, are considered to be the violated expectations. It is not the experience of parenting alone which influences our evaluation, but how our evaluations match our experiences (Kelley & Thibaut, 1978). Thus, an easier adjustment may be experienced if a more difficult transition is anticipated, or a more difficult adjustment may be the outcome, if our expectations were more pleasant than the actual occurrences. By providing anticipatory guidelines and therefore normative expectations during the pregnancy and early postpartum phases of this transitional period,

greater ease should be experienced in attaining a successful adjustment.

The adjustment to parenthood may be affected by and manifested in numerous experiences. It has been generally identified that there is a decline in marital satisfaction following birth among husbands and wives, although inconsistencies are present in regards to what accounts for this dissatisfaction. Kalmuss et al., (1992) stated that women's expectations regarding their competence as a mother and the effect that the newborn would have on their life was incongruent with the actual parenting experience. They indicated that at one year postpartum, women were actually more unhappy than they previously anticipated.

Parental competence may be defined in terms of feeling functional as a parent, or maintaining the perception that one has attained the skills necessary to consider oneself a "good" parent. Gibaud-Wallston & Wandersman (1977) believe that establishing this sense of paternal competence is strongly influential in successfully adjusting to new parenthood. The temperament characteristics of the infant is another factor which significantly influence a parent's appraisal of their parenting role and their adjustment to this transitional process (Sirignano and Lachman, 1985). It is important to recognize these intervening variables affecting the adjustment to fatherhood, both individually and in combination, so the appropriate preparatory steps can be taken when confronting this transitional stage.

Statement of the Problem

It has been identified that the transition to parenthood is often associated with the experience of stress and strain (Kach & McGhee, 1982) as well as entrance into a period of disequilibrium (Antonucci and Mikus, 1988). Successful attainment of the new role as a parent, and reentry into a state of equilibrium occurs as this new role becomes integrated and accepted into the individual's and couple's psychosocial framework (Nichols, 1992). Thus, not only does the transition affect the individual, but the dyad (couple) and triad (family) as well. The establishment of successful relationships with the infant has been identified to be crucial in the development of cognitive skills and socioemotional growth (Bowlby, 1969; Leiderman, Leifer, Seashore, Barnett & Grobstein, 1973). Further, successful negotiation in adjusting to the new role as a parent has been identified as influential in the creation of nurturing relationships within the family (Goldberg, et al., 1985). A more stressful adjustment to new parenthood has been associated with a difficult temperament baby (Sirignano and Lachman, 1985), poor quality in the marital relationship (Belsky, Ward and Rovine, 1986) and unpreparedness (violated expectations) for this event (Garrett, 1983; Kach and McGee, 1982).

Since adjustment strongly influences the parenting reaction and response toward the infant, this current study will attempt to individually and simultaneously consider the

effects of these theoretically related independent variables, including: 1) violated expectations, 2) the infant's temperament, 3) marital satisfaction, 4) a change in the maternal employment status from the prepartum to postpartum period, 5) maternal postpartum depression and 6) the presence of external support following the birth of the infant. In considering this multifaceted model, it will be important to note which variables are influential determinants of paternal stress which impinge on a father's adjustment during this transition to parenthood (the dependent variable). If the variables of concern affecting adjustment demonstrate significance either alone or in combination, it will be important to educate expectant fathers of the real vs. idealized visions of new parenthood, and assist them in preparing for the strain they are likely to encounter. This study unlike other studies, will focus primarily on the father's adjustment (as measured by stress) during the transition to parenthood. Further, these variables will be assessed for significance both alone and as a multiple effect. The predictor variables will be categorized according to four domains: (1) paternal, (2) maternal, (3) infant and (4) external.

CHAPTER 2

REVIEW OF THE LITERATURE

Introduction

Entering into parenthood, throughout both the pregnancy and with the arrival of the newborn, can be considered to be classified as a major life event. Not only may this period be characterized as stressful, but alterations in ones activities, status, role and life styles are required (Holmes & Rahe, 1967; Hultsch & Plemons, 1979). Belsky, Ward, and Rovine (1986), suggest that the transition into parenthood incorporates three important processes. First, a commitment to bear and nurture a child must be made. Second, an investment of one's psychological and physical self must be rendered throughout and following pregnancy and delivery. Third, responsibility must be accepted for caring for an almost entirely helpless and demanding new entity which imposes addition to the family unit. Russell (1974) stated that "the family is an integrated social system of roles and structures and that adding or removing members will force a major reorganization of the system."

Experiences of the Transition

Research has suggested that a crisis occurs as a couple enters into parenthood (Dyer, 1963; Hill, 1949 and LeMasters, 1957). Different variables may account for the degree of crisis parents experience in this transition of roles. Hobbs & Wimbish (1977), Russell (1974) and Touke (1974), suggest that the experience tends to be less intense among parents who are older, conceive after they have been married for longer periods of time (Dyer, 1963; Russell, 1974), and are married

before conception occurs (Russell, 1974). Thus, parents who follow societal norms as to placement of the parenting event within the sequence of lifespan activities, experience an easier period of adjustment.

There appears to be inconsistencies in reports regarding planned versus unplanned pregnancies (Dyer, 1963; Hobbs & Wimbish, 1977; Russell, 1994), prior preparedness for the birthing and rearing experience, including childbirth education classes (Dyer, 1963; Russell, 1974; Touke, 1974; Uhlenberg, 1970), and the pre-employment status of the mother prior to giving birth (Dyer, 1963; LeMasters, 1957; Russell, 1974). Heider (1958) proposed that exaggerating the benefits and underestimating how difficult and stressful an experience associated with a role transition may be, will intensify the degree of difficulty in adjusting to the new role and hinder experiencing the gratification and personal sense of pleasure that would be ordinarily affiliated with the role. Thus, a stressful situation which was not fully anticipated and adequately prepared for may yield a more difficult time with the adjustment process. Becoming overexcited about an event may prove to be disappointing if the event does not meet the criteria one was looking forward to experiencing. If the event turns out either less negative or more positive than perceived, then these violated expectations may encourage an easier and more pleasant adjustment than expectations that are truly reflective of the situation. It is the degree of divergence between the anticipation and actual situation which influence the coping and adjustment process.

Strain, defined as the discomfort that individuals experience, was reviewed by Grossman (1988), in relation to the transition to parenthood. She identified that strain may be described as feeling overwhelmed and inadequate, often demonstrating a negative mood. Strain occurs as a short term phenomenon and thus is differentiated from more serious psychopathology. The strain of the transition into parenthood may be considered a crisis period. Hobbs (1963) identified that husbands reported different concerns than their wives following childbirth. Husbands expressed being "very much" or "somewhat" bothered by money problems and interruption of their routine habits. Wives expressed dissatisfaction with the change in routine, feeling tired and fatigued, feeling upset emotionally and experiencing more stress due to finances. He also identified that when outside help was present to help care for the infant, more difficulty with the transition was experienced.

The ability to predict postpartum strain was the focus of a study conducted by Feldman (1984). Among wives, third trimester expectancy predictors of strain experienced at 6 months postpartum included, being responsible for household chores which were stereotypically masculine in nature and feeling less satisfied with their marriages. Marital tension expressed by husbands appeared to be the strongest predictor among men of postpartum strain in their wives. Thus, among husband and wives, tension within the marital relationship during pregnancy was the greatest predictor of postpartum

strain among wives. Among men predicting postpartum strain for themselves, influential factors included unplanned pregnancies, having a negative experience with the pregnancy, being younger in age, and their wives reporting less participation in stereotypical feminine roles while congruently identifying that their self perceptions were becoming more maternal. Feldman (1984) further identified that marital satisfaction factors were not statistically significant determinants of strain for men. Conversely though, Cowan & Cowan (1983), identified that for both husbands and wives, marital dissatisfaction and low self-esteem were significant predictors of stress 6 months following the delivery of the infant. Thus, the literature is mixed regarding the predictor variables of stress during the transition to parenthood.

Nichols (1992) examined the relationship between prenatal components (marital satisfaction, demographics, planned vs. unplanned pregnancy), paternal involvement and satisfaction with the childbirth experience, and the experiences of new parents as they related to feelings of parental competence and their ease in adjusting during this transition to parenthood. Her sample consisted of 106 couples in the military, who were pregnant with their first child, married, and living together. The subjects were administered the Maternal-Fetal Attachment Scale or the Paternal-Fetal Attachment Scale, the Paternal Childbirth Involvement Checklist, the Labor Agency Scale, the Parenting Sense of Competence Scale and the Role Transition

Checklist. She identified that both mothers and fathers experience the adjustment process in a unique fashion. For mothers, an easier adjustment to parenthood was predicted the combination of marital satisfaction and maternal-fetal attachment. For fathers' marital satisfaction alone was the greatest indicator of postnatal adjustment.

Goldberg (1988) differentiated between the transition, adapting and adjusting to parenthood. The transition is a process whereby the dyadic couple becomes a triad. Adjustment includes conforming, adapting and becoming settled into the role as a new parent. Adaptation to this event has been perceived to occur when the adjustment becomes incorporated into the life of the couple (Goldberg, Michaels, & Lamb, 1985). Attaining a successful adjustment during this process is paramount to healthy functioning with the family and successful parenting (Goldberg, 1988). This transitional period begins following conception and continues through the early postpartum months. Holt (1988) suggests that strong relationships within the family are based on experiencing this role transition as positive. Antonucci and Mikus (1988) argue that entering into and adjusting to new parenthood creates disequilibrium and when the new parental role is "defined and integrated", equilibrium will again be achieved.

Associated with this experience of stress are also the rewards and feelings of satisfaction. Upon undertaking the obligations and responsibilities of parenting, a sense of enhanced personal growth and self enrichment is experienced.

Further, there is an increased sense of emotional value gained through the excitement and happiness that conventionally accompany raising a child. Children also may be observed as the links between parents, inspiring a sense of family cohesion between husbands and wives. Gutmann (1975) noted that parenting enhances an individual by encouraging maturation in one's personal development.

Expectations Affecting Adjustment

The subjective encounters associated with parenthood are influenced by expectations and beliefs (Palkovitz, 1985, 1987a, 1987b) and reciprocally the experiences endured shape the expectations and beliefs one maintains regarding parenthood (McGillicuddy-Delisi, 1980; Palkovitz, 1987a, 1987b.). Differences among individuals in the ability to cope, accept social support if available and deal with stressors external to parenting, intercede with the individual's experience and the subjective report associated with adjusting to this new role. Palkovitz and Cope (1988) stated that Erikson's (1959) epigenetic principal relates to the transition to parenthood. This principal states that it is the constructs of society as well as how maturationally ready one is, which interact to guide one through resolving crises within the lifespan. Physical maturation of pregnancy may be defined by the hormonal and physical changes experienced by pregnant women and the possible "couvade" syndrome experienced among men. This syndrome, in which men experience similar physical and physiological symptoms of

their wife's pregnancy, is noted to occur in approximately 20% of all fathers (Bogren, 1986).

Society influences the pregnant couple by confronting parental issues and encouraging the formation of child-centered beliefs and expectations prior to the actual birth. The expectations of parenting ability and the infants behaviors and activities may be influenced by observational input from other parents interactions, actual experience with other people's infants, media, and attendance in childbirth education classes (Palkovitz & Copes, 1988). Prior learning is another form of learning in which individuals acquire a greater understanding of maternal and paternal behavior (Merton, 1957). Prior learning is associated with understanding patterns of behavior and the complimentary roles one should engage in. This may occur through formal education in the form of parenting books or childbirth/parenting classes (Albrecht, Thomas and Chadwick, 1980), or through informal learning, in the form of observational or imitative learning of other parents responses (Bandura and Walters, 1963).

Upon entrance into the transition to parenthood, persons bring expectations and such views may be altered, abandoned or maintained based on the perceptions of the reality experienced. Kalmus et al., (1992), conducted a study on 473 married, caucasian, middle class women, pregnant with their first baby. The women's perceived adjustment to parenthood was measured at one-year following delivery. The researchers identified violations in beliefs that women possessed

regarding their theorized performance in maternal roles and the effect that parenting would have on their lives. Such a violation between beliefs or expectations, and the actual event experienced is defined as a violated expectation. The ease in the transition to motherhood was significantly affected by such discrepancies. Kalmus et al., (1992) focused on 6 variables which impacted adjustment in a negative manner when a discrepancy occurred between the expectations and actual parenting experience. Such variables included (1) spousal relationship, (2) maternal competence, (3) maternal satisfaction, (4) physical well-being, (5) amount of assistance in child-care provided by the spouse and (6) amount of support provided by extended family members. When anticipation was high in regards to expecting child care assistance from the spouse and expecting support from extended family members, a negative impact was observed. Thus, a more difficult adjustment was experienced when the actual amount of assistance and support received was less than the amount expected. Maternal competence, maternal satisfaction, physical well-being and spousal relationship yielded an easier adjustment when these experiences were more positive than expected.

Heider (1958) and Kelley & Thibaut (1978), also identified that our actual experiences as well as our expectations interact to shape our evaluations. As the discrepancy between perceived expectations and the actual parenting experience become more violated, in a negative

direction, Kach and McGhee (1982) found this transition to parenthood significantly more difficult. Further, when the experience of parenting was more difficult than perceived, Belsky, Ward, and Rovine (1986) found this to have a negative influence on a wives appraisal of their marital relationship. At one year post-birth, Kalmus (1992) identified that women perceived that their childrearing experiences would be more positive than in actual practice. This direction in the discrepancy between expectation versus experience has been suggested to delineate "inflated expectations" (Kalmuss, et al., 1992).

Kalmuss' et al., (1992), identified four control variables which presented a significant effect on the predictability of the ease of adjusting to parenthood. Such variables included (1) maternal age, specifically younger women, (2) infants with an easier temperament, (3) the woman at one year post-birth who continued to not be employed, and (4) a perceived high quality in the marital relationship before birth. Education level, length of marriage, seriousness of infant's illness, income level, and planned vs. unplanned pregnancy, had no statistically significant effect on a woman's appraisal. A moderate impact was evidenced when a woman had previous experience with a stressful life event.

Orbutz, (1976) identified that expectant men perceived that their major responsibilities as fathers included teaching, nurturing and providing for their children. In reviewing fathers postnatal experience and prepartum

expectations, Hangesleben (1983) found that fathers actually engage in less child-caretaking activities than previously anticipated. Loss of sleep was identified as the greatest change in life style among these fathers. Fishbein (1984) identified that in regards to paternal anxiety, when husbands and wives shared similar expectations of the paternal role, paternal anxiety was reported to decrease.

Two studies, Garrett (1983) and Kach and McGhee (1982), respectively, identified that when a discrepancy occurs between expectations and a more negative actual experience, greater stress in adjusting may be endured. Garrett (1983) found that women's marital satisfaction and self-esteem decreased overtime when postnatally they experienced unexpected reactions to their new role as a parent, than were originally anticipated. Belsky, Ward, and Rovine (1986), identified that numerous factors effect marital adjustment in the transition to parenthood including: when the first birth occurs during the relationship, the division of responsibilities between the couple, the amount of emotional and social support provided by relatives and friends, individual personality characteristics of each mate, the newborn's temperament, and the demands of employment. Therefore, when an adjustment problem occurs during the marital relationship, the cause is most likely to be effected by multiple criteria.

Belsky, Ward and Rovine (1986) further identified that the degree of the stressful impact would deviate as a function

of such a discrepancy. As the discrepancy between the expectations and experience was more negative than previously anticipated, a greater amount of stress would be endured. Conversely, a more positive postnatal experience than prenatally expected, would yield less stress endured postnatally. Kach and McGhee (1982), designed a study to determine the relationship between expectations of parenthood prior to delivery and the occurrence of problems experienced during this transition. Couples were administered the Parent Expectations and Perceptions Inventory, 6 weeks prior to the expected date of delivery and two months postpartum. The researchers stated that among women, a greater and more negative discrepancy between postpartum expectations predicted late in the third trimester of pregnancy and the actual postpartum experience (measured 2 months postpartum) was correlated with more difficulty in feeling confident as a parent, an expressed lack of energy, decreased sexual responsiveness and problems with the change in routine among women. Further, more divergence between expectations and experience were evidenced among mothers who were older, felt they were not adequately prepared for parenting, and had longer marriages. It was more difficult to change previously established, long-term routines. Specific perceptions which were violated included mothers changing diapers and washing clothes more frequently than expected and both husbands and wives participating in less social activities than anticipated. Deprivation of sleep, the depth of responsibility and infant

care required, the degree of love and attachment toward the infant, and an unawareness of the skills necessary for dealing with an ill or distressed infant were also reported (although not necessarily statistically significant) as either negative or positive areas of discrepancy in relation to the transition of parenthood.

Glass (1983) studied how attitudes prior to giving birth, effected postnatal adjustment. Her sample consisted of 27 women, pregnant with their first child. The Neonatal Perception Inventory was administered in order to assess mothers' expectations and attitudes prebirth and following delivery. This inventory was conducted during the third trimester of pregnancy and 1 month postpartum. Glass hypothesized a connection between postnatal and prenatal factors influencing parental adaptation. Glass (1983) attempted to identify what attitudes prenatally promoted an easier adjustment to becoming a caretaker and being attracted to the newborn. She identified that prenatal attitudes create perceived standards regarding the behavior of the infant, the parent and childrearing, and appropriate responses toward such behaviors. Following birth, the actual interaction and experience versus the prenatal expectations, interact to yield an initial assessment of the newborn. Glass reported that a change of attitude in a negative manner existed, from the prenatal to postnatal period, among mothers who rated their babies as (1) burdensome, (2) viewed their infants' fussing and crying as "nerve wracking", and (3) had a difficult time

attempting to fulfill their own needs due to their infants' demanding schedule. Glass recognized two factors which contribute to the development of self-perceptions, including (1) cognitive and (2) affective. She described the cognitive component as having an awareness of the infants' state and behavioral cues. Glass identified that those mothers with little recognition of the infant's cues as well as the desire to assert control over the infant's need schedule, would be met with repeated failure in their interactions with the infant. Thus, the mother would demonstrate a more negative attitude toward the infant's activities. Mothers who were more sensitive to the cues exhibited by the infant, did not envision having to exert parental control over the infant's need schedule. These mothers viewed their infants as separate entities, which contributed to the positive attributions they felt toward their infants. Glass defined the affective component as the "parental orientation toward the infant" or the amount of emotional investment the parent has toward the newborn. She identified that (1) parent-caretakers who have a stronger emotional investment with the infant, are better equipped to deal with the more difficult incidents of raising a child, and (2) are more apt to acknowledge the positive aspects of infant caretaking. In 1973, Shereshfsky, Liebenberg and Lockman identified that a mother's emotional investment toward childbearing and childrearing prenatally, significantly contribute to and affect maternal adjustment following birth.

Researchers have identified spousal differences in their assessment of parenthood. Cole (1976) identified that adapting to parenthood was perceived as more stressful by females as opposed to males. Women have also been identified to have decreased satisfaction within their marital relationship following entry into parenthood, while a husband's assessment of the marriage remained unchanged (Waldron and Routh, 1981) or changed very little (Belsky, Spanier, and Rovine, 1983; Glenn and McLanahan, 1982; Ryder, 1973). Thus, as husbands and wives are affected emotionally by the addition in a different ways, this may reflect different emotional and familial needs and roles.

Infant Characteristics Affecting Adjustment to Parenthood

Thomas, Chess, and Birch (1968) evidenced that mothers who were more sensitive to and aware of their infants needs and desires communicated by behavioral cues, were more likely to have successful interventions and an easier adjustment, as opposed to mothers who were unaware and inattentive to fulfilling the needs of their infant. Sirignano and Lachman (1985), did a comparison study of adult adaptation assessing the role that infant temperament executes on parental reactions. Four features of adaptation which are affected by strain were observed, including; (1) maintaining a sense of personal control, (2) self-efficacy expectations, (3) depression, and (4) anxiety. The results identified that change in personality occurred either as a function of the infants temperament or as a function of the transition to

parenthood. During the postpartum period, new parents reported feeling more efficacious than during the later pregnancy, and husbands demonstrated more personality change than wives. Positive changes were experienced by those parents, particularly husbands, who perceived their infants as having an easy temperament. Fathers who reported their infants as adaptable and positive, characterized less anxiety postpartum. Maternal and paternal depression was reported as unchanged in relation to infant temperament from the pregnancy to postpartum period. Davis & De Luccie (1989) identified that paternal parenting involvement increases as a function of younger children who have been temperamentally characterized as "more difficult" and less competent. Wolkind and Desales (1982) stated that infants who were characterized as more difficult, had mothers' who were more likely to report physical fatigue, 4 months following her delivery.

A study conducted by Russell (1974) identified factors affecting the adjustment to new parenthood. Russell noted that for both husbands and wives, planned pregnancy as well as marital satisfaction were predictive of less of a reported crisis during the transition to parenthood. Equally influential was each parents view of their infant's temperament. Infants perceived as "quiet" (displaying an easy adaptation to routines, feeding well, sleeping well), were reported as requiring less effort, while infants viewed as "active" (moving more often, more problems sleeping and eating, crying and noisy) encouraged more strain or distress.

Variables Affecting The Marital Relationship

Golberg and Easterbrooks (1984) reported that the strong emotional support which is provided in a positive marital relationship encourages sensitive parenting. This strong emotional support has been a factor, significant, in the maintenance of paternal involvement (Hoffman & Nye, 1975). Belsky, Ward and Rovine (1986) conducted research with 67 white, middle class couples, pregnant with their first child. Questionnaires, interviews and observations were conducted during the third trimester of the pregnancy through the ninth month postpartum. Results of this research demonstrated the effects that violated expectations would have on inducing marital change. Characteristics of violated expectations resulting in a negative change in marital assessment included: (1) the expectation that becoming a parent would have a more positive effect on the marital relationship than ultimately experienced, and (2) husbands participating in less caregiving activities than prenataally anticipated. A violated expectation which identified a more positive assessment of marital satisfaction was reported when the external support provided by family, friends and neighbors was actually experienced and evaluated as more positive than the amount perceived. Women were evidenced to achieve statistically significant discrepancies more often than their husbands, and these violated expectations had a greater impact on their assessment of the marital relationship. Further, the most damaging effect on the marriage seemed to occur when the

experience of the transition to parenthood was more negative or less positive than previously anticipated, and conversely, the marriage benefitted when the transition resulted in more positive or less negative events than ultimately expected.

Kach and McGhee (1982) identified that whenever a discrepancy occurs between expectations and experiences, either positive or negative, stress will be the result. With the addition of the first offspring, Belsky, Ward and Rovine (1986), suggest that marital relationships are affected in numerous ways. First, there are excess physical demands which include losing sleep, change in sleep/wake cycles and feelings of constant fatigue. Second there are reported emotional concerns associated with the realization that parenting responsibilities persist throughout the life span, including insecurities in regards to one's abilities to parent competently, and having total responsibility for the well-being and care of this newborn. Thirdly, there are restrictions placed on one's social life, career opportunities and increased and never ending financial burdens. Fourthly, increased strain on the marital relationship may be noted since time alone together as a couple has decreased, less attention to the spouse is provided since the child has priority for having demands and needs fulfilled, and inevitable changes in the sexual relationship occurs. During the first ten months of the postpartum period, fathers attributed their adjustment to parenting based on the quality of their marital relationship (Hangsleben, 1983).

Changes in Division of Labor

Accompanying the conversion to parenthood, are both functional (division of tasks) and emotional (satisfaction within the marriage) changes for each spouse. The division of role responsibilities becomes more traditional with the birth of the infant, regardless of maternal employment status, preexisting division of tasks, maternal educational level and ideology regarding sex roles (Levy-Shiff, 1994). Berk and Berk (1979) and Schooler, Miller, Miller and Richtand (1984) also determined that the division of labor becomes differentiated between the spouses following the birth of the infant. Among differences in the division of labor, wives engage in and are responsible for more tasks than husbands. During the transition to parenthood chores and tasks enter disequilibrium and performing the tasks required to care for the newborn become a major source of conflict. Fathers who typically engage in more playmate as opposed to caregiver roles, report less problems with parenting than do mothers (Clarke-Stewart, 1980; Easterbrooks and Goldberg, 1984; Lamb, 1980; Parke, 1979). Women, conversely experience more responsibilities and changes as the principal caretaker and this may account for the more common reports of difficulty adjusting and marital dissatisfaction. Further, as noted from the Belsky, Ward and Rovine (1986) study previously reviewed, failure to reliably perceive the significant variation in role and task orientation postnatally among women, and to overestimate how positive this addition is likely to be, is

significantly associated with a more negative appraisal of one's marriage.

Goldberg, Michaels and Lamb (1985) conducted a longitudinal study to determine the effects of changes in the division of labor, on the transition to parenthood, specifically focusing on marital and parental adjustment during the early months postpartum. Thirty nine, primarily caucasian and middle class couples, pregnant with their first child, volunteered to be participants in this study. Interviews and questionnaires, including: a Household Division of Labor examination, the Changes in Routine Measure (Wente and Crockenberg, 1976) and Spanier's Dyadic Adjustment Scale (1976) were administered to these couples at three times during the course of this study: early pregnancy, late pregnancy and 3-4 months postpartum. The results of their study indicated that: (1) during the early pregnancy and postnatal period, the division of labor is more traditional sex-typed, whereas during late pregnancy there were more shared tasks and responsibilities, (2) a more negative adjustment for fathers was associated with their participation in stereotypically deemed feminine household tasks, whereas more involvement with the infant was correlated with a more positive adjustment to parenthood and marital satisfaction, (3) mothers reported more marital dissatisfaction with greater sole responsibility in infant caretaking and (4) marriages appeared to be well adjusted at 3-4 months following the birth of the infant. Consistent with previous research conducted by

Russell (1974), and Wente and Crockenberg (1976), this study also identified positive correlations between adjusting to parenthood and marital satisfaction, for fathers.

Other Variables Affecting Adjustment To New Parenthood

Women reported that being married longer diminished the experience of crisis, while men stated that wanting more children and being younger lessened their strain (Russell, 1974). Cowan & Cowan (1983) identified that for both husbands and wives, satisfaction within the marriage and self-esteem were correlated significantly with experiencing strain in parenting. For husbands, during the later months of their wives pregnancy, both high stress and low self-esteem were predictive of higher amounts of tension 6 months following delivery. Such postpartum strain was measured by the Parenting Stress Index, designed by Abiden & Burke (Abiden, 1981; Abiden & Burke, 1980). Low self-esteem and marital dissatisfaction were significant predictors of distress for women, 6 months postpartum. Cowan & Cowan (1983) interpreted such findings for men as reflective of the focus of their individual outlooks, whereas women are more likely to express emotional views of the support systems they are involved with. In a follow-up study by Cowan et al., (1985) it was identified that among men, higher reports of stress during the transition to parenthood was predicted when (1) men viewed their own families of origin as less cohesive, and (2) when, during late in expectancy, they expected to have little involvement in caring for the baby during the postpartum months. It should

be further noted that adjustment for each member of the dyad during the transitional period, is based on individual differences as well as the interconnectedness between the couple, each having a reciprocal effect on the adaptation and experiences of the other (Cowan et al., 1985; Grossman, 1988). Influential on positive attitudes towards becoming a parent and having an easier adjustment, include such factors as the disposition of the pregnancy and delivery, spouses sharing the childbirth experience, and a parent feeling gratified with the experience of childbirth (Antonucci and Mikus, 1988).

A more difficult adjustment to becoming a parent may be the result of couples who do not participate in the childbirth experience together, feel less competent as parents (Wandersman, Wandersman & Kahn, 1980) and thus risk the development of an ineffectual and unhealthy relationship between the parent and the child (Marut & Mercer, 1979). As parents become attached to the fetus during pregnancy, family relationships begin to develop. Feeling attached to the fetus has been identified as influential in both easing the adjustment process (Wayland, 1987) and creating parent-child relationships which are positive (Cranley & Weaver, 1983). Nicholson (1983) suggested that an association exists between a father's involvement in the pregnancy and childbirth experience, the evaluation of the marital relationship and the consequent patterns of fathering. Reports of feeling more competent as a father was correlated with the husbands providing support to their wives during labor, and wives

reporting a greater satisfaction with the experience of childbirth due to this support (Nicholson et. al., 1983). Nichols (1992) identified that fathers who were involved with childbirth and felt satisfied with the childbirth experience, positively influenced the adjustment to new parenthood for both themselves and their spouses.

Further, the role that a parent plays in response to its newborn may be a function of their partner's expectations in regards to the way they should behave in this role. Palkovitz (1980 and 1984) identified that a strong relationship exists between both the spouse's view of the role the father should engage in with the infant and his actual affective and behavioral responses. Although the father is apt to respond to the infant according to his own beliefs and expectations in the mother's absence, in her presence his parenting skills are more likely to be reflective of her view of the way he should react. Strassberg (1978) found that fathers who had wives who were supportive of the paternal-infant interactions, were more likely to be more involved with their infants. McHale and Huston (1984) reported that a father's attitude toward his wife, influence his involvement with the infant. It has been suggested by Pleck (1983) that wives typically discourage their husband from engaging in nontraditional masculine parenting roles, due to the wife's feeling that her husband is unaccustomed and unskilled in domestic childcare activities. When she does encourage participation, it is under her direction.

Palkovitz and Cope (1988) engaged in a research study to focus on maternal and paternal changes in attitudes and beliefs regarding expectations prior to the birth of the infant and following delivery as they relate to paternal childcare, orientation of sex role and paternal self-esteem. Results of this study identified a positive influence on attitudes and beliefs in both mothers and fathers from the expectancy period to actual postnatal experience. Fathers experienced an increase in their feelings of self-esteem and both masculinity and femininity traits, following the birth of their infant. Further, their feelings regarding the importance of their role as fathers increased from the prenatal to postpartum period. Father-infant bonding was observed to significantly drop as an issue of importance during this same period. Mothers experienced improvements in their self-esteem and femininity during this transitional period. Attitudes regarding her own masculinity appeared not to change. Further, mothers also demonstrated a decline in their beliefs regarding the importance of the fathers' role and the bonding between the father and the infant during the postpartum period.

It has been observed that first-time parents often enter into the transition to parenthood with apprehension (Dubow & Silverman, 1991). For example, the fear that the parents will find the role of first-time parenting as overwhelming, and that they will be unable to fulfill the childcare demands and meet their child's needs, has been observed (Deutsch, 1949;

Solnit & Stark, 1961). During the prenatal period, expectations regarding the behavior of unborn children was assessed using an infant temperament scale created by Thomas, Chess & Birch, 1968 and Bates, Freeland & Lounsbury, 1979. Significant findings from this as well as other studies identified that among primiparous couples, prenatal expectations of their infant's temperament were more negative than actual reports of the temperament assessed postnatally (Kalinowski, 1986; Mebert, 1989; Zeanah et al., 1986; Zeanah et al., 1985).

Expectations regarding one's own parental competence and future children's behavior may be influenced by ones own experience as a family member (son, daughter, sibling) or with actual childcare practice (counselor, babysitter). Olson, Portner and Lavee (1985) identified that individuals who experienced their own childhood as lacking in cohesiveness and adaptability, expected the same to occur within the next generation of their family, with themselves as the parent. Rustia and Abbott (1993) conducted research to identify how different child-caretaking experiences influenced the roles that fathers engage in. Four influences were recognized to account for differences in the degree of childcare participation. Characteristics of the infant, the mother, the father, and external mediating variables (extended family and societal norms), all rendered influence to the role executed. The expectations an expectant father maintains as to the paternal behaviors he should practice or exhibit are based on

his beliefs, motivation to become a father, and values he possesses. It has been suggested that previous experience with ones' own father may be the strongest influential factor (Radin, 1981). Both effective and ineffective forms of previous parenting from ones's own father, has been observed to affect behaviors and attitudes one displays to his own children (Burlingham, 1973). Radin (1981) suggests that in regards to such previous experiences, the paternal performance may be modeled, or an attempt to improve upon past inadequate parenting may be sought.

Attitudes and expectations held by the wife is another intervening variable which dictates paternal role performance. Zelkowitz and Milet (1996) conducted a study to identify the influence that maternal postpartum depression has on marital satisfaction between both spouses. These researchers reported that women who suffer postpartum depression were more likely to complain that this adjustment to parenthood had placed increased, negative stress on their marital relationship. Further, these women were more likely to characterize their husbands as unsupportive.

Cummings (1976) identified that the newborn's characteristics may impede or encourage paternal behavior. Numerous research studies have evidenced that fathers are more likely to become attached to and engage in caretaking and play behaviors with male infants (Pederson and Robson, 1969; Spelke et al., 1973; Bon and Lewis, 1974; Weinraub and Frankel, 1977). Temperament qualities and the health status of the infant, may

also influence paternal involvement (Jones and Lenz, 1986; Rustia and Malcolm, 1989; Brown et. al., 1991). Cox, Owen, Henderson and Margand (1992) identified the importance of appropriate father-infant interactions which promote secure father-infant attachment. They reported that infants who displayed more secure father-infant attachment at 12 months old, had more positive interactions with their fathers during the first three months postpartum. Such interactions included more playtime, more sensitivity, greater warmth, high activity and encouragement in the father-infant time spent together. Infants who developed more secure attachments to both their mothers and fathers, functioned more competently when older, than infants who developed secure attachments to only one parent or no parent at all. (Belsky, Garalique & Hrncir, 1984; Main & Westin, 1981). Thus, it is not only the relationship and attachment with the mother which is significant, but the relationship and attachment with the father which is significant as well. Finally, society also delineates established values and roles fathers are expected to engage in. This additional mediating variable, as well as the opinions held by friends and family, all add to the predictability of paternal behavior and the degree of paternal involvement in infant care.

Review of Statement of the Problem

Throughout the research studies conducted in the area assessing the effects of the transition to parenthood, the

focus has been primarily geared toward wives and couples. Little empirical research has looked exclusively at the effect that becoming a parent has on husbands. This current research study will attempt to identify factors which impede a husband's adjustment in his transition to parenthood. Previous factors which have been significantly correlated with impinging upon adjustment will be explored including paternal violated expectations, the infant's temperament, and marital satisfaction. This study will also include such variables as postpartum maternal depression, a change in maternal employment status from the prepartum to postpartum period, and the presence of external support provided during the postpartum period. This study will be further individualized by assessing each of these variables impact upon adjustment independently, and as a collaborative unit, as they affect paternal adjustment during the transition to parenthood. Such a study renders importance since a father's relationship with his infant has been identified as crucial in the development of cognitive skills and socioemotional growth. It will be important to educate pending and new fathers of the significant stressors they are likely to encounter and the effect and importance that their reactions have on the formation of the father-infant relationship.

Hypotheses

(written in terms of the null hypothesis)

Based on the above mentioned information, the following research will be investigated and reported according to 4

domains:

Paternal Domain

1. Paternal marital satisfaction, both prepartum and postpartum, will have no significant effect on the paternal experience of stress, following the birth of the infant.
2. The presence of a divergence between paternal expectations prepartum and actual paternal experience postpartum (violated expectations), will have no significant effect on the experience of postpartum paternal stress, following the birth of the infant.

Maternal Domain

3. A change in the wife's employment status from the prepartum to postpartum period will have no effect on the husband's experience of postpartum stress, following the birth of the infant.
4. The presence of maternal postpartum depression will have no effect on the husband's experience of stress, following the birth of the infant.
5. A wife's postpartum marital satisfaction will have no significant impact on her husband's experience of stress, following the birth of the infant.

External Domain

6. The presence of external support following the birth of the infant, will have no significant effect on the father's experience of postpartum stress.

Infant Domain

7. Infant temperament will have no significant impact on the father's adjustment to parenthood.

Collective Domains

8. There will be no significant effect on the father's experience of postpartum stress when paternal prenatal and postnatal marital satisfaction, paternal violated expectations, maternal postnatal marital satisfaction, the presence of maternal postpartum depression, a change in maternal employment status from the prepartum to postpartum period, the presence of external support, and infant temperament are collectively combined to impinge upon the paternal adjustment during the transition to parenthood.

Chapter 3

METHODOLOGY

Sample

Respondents in this study consisted of forty seven couples who were recruited from six Obstetric and Gynecological offices in the suburban Detroit area. Inclusion criteria for participation included pregnant, married women who were 28 or more weeks gestational age and had no previous children. Male counterparts also had to have no previous children. All participants had to be able to read and understand English. Informed consent was received from each participant. Following completion and return of the prenatal phase research questionnaires, criteria for postnatal phase inclusion consisted of the delivery of a healthy newborn, full-term (37+ weeks gestation), with no severe perinatal complications or serious illnesses.

Data was collected in two phases. First, the physicians requested participation for this study from their patients who were in the third trimester of pregnancy, and if the patient was willing, a questionnaire packet was given to them. All information was then forwarded to this researcher and no further contact between the physician and researcher was made. Second, following return of the prenatal phase research packets, and after a birth announcement postcard was received by the examiner, a postnatal phase research packet was sent to the participants when the infant was at least two months old.

Sample characteristics of the subjects are presented in Table 1. Four hundred prenatal phase questionnaires were distributed and 72 (18%) were completed and returned. Sixty-

TABLE 1
 Characteristics of the Sample (N=47)

Variable	%	Mean (S.D.)
Age (yrs)		
Maternal	---	29.6 (4.45)
Paternal	---	29.9 (4.52)
Ethnicity	Husbands	Wives
African-American	0	0
White	96%	96%
Hispanic	2%	0
Asian	0	0
Biracial	2%	4%
Hollingshead Social Status		25.19 (12)

two (86%) contacted the researcher by means of the birth announcement postcard and 10 (14%) neither sent back the postcard or acknowledged any contact attempted by this researcher. All 62 subjects were mailed the postnatal phase research packets and 47 (76%) completed and returned the postnatal packets. Of the remaining 15 subjects (24%), 13 (21%) did not return the research packets and 2 (3%) requested to withdraw from this research study. The mean maternal age of the sample was 29.60 years (S.D. 4.45, range 20 to 45 years). The mean paternal age was 29.99 years (S.D. 4.52, range 19 to 40 years). The mean score for the Hollingshead Index of Social Status was 25.19 (S.D. 12, range 6 to 45). This score was derived by combining occupation, educational level, age and marital status information (Hollingshead, 1975). The ethnicity of the sample was predominantly white, (96%) for both husbands and wives. The husbands sample further included two percent hispanic and two percent biracial

ethnicities. The remaining four percent of the wives sample comprised biracial ethnicity.

Procedure

Prenatal Phase Data Collection

Prenatal phase data packets included: (1) a Letter of Introduction (Appendix A); (2) a Summary of Instructions (Appendix B); (3) an Informed Consent document (Appendix C); (4) a Name and Address form (Appendix D); (5) a stamped, addressed Birth Announcement postcard (Appendix E); (6) the expectant father's questionnaire (Appendix F); (7) the expectant mother's questionnaire (Appendix G); and (8) a stamped, addressed return envelope.

The Letter of Introduction (Appendix A) was a personal letter from the investigator explaining why the study was being conducted, along with an invitation for the couple to participate. The letter included a brief synopsis of the purpose of the study, an explanation of the processes required to accurately complete the prenatal questionnaires, an explanation of each item included in the prenatal packet, and the objective of the postnatal questionnaire. Subjects were informed that they were free to withdraw from participating at anytime. Further, confidentiality for both participants of the couple was protected by supplying a code number to all prenatal phase data received. All subsequent research data also contained this code number and no names were revealed on these forms. Participants were asked to keep the Letter of Introduction for future reference and to complete and send back (1) the Informed Consent Document, (2) the Name and

Address Form and 3) the Paternal and Maternal Prenatal Questionnaires. The maternal questionnaire contained questions regarding biographical and occupational data. The paternal questionnaire also included biographical and occupational profiles, but further contained The Dyadic Adjustment Scale (Spanier, 1976) and the Parental Expectations and Perception of Adjustment measure developed by Kach and McGhee (1982). It was further requested that upon birth of the infant, the birth announcement postcard be completed by a parent and mailed to the examiner for indication that the infant had been born. After the investigator received the prenatal packet, the birth announcement card and the infant was at a minimum two months old, the postnatal phase data collection began.

Postnatal Phase-Data Collection:

The postnatal phase research packet included: (1) an instruction form (Appendix H); (2) the Father's Questionnaire (Appendix I); and the Mother's Questionnaire (Appendix J). The instruction form identified which form was for the mother and which forms were for the father. Due to copyright specifications one of the measures was not allowed to be reproduced and therefor was separate from the father's stapled research questionnaire. The Father's Questionnaire included: (1) questions pertaining to biographical data regarding the childbirth experience and the amount and type of external support received following delivery, (2) the Dyadic Adjustment Scale (Spanier, 1976), (3) the Parental Expectations and Perception of Adjustment (Kach & McGhee, 1982) scale, (4)

Parenting Stress Index (Abiden, 1981) and (5) the Early Infant Temperament Questionnaire (Medoff-Cooper, 1990). The Maternal Questionnaire included biographical and demographic data, the Dyadic Adjustment Scale (Spanier, 1976) and Parental Expectations and Perception of Adjustment (Kach & McGhee, 1982) scale.

Instrumentation

Data regarding the following variables affecting paternal adjustment were collected: (a) violated expectations (paternal expectations and perceptions), (b) marital satisfaction, (c) infant temperament (d) maternal post-partum depression, (e) external support and (f) change in wife's employment status. The following is a description of the measures, including reliability and validity information.

Paternal Expectations and Perceptions. Expectations and perceptions regarding becoming a parent and the actual events experienced was be assessed by means of the Parental Expectations and Perception of Parenthood Adjustment (Kach & McGhee, 1982) questionnaire. The original questionnaire included both rated statements and open ended questions, although the present study included only rated items (Levy-Shiff, Goldshmidt and Har-Even, 1991). This questionnaire included 29 statements referring to common feelings, concerns and gratifications about becoming and actually experiencing parenthood. Both prenatal and postnatal versions of this questionnaire were utilized. The prenatal questionnaire posed questions to the fathers regarding their expectations for upcoming parenting events, while the postnatal questionnaire

reflected upon their perception of parenting experiences which have already occurred. The Cronbach alpha reported by Kach and McGhee (1982) for this measure was ($\alpha=.94$). This researcher's measure of internal reliability was ($\alpha=.71$). This coefficient was substantially lower than what was reported by the authors.

Within the prenatal subtest, respondents were asked to rate their expectations regarding specific parenting events by placing a check next to five response categories (strongly disagree, disagree, neither disagree or agree, agree, and strongly agree). Among postnatal statements, respondents were asked to rate parenting experiences to the extent they considered them a problem, on a 5 point Likert Scale, ranging from extreme to moderate to slight.

Marital Satisfaction.

Marital satisfaction was assessed prenatally by the husbands and postnatally by the husbands and wives, utilizing Spanier's Dyadic Adjustment Scale (1976). This 32-item questionnaire was developed to assess the quality of marital relations. The scale is made up of four subscales, measuring: (a) dyadic satisfaction, (b) dyadic cohesion (maintaining similar outside interests), (c) dyadic consensus (agreement upon matters of importance within dyadic functioning) and (d) affectional expression. Answers are rated according to either 5-point or 6-point scales. Total scores on this scale range from 0 to 151, and the higher the score the more indicative of marital satisfaction. Cronbach's alpha, which Spanier (1976) stated is the most consistent measure of internal reliability

was .96 for this instrument. Reliability coefficients specific to each instrument were computed and reported, along with the reliability coefficients determined by the author's of each measurement. Cronbach alpha for the various measures was: Dyadic Total ($\alpha=.96$); Dyadic Consensus ($\alpha=.90$); Dyadic Satisfaction ($\alpha=.94$); Dyadic Cohesion ($\alpha=.86$) and Affectional Expression ($\alpha=.73$). This study identified, that for paternal prenatal dyadic adjustment subscales: Dyadic Total ($\alpha=.87$); Consensus ($\alpha=.75$); Affectional Expression ($\alpha=.75$); Satisfaction ($\alpha=.65$); and Cohesion ($\alpha=.78$). Paternal postnatal dyadic adjustment internal reliability measures identified: Dyadic Total ($\alpha=.86$); Consensus ($\alpha=.78$), Affectional Expression ($\alpha=.62$), Satisfaction ($\alpha=.62$), and Cohesion ($\alpha=.72$). Among maternal dyadic adjustment subscales, Cronbach's alpha internal consistency reliabilities were: Dyadic Total ($\alpha=.91$) Consensus ($\alpha=.84$), Affectional Expression ($\alpha=.76$), Satisfaction ($\alpha=.79$), and Cohesion ($\alpha=.74$). The Cronbach alpha's for this study were generally lower than Spanier's reported Cronbach alpha coefficients. The presence of content, construct and criterion-related validity was identified for this measure (Spanier, 1976).

Infant Temperament

Each infant's temperament was assessed according to the Early Infancy Temperament Questionnaire (Medoff-Cooper, 1990). This scale has been identified to measure temperament in 1-4 month old infants. Paternal responses to 80 behavioral descriptions which make up nine temperament categories were assessed. Infant temperament subcategories include: activity

(physical motion exerted during sleep and wake activities), rhythmicity (regularity in physiological functioning), approach (initial responsiveness to stimuli not previously introduced), adaptability (the ease at which one can modify desired reactions to stimuli), intensity (amount of energy exerted in responses), mood (the presence of pleasantness expressed in different situations), persistence (the amount of time an infant is able to pursue an activity), distractibility (interference of extraneous stimuli effecting focus on an activity the infant is engaged in) and threshold (the amount of sensory stimulation necessary to evoke a response in the infant). Test-retest reliability for the nine categories was reported to range from .64-.79 (Medoff-Cooper, 1990). Internal reliability for the nine categories was reported to range from $r=.51$ to $r=.73$ (Medoff-Cooper, 1990). Cronbach's alpha internal reliability computed by this study was ($\alpha=.82$). Internal reliability for the nine individual scales were: Activity ($\alpha=.86$), Rhythmicity ($\alpha=.69$), Approach ($\alpha=.46$), Adaptability ($\alpha=.38$), Intensity ($\alpha=.22$), Mood ($\alpha=.57$), Persistence ($\alpha=.60$), Distractibility ($\alpha=.34$), Threshold ($\alpha=.49$). The higher the score on each temperament subcategory was reflective of: Activity (high level); Rhythmicity (arrhythmic); Approach (withdrawal); Adaptability (slowly adaptable); Intensity (intense); Mood (negative); Persistence (low persistence); Distractibility (low distractibility); Threshold (low).

Depression

Maternal post-partum depression was measured to identify

its effect on paternal stress and/or adjustment. Maternal depression was measured by a subscale within the Expectations and Perception of Parenthood Adjustment battery (Kach & McGhee, 1982). Eleven items were administered and scored according to a 5 point Likert scale. Response choices ranged from "extreme" to "slight" and pertained to the degree to which the mother perceived individual items to cause a problem for her. The lower the score the more indicative of depression. Cronbach's internal reliability coefficient reported by the authors was ($\alpha=.98$). Cronbach's alpha measured by this study was ($\alpha=.75$). This finding was substantially lower than internal reliability previously noted by the authors.

External Support

External support was a single item measure. An open ended question pertaining to whether the couple received any help by members outside their nuclear family, following the birth of their infant was posed on the Maternal Questionnaire.

Change in Maternal Employment Status

The change in maternal employment status from the prenatal to postnatal period was a single item measure. Open ended questions were asked on the Mother's Questionnaire as to whether the mother was currently working outside of the home and the date (if any) that she expected to return to work.

Measure of Adjustment

Paternal adjustment during the transition to parenthood was assessed by utilization of the Parenting Stress Index (Abidin, 1981). Adjustment was measured according the effects

of strain and /or stress which has been experienced. This scale was developed to assess the stress experienced by parents in relation to their children. The index is made up of 120 items requiring the respondent to circle available options to the statements posed. Response options are provide on a 5 point likert scale ranging from (1) strongly agree to (5) strongly disagree. Scoring was divided between the Parent Domain and the Child Domain, and each of these scores was sum totaled to equal "Total Stress". Within the Parent Domain, subscales are assessed in each of the following categories: Competence, Isolation, Attachment, Health, Role Restriction, Depression, and Spouse. Only the Parent Domain was utilized in this battery. Coefficients of Cronbach's alpha internal consistency reliabilities based on the Abidin (1995) for the parent domain format ranged from ($\alpha=.70$) to ($\alpha=.84$). The alpha coefficient for the two domains in total was ($\alpha=.90$). The parenting stress index has adequate constructed validity as evidenced by high correlations with numerous other measures (Abidin, 1995).

Data Screening

Inspection of the data revealed missing information in very few cases (n=2). Of the two cases, the Parenting Stress Index was not completed both times and these protocols were not included in the statistical analysis. One case was eliminated from the study due to a multiple birth. No more than three data points were missing for any respondent. Therefore, mean substitution was used to replace the missing data in all analyses. Preliminary analysis of the data was

done to ensure that the assumption of linearity, homogeneity and normalcy were met. No significant multivariate outliers were found in separate tests of the predictors and parenting stress variable. Further, none of the variables showed any significant skewness or kurtosis.

Data Analysis

Hierarchical regression analyses were used to test the hypotheses that dyadic adjustment, violated expectations, infant temperament, maternal post-partum depression, change in maternal employment status and external support contribute significant and unique variance to the prediction of paternal stress. Variables were entered in three steps with paternal prenatal dyadic adjustment entered first to control for its unique variance. Paternal dyadic adjustment (postpartum), maternal dyadic adjustment (postpartum), maternal post-partum depression, change in maternal employment status, violated expectations and external support, were entered in the next step (Step 2) to test the prediction that they will account for significant variance above that which is due to the variable entered in Step 1. Similarly, the temperament variables were entered as a separate step (Step 3) to test their incremental predictive power beyond that provided by those in Step 2.

CHAPTER 4

RESULTS

Findings and Interpretations

Preliminary Analysis

Demographic Variables

Intercorrelations were computed to identify if socioeconomic status or maternal\paternal age were related to the predictor variables of the hypotheses (Table 2). Of the 16 variables intercorrelated with socioeconomic status and maternal/paternal age, only 1 correlation identified statistical significance. A significant correlation ($r=.34$, $p=.05$) was found between a less persistent infant temperament style and a higher socioeconomic status of the couple. Infants characterized as less persistent, engage in activities for shorter periods of time.

TABLE 2

Demographic Data Related to Predictor Variables

Predictor Variables	Socioeconomic Status	Maternal Age	Paternal Age
<u>Paternal Domain</u>			
VIOLATED EXPECTATIONS	-.28	-.06	-.20
PATERNAL DYADIC ADJUSTMENT (PRE)	-.07	-.03	-.22
PATERNAL DYADIC ADJUSTMENT (POST)	-.04	-.24	-.28
<u>Maternal Domain</u>			
MATERNAL DYADIC ADJUSTMENT	-.13	-.01	-.19
Δ IN MATERNAL EMPLOYMENT STATUS	-.07	-.10	-.09
MATERNAL POSTPARTUM DEPRESSION	.13	-.15	-.18
<u>Infant Domain</u>			
ACTIVITY	-.03	-.22	-.14
RHYTHMICITY	.11	.10	-.07
APPROACH	.18	-.09	.04
ADAPTABILITY	.10	-.23	-.14
INTENSITY	-.20	-.06	-.10
MOOD	.19	-.18	-.07
PERSISTENCE	.34*	.00	.19
DISTRACTIBILITY	.17	-.03	.15
THRESHOLD	-.24	-.22	-.19
<u>External Domain</u>			
EXTERNAL SUPPORT	-.06	.07	.23

Note. * $p \leq .05$

Both spouses of each couple were asked about their willingness to become pregnant at this time and questions were

posed respective of the spouses gender. Choices included: (a) I really wanted to get pregnant at this time (I really wanted my wife to get pregnant at this time, (b) it didn't matter if I (or my wife) got pregnant at this time and (c) I didn't want my wife to get pregnant at this time. Eighty percent of the wives wanted to get pregnant at this time, compared to seventy four percent of the husbands. Ten percent of the wives and twenty four percent of the husbands stated it didn't matter if they got pregnant at this time. Ten percent of the wives and two percent of the husbands did not want to get pregnant at this time. Sixty nine percent of the couples were in agreement regarding their desired, neutral or undesired opinion regarding this pregnancy.

TABLE 3
Spousal Opinion Regarding Current Pregnancy

Variable	Percentage
1. "I really wanted to get pregnant at this time"	80%
"I really wanted my wife to get pregnant at this time"	74%
2. "It didn't matter if I got pregnant at this time"	10%
"It didn't matter if my wife got pregnant at this time"	24%
3. "I didn't want to get pregnant at this time"	10%
"I didn't want my wife to get pregnant at this time"	02%
Agreement between spousal opinion regarding pregnancy	69%
Disagreement in spousal opinion regarding pregnancy	31%
Wife- really wanted to get pregnant	
Husband- didn't matter if wife got pregnant	15%
Wife- didn't matter if pregnant	
Husband- really wanted wife to get pregnant	07%
Wife- didn't want to get pregnant	
Husband- didn't matter if wife got pregnant	04%
Wife- didn't want to get pregnant	
Husband- really wanted wife to get pregnant	02%
Wife- really wanted to get pregnant	
Husband- didn't want wife to get pregnant	02%

Among the thirty one percent difference in spousal opinions, Table 3 breaks down the disconcordance of opinions.

Among infant gender preferences (Table 4), fifty four percent of the wives compared to sixty seven percent of the

husbands, had no gender preference. Twenty four percent of the wives preferred to give birth to a daughter and twenty two percent hoped for a boy. Only four percent of the husbands preferred a daughter and twenty nine percent hoped for a son. Of the babies born, fifty eight percent were boys and forty two percent were girls.

TABLE 4
Infant Gender Preference Between Spouses

	Percentage
No Gender Preference	
Husbands	67%
Wives	54%
Preferred Daughter	
Husbands	04%
Wives	24%
Preferred Son	
Husbands	29%
Wives	22%
Actual Gender of Infants Born	
Males	58%
Females	42%

Intercorrelation among predictor variables

Bivariate correlations among the predictor variables are shown in Tables 5a & 5b. Table 5a includes the Paternal, Maternal and External Domains, while Table 5b includes the Infant Domain correlated with Maternal, Paternal, and External Domains. The Infant Domain was correlated within its own table due to the numerous subcategories which comprise this scale. Correlations as well as multiple regression analyses are presented in accordance with the order of hypotheses within the appropriate domains. Predictor variables were correlated to determine independence or the presence of any significant patterns. The level of significance was $p \leq .05$ for all of the analyses.

Paternal and Maternal Domains

Paternal Expectations and Perceptions. For the predictor variable Violated Expectations, a significant positive correlation was identified in its relation to paternal prenatal dyadic adjustment ($r=.32$, $p<.05$). This finding indicates that the higher the quality of marital satisfaction perceived by the husband during the prenatal period, the higher the discrepancy between perceived and actual parenting and the more problems associated with adjusting during this transition.

Marital Satisfaction. Prenatal paternal dyadic adjustment was found to correlate with postpartum paternal dyadic adjustment ($r = .63$, $p<.01$), and postpartum maternal dyadic adjustment ($r=.51$, $p<.01$). Paternal marital satisfaction prior to the birth of the infant, was highly reflective of both the father's and the mother's marital satisfaction after the infant was born. Further, postnatal paternal dyadic adjustment also correlated with maternal postnatal dyadic adjustment ($r=.60$, $p<.01$). This finding suggests that maternal and paternal assessments of marital satisfaction are both either positive or negative, during the postnatal period. Following the delivery of the infant, paternal spousal reports remained consistent with his prenatal appraisal of the quality of his marriage.

Maternal Postpartum Depression. Maternal dyadic adjustment correlated positively with maternal postpartum depression ($r=.39$, $p<.01$). The higher the quality of the marital relationship as perceived by the wife, the less postpartum

TABLE 5A
 INTERCORRELATIONS AMONG PREDICTOR VARIABLES IN THE PATERNAL, MATERNAL AND EXTERNAL DOMAINS

VARIABLE	1	2	3	4	5	6	7
<u>Paternal Domain</u>							
Pre Dyadic Adj	----						
Pst Dyadic Adj	.63**	----					
Viol Expect	.32*	.26	----				
<u>Maternal Domain</u>							
Pst Dyadic Adj	.51**	.60**	.10	----			
Δ in Employment	.18	.00	.25	-.09	----		
Pst. Depression	.08	.21	-.16	.39**	.00	----	
<u>External Domain</u>							
External Support	-.83	-.20	.10	-.11	.10	-.16	----

* p ≤ .05
 ** p ≤ .01

Key to Variables:
 1=Prenatal Paternal Dyadic Adjustment
 2=Postnatal Paternal Dyadic Adjustment
 3=Violated Expectations
 4=Postnatal Maternal Dyadic Adjustment
 5=Maternal Change in Employment Status
 6=Postpartum Maternal Depression
 7=External Support

depression was experienced. (Higher scores on the depression inventory reflective of less of a problem with the experience of depression).

Change in Maternal Employment Status. Maternal employment status was categorized according (1) a change in employment status from the prenatal to postnatal period, and (2) no change in employment status from the prenatal to postnatal period. Only 19% of the mothers changed in their employment status following the birth of the baby. This change was from full-time to part-time employment. Forty six percent remained unemployed from the prenatal to postnatal period and thirty five percent remained employed on a full-time basis. A change in maternal employment status from the prenatal to postnatal period did not significantly correlate with the other predictor variables.

External Domain

External Support. Sixty seven percent of the couples reported some form of external support, while thirty three

percent had no type of support. The predictor variable external support did not correlate significantly with any other predictor variable.

Infant Domain

Infant Temperament. The nine infant temperament subcategories were each correlated with other temperament variables and the predictor variables in the paternal, maternal and external domains (Table 5b). Higher temperament scores are indicative of a more difficult temperament. Specifically, higher infant temperament subcategories reflect: high activity, arrhythmic, tendency to withdraw upon approach, slowly adaptable, intense, negative mood, low persistence, low distractibility, and low threshold. Activity was positively correlated with Intensity ($r=.31$, $p<.05$) and Threshold ($r=.33$, $p<.05$). As the activity level of the infant was high, the intensity of the infant's response was strong and the lower the amount of stimuli needed to evoke a response in the infant. Rhythmicity was positively correlated with Mood ($r=.30$, $p<.05$). Infants who were arrhythmic in physiological functioning demonstrated a more negative mood. Approach was significantly correlated with both Adaptability ($r=.51$, $p<.01$) and Distractibility ($r=.51$, $p<.01$), in a positive direction. Infants who tended to withdraw from new stimuli, were more slowly adaptable to modify their reactions in a desired direction and demonstrated less distractibility. Adaptability also correlated positively with Distractibility ($r=.61$, $p<.01$). Very adaptable infants were more distractible. The characteristic of Intensity positively correlated with Threshold ($r=.49$, $p<.01$). The more

TABLE 5B

INTERCORRELATION AMONG INFANT TEMPERAMENT AND THE PREDICTOR VARIABLES

	1	2	3	4	5	6	7	8	9
1. Activity	----								
2. Rhythmicity	.12	----							
3. Approach	.05	-.06	----						
4. Adaptability	.10	-.03	.51**	----					
5. Intensity	.31*	.11	.07	-.13	----				
6. Mood	.17	.30*	.05	.24	.14	----			
7. Persistence	-.12	-.09	.14	.12	-.29	.28	----		
8. Distractibility	.03	.74	.51**	.61**	-.13	.26	.27	----	
9. Threshold	.33*	.06	.14	.12	.49**	.07	-.31*	-.05	----
10. Pre Dyadic Adj (P)	.12	-.15	.13	.00	.11	-.44**	-.42**	-.17	.09
11. Post Dyadic Adj (P)	.22	.07	.08	-.09	.12	-.35*	-.21	-.07	.14
12. Violated Expectations	.11	.09	-.10	-.26	.23	.29	-.39**	-.30*	.08
13. Post Dyadic Adj (M)	.14	-.02	-.06	-.14	-.09	-.40**	-.09	-.18	.09
14. Change in Employment (M)	.11	-.06	-.15	-.02	-.02	-.23	-.08	-.07	.12
15. Postpartum Depression	-.28	-.39**	-.14	.04	-.17	-.21	.48**	.04	.09
16. External Support	.12	.11	.01	-.03	-.12	.05	-.08	.24	.00

* $p \leq .05$ ** $p \leq .01$ Key to Variables:
 1=Activity
 2=Rhythmicity
 3=Approach
 4=Adaptability
 5=Intensity
 6=Mood
 7=Persistence
 8=Distractibility
 9=Threshold

intense the infants energy level, the lower the sensory threshold level needed to evoke a response in the infant. A negative correlation was identified between Threshold and Persistence ($r = -.31$, $p \leq .05$). The less persistent the infant was in pursuing a particular activity, the higher the amount of sensory stimulation required to evoke a response in the infant.

Numerous significant correlations were found between the subcategories of infant temperament and predictor variables within the paternal maternal and external domains. Rhythmicity was correlated with maternal postpartum depression, in a negative direction ($r = -.39$, $p \leq .01$). Mothers who reported less problems with depression, had infants who were more rhythmic in physiological functioning. The infant

subcategory Mood correlated in a negative direction with Prenatal Paternal Dyadic Adjustment ($r = -.44$, $p < .01$), Postpartum Paternal Dyadic Adjustment ($r = -.35$, $p < .05$) and Maternal Dyadic Adjustment ($r = -.40$, $p < .01$). The more positive the mood of the infant was correlated with a higher quality of marital satisfaction prepartum for the father, and postpartum for the mother and the father. Higher infant temperament mood scores were reflective of a negative mood whereas low infant temperament mood scores suggested a more positive mood. Persistence was negatively correlated with Prenatal Paternal Dyadic Adjustment ($r = -.42$, $p < .01$) and paternal violated expectations ($r = -.39$, $p < .01$). The higher the persistence level the infant demonstrated spending time engaged in a particular activity, the more satisfied the father was with his marriage prenatally, and the higher the reported discrepancy between the perceived and actual parenting event. A high persistence score was reflective of a less persistent infant. A positive correlation was identified between Persistence and Maternal Postpartum Depression ($r = .48^{**}$, $p < .01$). Infants with high persistence had mothers who reported more of a problem with postpartum depression. Distractibility and paternal violated expectations were negatively correlated ($r = -.30$, $p < .05$). Higher distractibility scores was indicative of infants who were less distractible. Infants who were highly distractible and allowed outside stimuli to interfere with a given task, had fathers who experienced a greater discrepancy between perceived parenting and actual parenting events.

Hypotheses Testing

Results from the hierarchical multiple regression analyses for the prediction of scores on postpartum paternal stress, are presented according to the order of hypotheses and within the corresponding domains. For each analysis, Table 6 includes standardized beta coefficients in the final equation $Beta_{(final)}$, the total amount of variance accounted for at each step (R^2), and the amount of change in variance accounted for in each step ($R^{2\Delta}$). Also provided are squared semipartial correlation coefficients (sr^2) to indicate the amount of unique variance attributable to each predictor. Zero-order correlations, which identify significant correlations between the predictor and criterion variables without the influence of the other predictor variables in the equation, are presented for comparison with its respective Betas, in order to determine the presence of suppression or redundancy. As suggested by Velicer (1978) and by Smith, Ager and Williams (1992), suppression effects in regression analyses with more than two predictors are present when the semipartial correlation (sr) is higher than or of opposite valence to the corresponding zero-order coefficient (r). Of interest for this study was evidence of suppression in which $B_{(final)}$ for the predictor was reduced to nonsignificance upon removal of the suppressor variable. Analysis of Variance (ANOVA) is reported for significance testing of each step and the final equation of the regression analysis. Also reported are the t -tests for significance testing of each individual variable in the equation. Each hypothesis will be stated according to how it

was entered into the equation, followed by the corresponding results.

Hypothesis 1(a): Paternal marital satisfaction, prepartum, will have no significant effect on the paternal experience of stress, following the birth of the infant.

In step 1, higher scores on the paternal parenting stress factor (see Table 6) were predicted by higher scores on paternal prenatal dyadic adjustment, which is reflective of better marital adjustment ($\beta_{(final)} = .51$, $t_{(46)} = 2.76$, $p = .01$). This step analyzed the hypothesis that there is no relationship between paternal prenatal marital satisfaction and the experience of a difficult postpartum adjustment (stress). The zero-order correlation between higher paternal parenting stress and higher paternal prenatal dyadic adjustment was also statistically significant ($r = .34$). This zero-order correlation was lower than its respective Beta. Suppression, however, had a negligible impact because the Beta and zero-order correlation were both statistically significant (Smith, Ager & Williams, 1992).

Hypothesis 1(b): Paternal postpartum marital satisfaction will have no significant effect on the presence of paternal stress, following the birth of the infant.

Hypothesis 2: The presence of paternal violated expectations, will have no significant effect on the experience of postpartum paternal stress, following the birth of the infant.

Hypothesis 3: A change in the wife's employment status from the prepartum to postpartum period, will have no significant effect on the husband's experience of stress, following the

TABLE 6

Hierarchical Regression Examining Relation of Predictor Variables to Paternal Stress (N=47)

Predictor Variable	Paternal Stress				
	r	B _(final)	sr ²	R ²	R ² Δ
Step 1:					
Socioeconomic Status	-.16	.11	.006	.13	.13*
Pre Dyadic Adjustment (Pat)	.34*	.51***	.096		
Step 2:					
Violated Expectations	-.03	-.13	.012	.32	.19
Paternal Dyadic Adjustment	.10	.04	.000		
Maternal Dyadic Adjustment	.00	-.03	.000		
Maternal Post Depression	-.02	-.25	.022		
Change in Maternal Employment	.03	.02	.000		
External Support	-.26	.01	.000		
Step 3:					
Activity	.10	-.19	.020	.67	.35**
Adaptability	.30*	.58***	.130		
Approach	-.04	-.20	.020		
Distractibility	-.18	-.43*	.068		
Intensity	.29*	.30	.044		
Persistence	.00	.42*	.068		
Mood	.10	.14	.008		
Rhythmicity	-.07	-.09	.003		
Threshold	.35*	.19	.020		

Note. For final equation. $F_{(17,44)}=3.20$. $p=.003$ * $p < .05$ ** $p < .01$ birth of the infant.

Hypothesis 4: The presence of maternal postpartum depression will have no significant effect on the husband's experience of stress, following the birth of the infant.

Hypothesis 5: A wife's postpartum marital satisfaction will have no significant impact on her husband's adjustment to experience of stress, following the birth of the infant.

Hypothesis 6: The presence of external support following the birth of the infant, will have no significant effect on the father's experience of stress.

Within the second step, none of the predictor variables including: violated expectations, paternal postpartum dyadic adjustment, maternal postpartum dyadic adjustment, change in maternal employment status, and external support, were significantly related to paternal stress ($p \leq .05$). Each of

these predictor variables were hypothesized to contribute no significance to the presence of postpartum stress. No statistically significant change in variance was accounted for by the addition of this step. $R^2\Delta$ for the step was not statistically significant ($R^2_{(step)}=.19$, $F_{(6,36)}=1.7$, $p=.16$).

Hypothesis 7: Infant temperament characteristics will have no significant impact on the father's adjustment to parenthood.

Hypothesis 8: There will be no significant effect on the father's experience of postpartum stress, when paternal prenatal and postnatal marital satisfaction, paternal violated expectations, maternal postnatal marital satisfaction, the presence of maternal postpartum depression, a change in maternal employment status from the prepartum to postpartum period, the presence of postpartum external support and infant temperament are collectively combined to impinge on the father's adjustment to parenthood.

Step 3 included the addition of the nine infant temperament subcategories: activity, adaptability, approach, distractibility, intensity, persistence, mood, rhythmicity and threshold. It was hypothesized that infant temperament would have no significant effect on the father's adjustment during the transition to parenthood. This addition accounted for a significant incremental change in variance ($R^2\Delta = .35$, $F_{(9,27)}=3.14$, $p=.01$). Higher paternal parenting stress was significantly related to slowly adaptable infants ($\beta_{(final)}=.58$, $t_{(46)}=3.25$, $p=.01$), less persistent infants ($\beta_{(final)}=.42$, $t_{(46)}=2.35$, $p=.05$) and more distractible infants ($\beta_{(final)}=-4.3$, $t_{(46)}=-2.30$, $p=.03$). Infants who engaged in activities

for shorter periods of time (persistence), were more slow in adapting their behaviors in a desired direction, and were highly distracted by outside stimuli interfering with current activities, had fathers who reported the greater presence of stress. Zero-order correlations identified statistical significance between paternal stress and infant intensity ($r=.29$, $p=.05$) as well as paternal stress and infant threshold ($r=.35$, $p=.05$), in a positive direction. Infants who were more intense in their level of response and had a low sensory threshold upon responding, had fathers who experienced higher levels of paternal stress. The statistically significant relationship between distractibility and paternal stress, and persistence and paternal stress, is higher than its respective zero-order correlation. Statistically this is suppression and there is/are a variable(s) artificially increasing the strength of the relationship between these variables, and accounting for their statistical significance. The statistically significant relationship between adaptability and paternal stress also identified a zero-order correlation which was lower than its corresponding Beta. Suppression had a negligible effect on this relationship since both Beta and the zero-order correlation were statistically significant (Smith, Ager & Williams, 1992).

Further analyses were conducted in order to identify those aspects (subscales) of dyadic adjustment that predict postpartum paternal stress (Table 7). Although all of the variables in the hypothesis testing were included in this multiple regression analysis equation, only the dyadic

adjustment scales and subscales are presented in Table 7 to identify which subscales were the most influential as significant predictors of paternal stress. Among the dyadic adjustment subscales: affectional expression, dyadic cohesion, dyadic consensus and dyadic satisfaction, only paternal prenatal dyadic satisfaction was significantly related to paternal stress, in a positive direction ($\beta_{(final)}=.52$, $t_{(46)}=2.11$, $p=.05$). The higher the quality of marital satisfaction assessed prenatally by the father, the more predictive of the postnatal paternal stress. Significant zero-order correlations were identified with two prenatal dyadic adjustment subcategories, affectional expression ($\alpha=.33$, $p=.05$) and dyadic cohesion ($\alpha=.29$, $p=.05$), in a

TABLE 7
Hierarchical Regression Examining The Influence of Dyadic Adjustment Subscale Scores On Paternal Stress
(N=47)

Predictor Variables	Paternal Stress		
	r	$\beta_{(final)}$	sr^2
Paternal Dyadic Adjustment (Prenatal)			
Affectional Expression	.33*	.32	.034
Dyadic Cohesion	.29*	.18	.010
Consensus	.13	-.15	.005
Dyadic Satisfaction	.16	.52*	.050
Maternal Dyadic Adjustment (Postnatal)			
Affectional Expression	.06	-.26	.013
Dyadic Cohesion	.11	.43	.068
Consensus	.11	-.22	.013
Dyadic Satisfaction	.07	-.02	.000
Paternal Dyadic Adjustment (Postnatal)			
Affectional Expression	.04	.03	.000
Dyadic Cohesion	.18	-.24	.012
Consensus	.09	-.02	.000
Dyadic Satisfaction	.09	.35	.015

Note. For the final equation. $F_{(26,44)}=2.71$. $p=.016$

* $p < .05$

positive direction. Paternal assessment that the couple maintains similar outside interests (dyadic cohesion) and

expresses appropriate levels of affection were both related to the higher presence of postpartum paternal stress in the zero-order correlation, but not in the respective Betas. Thus, in the presence of other variables influencing the presence of paternal stress, these two variables lost their significant predictive power.

Exploratory analysis was conducted to identify if the direction of the violated expectation influenced the presence of paternal stress. Expectation-perception scores were recoded and a composite score was created to test the interaction of prenatal and postnatal violated expectations. Scores were defined in terms of having (1) negative perceptions prenatally and a negative experience postnatally, (2) positive perceptions prenatally and positive experience postnatally, and (3) violated expectations: fathers who expected their parenting experience to be positive, yet had so far experienced it to be difficult, or fathers who had negative expectations of parenting, yet experienced a more positive outcome. The interaction term was the product of prenatal and postnatal violated expectation scores entered in the regression equation after controlling for the main terms. No statistical significance was identified in the direction of the violated expectations predicting paternal parenting stress ($\beta_{\text{final}} = .07$, $t_{(46)} = .34$, $p = .89$).

CHAPTER 5

DISCUSSION

The present study was conducted to determine the presence of significant factors which impinge on a father's adjustment to first-time parenthood, yielding stress and/or strain. Below is a discussion of the results for the prediction data and zero-order correlations, followed by: (a) discussion of the exploratory analysis, (b) limitations of the study, and (c) implications for prevention and intervention. Suggestions for future research are provided throughout. The discussion will follow the order of hypotheses as the predictor variables were entered into the regression analyses.

Subjects for this study consisted of married couples who were pregnant with their first child. Married couples were focused upon since Russell (1974) identified that this experience tends to be less intense among parents who are married before conception occurs.

Paternal Domain

Hypothesis 1(a): Paternal marital satisfaction, prepartum, will have no significant effect on the paternal experience of stress, following the birth of the infant.

Hypothesis 1(b): Paternal marital satisfaction, postpartum, will have no significant effect on the paternal experience of stress, following the birth of the infant.

A significant positive correlation was identified between paternal prenatal dyadic adjustment and paternal postnatal dyadic adjustment. Such findings suggest that paternal marital satisfaction remained somewhat stable during the transition from the prenatal to postnatal period. Paternal

prenatal marital satisfaction did have a significant effect on the presence of paternal stress during the postnatal period, whereas paternal postnatal marital satisfaction did not. An assessed higher quality of the marital relationship was a significant predictor of stress. The increase in paternal stress postpartum, as predicted by the higher quality of marriage prepartum, may be a function of the new parent exerting excessive emotional energy in attempt to have as satisfying a relationship with his infant as he does with his wife, or that the husband may be working harder to maintain the quality of his marital relationship. Research on the linkage between parenting and marital relationships has suggested that the quality of the marriage is a crucial and powerful predictor of parental functioning (Belsky, 1984; Feldman et al., 1983). In the transition, both spouses must work out their own interpersonal crises regarding accommodating the infant into their lives and emotionally allowing the dyad to become a triad. There is a new division of role responsibilities and different expectations regarding the orientation of role execution each spouse is willing to engage in. Short Tomlinson (1987) identified that the quality of the marriage assessed during the prepartum period, has a strong influence on the quality of the marriage and the marital adjustment following the birth of the infant. Coyish (1983) suggested that a man who is more happily married may be a more involved parent, based on his greater sense of competence and security in relationships.

Marital and parenting roles are highly linked and

therefore is important to assess the quality of the marriage before the baby is born (or hopefully, conceived). This study only assessed paternal prepartum marital satisfaction. It is suggested that future research studies measure maternal prepartum marital satisfaction as well, since the quality of marriage assessed by both parents has a strong relationship with parenting roles and parenting behavior. This study did not include a maternal marital satisfaction questionnaire in the prepartum packet since the larger prepartum packet may have led to a decreased sample size, thus accounting for an even higher dropout rate than experienced in this study.

Feldman (1984) identified that marital tension expressed by both husbands and wives during the pregnancy was the greatest predictor of postpartum strain among wives. Activities which include the dyadic couple spending positive time together decrease with the birth of the infant, while the amount of marital conflicts are reported to increase (Belsky et al., 1985; Belsky et al., 1983; Cowan et al., 1978). These studies identified consistency in paternal reports of marital satisfaction from the prepartum to postpartum period. Paternal marital satisfaction was found to decrease as maternal involvement with the care of her infant increased (Levy-Shiff, 1994). Men who viewed substantial change in their wives and in their spousal relationship, were more negativistic about their role as a parent and demonstrated more problems adjusting to parenthood (Dragonas, Thorpe & Golding, 1992). Paternal marital satisfaction during the

prepartum period was predictive of postpartum stress. This may occur because the husband may fear that this new division of role tasks and increased maternal childcare responsibilities will significantly apply time constraints to the quality and quantity of activities the couple was used to previously engaging in.

Hypothesis 2: The presence of paternal violated expectations will have no significant effect on the experience of postpartum paternal stress, following the birth of the infant.

The presence of paternal violated expectations did not predict the experience of postpartum stress during the transition to parenthood. In the multiple regression analysis, the addition of violated expectations did not account for a significant portion of the variance. The presence of paternal stress was not predicted by violated expectations when violated expectations were analyzed according to both the absolute value (absolute difference of the divergence of scores between prenatal expectations and postnatal experience) or when the direction of the change score (yielding a more positive or more negative experience than expected) was entered. Such findings were inconsistent with previous research (Belsky et.al, 1986; Garrett, 1983; Kach and McGhee, 1982). This may have occurred because of the limited sample size of this study and therefore, a limited presence of violated expectations. Heider (1958), and Kach and McGhee (1982) found that as expectations of parenting become more violated, the transition to parenthood becomes

significantly more difficult. Garrett (1983) stated that greater stress in adjusting may be endured as the discrepancy between violated expectations increases. Belsky, Ward and Rovine (1986) further identified that the degree of the stressful impact would deviate as a function of such a discrepancy.

Fathers who are readily amenable to accept the responsibilities of parenting in a sensitive, caring and nurturing way are more likely to have appropriate expectations regarding their ability to adapt to the infants' needs and therefore find the transition less stressful. Conversely, those fathers who are unyielding to new experiences, have difficulty with commitment and obligation and enjoy remaining independent, will have less success with this adaptation to parenthood, thus compromising the relationship with their infant. In future research it will be important to measure paternal attitudes and adaptability and this impact on violated expectations. Levy-Shiff and Israelashvili (1988), stated that fathers who maintain a positive perception of parenthood and find it personally fulfilling, will be more motivated to remain involved with their infants. Glass (1983) identified that prenatal attitudes create perceived standards regarding the behavior of the infant, the parent and childrearing. Interpersonal dilemmas regarding expectations and experiences of fatherhood must be addressed to promote mutually successful relationships between infants and their fathers. During the prenatal period, men who viewed

fatherhood as an experience involving self contribution, were more likely to participate extensively in taking care of the child. Future research may include identifying personality characteristics at risk for the development of violated expectations, resulting in excessive stress and a hindering a healthy relationship between the father and infant. Such a measure may attempt to delineate specific violated expectations which suggest "at risk" factors. A reference point may be noted in which scores may signify the potential for extreme paternal stress (Medoff-Cooper, Carey and McDevitt, 1990). Education, prevention and intervention programs need to evaluate the importance of assessing the individuals' and couples attitudes, beliefs and expectations, regarding any actual or perceived changes, which occur during the transition to parenthood.

A significant positive correlation was identified between violated expectations and paternal prenatal dyadic adjustment. The higher the quality of marriage perceived by the husband during the prenatal period, the higher the discrepancy between perceived and actual parenting and the more problems associated with adjusting during this transition. Future research may identify if violated expectations existed just for the husband, the wife, or between the spouses, and the impact this would have on: (1) their marital satisfaction during the prepartum and postpartum periods, (2) the relationship between the husband and wife, and (3) father-infant and mother-infant relationships.

Belsky, Ward and Rovine, 1986 identified that the most damaging effect on a marriage seemed to occur when the experience of the transition to parenthood was more negative or less positive than previously anticipated. Thus, if spouses differed in their opinions regarding (1) their desire to become pregnant, (2) the roles and responsibilities regarding becoming a parent and (3) the actual caretaking involved once the infant was born, such discrepancies in expectations would be hypothesized to exacerbate a more difficult (i.e., stressful) adjustment.

Maternal Domain

Hypothesis 3: A change in the wife's employment status from the prepartum to postpartum period, will have no significant effect on the husband's experience of stress, following the birth of the infant.

A change in maternal employment status from the prenatal to postnatal period, did not significantly correlate with the other predictor variables or predict the presence of postpartum paternal stress. There was a 19.5% change in employment status following the birth of the infants. This change was from full-time to part-time employment. Forty six percent remained unemployed from the prenatal to postnatal period and thirty five percent remained employed on a full-time basis. The statistical analysis was unable to detect unique variance contributed by this variable.

Maternal and paternal roles may be dictated by sociocultural influences. As more families include dual wage-

earning spouses, increased forms of stress are reported to be experienced by differing gender and/or personality styles. Owen & Cox (1988) suggested that more women are working outside of the home due to financial need. When the circumstances exist in which the father is the primary caretaker, separation from the infant is experienced with less stress and concern than the mother experiences it, when she is the primary caretaker (Hock, McBride & Gnozda, 1989). Mothers who preferred employment outside of the home also experienced less anxiety regarding the separation from their infant whereas, mothers who preferred to stay home with their infants reported increased separation anxiety (Fein, Gariboldi & Boni, 1993). Mothers who are employed outside of the home have husbands who partake in greater childcare activities with their infants (Darling-Fisher & Tiedje, 1990). This increase in paternal caretaking is inconsistent with the fathers previous traditional role as the "financial provider" and may increase his degree of anxiety when having to separate from the infant for employment reasons. When the father engages in greater childcare activities, mothers experience less strain and role conflicts regarding their own separation from their infants. It is suggested that future research studies focus upon the direction of intended and actual change in employment status and how this change effects both maternal and paternal expectations, attitudes and adjustment. Further it may be important to note if paternal stress is reduced as a function of spending more childcare time with the infant, thus yielding

a more positive father-infant relationship. It is further suggested that researchers identify who engages in the role as the primary caretaker with the infant, when the mother changes her employment status due to need or personal desire.

Hypothesis 4: The presence of maternal postpartum depression will have no significant effect on the husband's experience of stress, following the birth of the infant.

Maternal postpartum depression did not predict the presence of paternal stress. A significant correlation was identified though, between maternal postpartum depression and maternal dyadic adjustment. A lower presence of postpartum depression was reported by mothers who expressed a higher satisfaction with their marital relationship. Previous research has suggested that women who suffer from postpartum depression rated the quality of their marriage as less satisfactory, experienced higher stress, used avoidance and escape as a coping technique and perceived the care they received from their own parents as negative (Gotlib, Whiffen, Wallace & Mount, 1991). It was further reported that these women also perceived their husbands as unsupportive and reported increased marital discord ((Cambell, Cohn, Flanagan, Popper, & Meyers, 1992; Gotlib et al., 1991; O'Hara, Zekoski, Phillips & Wright, 1990). It has been suggested that during the postpartum period, different concerns are held by husbands and wives. Husbands are more likely to be concerned about sharing companionship and intimacy with their spouse, whereas wives are more concerned about being able to incorporate her

new multitude of roles and the division of labor regarding tasks (Broom, 1984; Ruble, Fleming, Hackel & Stangor, 1988).

Hypothesis 5: A wife's postpartum marital satisfaction will have no significant impact on her husband's experience of stress, following the birth of the infant.

Multiple regression analysis did not identify that maternal marital satisfaction was predictive of postpartum paternal stress. Maternal Dyadic Adjustment correlated significantly with both paternal prenatal dyadic adjustment and paternal postnatal dyadic adjustment, in a positive direction. Thus, wives assessment of the quality their marriages postnatally, was consistent with their husbands opinions of their marital satisfaction, prenatally and postnatally. Neither maternal or paternal dyadic adjustment, assessed postnatally, predicted paternal stress. Since paternal postnatal marital satisfaction did not predict the presence of postnatal stress and maternal marital satisfaction correlated positively with paternal postnatal marital satisfaction, it follows that maternal postpartum marital satisfaction does not predict paternal stress.

Paternal behavior towards the infant does influence the maternal assessment of her satisfaction with her marriage. Levy-Shiff (1994) identified that wives' view their husbands loving and nurturing involvement with the infant as an act of love and care toward the wives' themselves. Cowan and Cowan (in press) suggested that women generally want their husbands to participate more in childcare activities than the fathers

are able or willing to actually engage in. Maternal and paternal marital satisfaction as well as career orientation have been suggested to exert an impact on the relationship the father has with his infant (Belsky, 1984). This previous research has suggested that maternal attitudes and behaviors regarding paternal and maternal roles and responsibilities have an impact on the maternal assessment of marital satisfaction and paternal parenting behaviors. Future research may identify which variables significantly predict negative precursors of maternal marital dissatisfaction since maternal attitudes impact paternal involvement with their infants'.

External Domain

Hypothesis 6: The presence of external support following the birth of the infant, will have no significant effect on the father's experience of postpartum stress.

External Support did not contribute significant variance to the prediction of postpartum paternal stress. Previous research studies regarding external support identified inconsistent data. Hobbs (1963) reported that the presence of outside help to care for the infant yielded more dissatisfaction and more difficulty adjusting to this parenting transition. Crockenberg (1984), found that external social support encouraged the formation of more secure attachments among infants who were rated to have more irritable and difficult temperaments than similarly characterized infants who did not have external social support

systems available.

Infant Domain

Hypothesis 7: Infant temperament will have no significant impact on the father's adjustment to parenthood.

Infant Temperament significantly predicted the presence of paternal stress during the postpartum period. Specifically, high paternal parenting stress was significantly related to slowly adaptable infants, less persistent infants, and more distractable infants. Such findings were consistent with previous research studies. Sirignano & Lachman (1985) identified that individual personality characteristics of the infant have a significant influence on paternal adaptation to parenthood. Infants who displayed difficult temperaments were reported to have a substantial effect on maternal mental health and these mothers reported higher levels of fatigue than mothers with less difficult infants (Wolkind and DeSales, 1982). Boukyolis and Burgess (1982) stated that both mothers and fathers reported that the cry of an infant characterized as difficult was more irritating and highly arousing, especially for first-time parents. A positive correlation was identified by Ventura (1982) between infants who are difficult to sooth and an increase in anxiety and depression in mothers and fathers at two and three months postpartum.

Zero-order correlations identified a positive correlation between higher paternal stress and infants who were more intense in their level of response, had a low sensory threshold of responding and were slower in their ability to

adapt their undesirable behaviors in a more desirable direction. This zero-order correlation identified a significant relationship between these significant infant temperament subcategories and the presence of paternal stress, independent of the influence of the other predictor variables in the multiple regression equation. Russell (1974) reported that infants who were characterized as requiring greater effort, encouraged more strain and distress in their parents.

The mood of the infant was significantly correlated with paternal marital satisfaction, prepartum and postpartum, and with maternal marital satisfaction, postpartum. The higher the quality of marriage reported by fathers, prepartum and postpartum, and by mothers, postpartum, the more likely they were to rate their infants mood as positive. This is consistent with Russell (1974) who identified that infants' who were quiet and displayed an easier adaptation to routines including feeding and sleeping had parents who reported less strain or distress and a higher satisfaction with their marriage.

Hypothesis 8: There will be no significant effect on the father's experience of postpartum stress, when paternal prenatal and postnatal marital satisfaction, paternal violated expectations, maternal postnatal marital satisfaction, the presence of maternal postpartum depression, a change in maternal employment status from the prepartum to postpartum period, the presence of external support and infant temperament are collectively combined to impinge on the

father's adjustment to parenthood.

Paternal prepartum marital satisfaction and the infant temperament subcategories adaptability, distractibility and persistence significantly predicted paternal stress, when all of the variables were entered into the equation. collectively. Belsky (1984) argued that the relationship which exists between the infant and the parent is a system which is well buffered and mediated by numerous domains. The strength of the system is such that the weakness of one entity (e.g., infant temperament) will be supported or compensated by the strength of other contributing entities. It is for this reason that it is important to research the many contributing variables effecting the presence of paternal stress during the adjustment process to parenthood. Each of the predictive variables are influenced by the other variables and each variable needs to be understood solely and in its relationship within the infant-parent system.

Exploratory Analysis

An exploratory analysis was conducted in order to identify those subscales of paternal prenatal dyadic adjustment which were influential in predicting stress. Among the 4 dyadic adjustment subscales: affectional expression, dyadic cohesion, dyadic consensus and dyadic satisfaction, only dyadic satisfaction was predictive of paternal stress. As prepartum paternal dyadic satisfaction scores increased, postpartum paternal stress scores also increased. The fear of change in the quality of the relationship prepartum, may

increase paternal stress postpartum.

There was a significant positive zero-order correlation between the two prepartum paternal dyadic adjustment subscales affectional expression and dyadic cohesion, and the presence of postpartum paternal stress, in a positive direction. Such findings were consistent with Short Tomlinson (1986) and Belsky et.al., (1983) who reported that babies exert the greatest impact on a couples affectional expression including marital communication, sex, and affection, shortly after the birth of the infant. The decline in the dyadic cohesion subscale further suggests that as affectional expression decreases, mutual agreements regarding handling couple as well as parenting matters also decrease. Thus, fathers who rated a higher quality of prepartum affectional expression and dyadic cohesion, may report greater stress as the quality of these subscales are impacted following the delivery of the infant.

Another exploratory analysis was conducted to identify if the direction of the violated expectations influenced the presence of stress. Belsky, Ward & Rovine (1986) found that the transition to parenthood yielded more stress and paternal adjustment problems, when the actual parenting experience was more difficult than previously perceived. Violated expectations scores were recoded on a negative to positive continuum. Negative scores signified that the violated expectations grew from the prepartum to postpartum period. The exploratory analysis did not identify any statistical

significance in the direction of the violated expectation being predictive of stress.

Limitations of the study

Several aspects of the methodology limit the generalizability of these findings. First, the present study reflects a small, predominantly homogeneously white and higher educated middle class sample. The majority of couples who volunteered to participate were highly motivated to assume the parental role and accept parenting responsibilities. Thus, such a narrow and uniform sample restricts the generalizability to different socioeconomic groups, with varied educational backgrounds, and different attitudes and coping skills needed to prevent and/or reduce the stress associated with becoming a father.

Another important limitation of the study was that paternal psychological stress was not addressed prenatally, since postnatal paternal stress may have been present prior to the birth of the infant. It would be important to design a study in which paternal stress could be accounted for prenatally in order to identify and document changes in the stress level and intervening variables which exacerbate such stress.

Although several of the hypothesized results were significant, the small sample size precluded a clear understanding of the other variables which may have further predicted the paternal stress. Many interesting patterns of correlations emerged from the analyses but were limited in

precision and statistical power due to the small sample size.

Implications for prevention and education

This study identified that infant temperament and paternal marital satisfaction, prepartum, were both significant variables which predicted postpartum paternal stress. The higher the paternal assessment of the quality of the marriage prepartum, the greater the experience of postpartum paternal stress, during the transition to parenthood. Paternal expectations impact the infant who joins the relationship, the new role each parent engages in with each other and feelings of self worth each parent maintains for themselves (Belsky, Spanier & Rovine, 1983). Providers of education and intervention programs for new parents must consider the importance of assessing the individuals and couples marital satisfaction, and expectations regarding becoming a parent and feelings regarding the actual parental experience and expectations regarding infant behavior based on infant temperament characteristics. It is important to determine which violated expectations will have a negative impact on the relationship with the infant, the marriage and the fathers' view of himself. Education and prevention programs may decrease the magnitude of paternal stress by informing participants of appropriate expectancies and identifying which feelings, attitudes and behaviors (of the individual, dyad and triad) to be concerned about. Education programs should also focus attention toward increasing paternal participation in infant care, thus increasing

maternal marital satisfaction, and therefore yielding the experience of less paternal stress.

Conclusion

It is believed that paternal adjustment during the transition to parenthood has a significant impact on the father's feelings of self-worth, the relationship he develops with his infant, and the relationship he engages in with his wife. This study attempted to address whether specific variables predicted the presence of postpartum paternal stress. This study identified that paternal prepartum marital satisfaction and infant temperament, significantly predicted postpartum paternal stress. Although the other predictive variables including, violated expectations, postpartum maternal and paternal marital satisfaction, postpartum depression, change in maternal employment and the presence of external support did not predict paternal stress, this may be due to limitations in the sample size or restrictions of the instrumentations themselves.

Each of the variables assessed in the prediction of stress have been identified by previous research to impact upon adjustment during the transition to parenthood. This study differed in that the focus was on paternal adjustment during the transition to parenthood, and the study was a multifaceted collaborative approach to predicting, identifying and hopefully reducing postpartum paternal stress.

Appendix A
Letter of Introduction

LETTER OF INTRODUCTION FOR RESEARCH STUDY

My name is Linda Sucher. I am a psychologist, and currently a doctoral candidate at Wayne State University. I would like to invite you to participate in my dissertation study which is concerned with factors which affect first-time father's adjustment to parenthood.

You have been selected to participate in this study because you are married, living with your spouse, in your third trimester of pregnancy, and pregnant with your first child. If you and your spouse choose to participate, you will be ask to fill out the enclosed questionnaires (blue form for the father and pink form for the mother) and return them to me as quickly as possible in the stamped, self-addressed envelope provided. Also please fill out the white form with your name address and phone number so the postnatal phase questionnaires can be mailed to you following the birth of your infant, and sign (and return) the Letter of Informed Consent. It is crucial that each form be filled out in a confidential manner, without assistance or shared opinion from your spouse.

Following the birth of your infant please send me the enclosed postcard. Within approximately 8 weeks a second set of questionnaires will be mailed to you and your spouse. These questionnaires contain information about adjusting to new parenthood, the temperament of the infant, and how this adjustment is affecting your marital relationship. Please fill these out and return them to me in the stamped, self-addresses envelope, within one week. If at any time you no longer wish to participate in the study, please contact me and all of the information I have will be destroyed.

All of the information which is collected during this study will only be used for the purpose of this study and will be kept in the strictest of confidence. Your privacy will be protected. All forms will contain a pre-printed code number for identifying purposes.

Although you will not be compensated monetarily, the primary purpose of your participation is to provide useful information which may aide future parents in their transition to parenthood. If you and your spouse choose to participate please fill out the following forms which include (1) Name & Address Form (white), (2) the Informed Consent Form (white) and (3) the blue (husband) and pink (wife) questionnaires. Please return these forms to me as soon as possible.

If you have any questions please contact me by mail or by telephone:

Linda Sucher
32332 Wayburn West
Farmington Hills, MI. 48334
(810) 489-9696

Thank you very much for your cooperation and participation.

Appendix B
Summary of Instructions

Summary of Instructions

1. Included please find the Letter of Introduction for both the husband and wife to read. This letter includes a brief description of the reasons for this study, as well as pertinent information regarding participation procedures, confidentiality requirements and the ability to terminate participation at anytime during the study. Following careful review of this letter, each participant is required to sign the enclosed Informed Consent Form which states that the criteria above have been reviewed.
2. If both the husband and the wife agree to participate:
 - A. Either husband or wife may fill out the WHITE form;
 - B. Husband ONLY should fill out the BLUE forms, confidentially, after reading the instructions carefully;
 - C. Wife ONLY should fill out the PINK forms, confidentially after reading the instructions carefully.
3. Please return the INFORMED CONSENT, WHITE, BLUE, and PINK forms to me, in the envelope provided, as quickly as possible, preferably within one week.
4. Please feel free to call me if you have any questions about the study (810-489-9696 or 810-642-6066).
5. Please keep the enclosed BIRTH ANNOUNCEMENT CARD to be filled out and sent back soon after the baby is born.

Upon receiving this card and within 8 weeks after the birth of your baby I will send you another packet of questionnaires, again blue for the husband, and pink for the wife. Please complete these and send them back to me as quickly as possible in the enclosed self-addressed, stamped envelope.

6. **THANK YOU VERY MUCH FOR YOUR COOPERATION!!!**

Linda D. Sucher, M.A.
Limited License Psychologist

Appendix C
Informed Consent

**TITLE: FACTORS AFFECTING PATERNAL ADJUSTMENT
IN THE TRANSITION TO PARENTHOOD**

PRINCIPAL INVESTIGATOR: LINDA D. SUCHER, M.A.

INFORMED CONSENT FORM

We, the undersigned, have been informed of the purposes and procedures involved in this research study (Letter of Introduction) investigating factors which may affect first-time fathers adjustment to parenthood. We are aware of the fact that this study involves filling out a series of questionnaires. We agree to fill out these questionnaires without discussing them with our spouses and to mail them back to the investigator in the envelopes provided. We understand that all of our information that we provide to the investigator is strictly confidential, will be placed in a locked cabinet, and will be available only to the researcher. We understand that we are free to terminate our participation in this study at any time, and there are no known risks nor benefits to us from participating in this study. We are aware that if we have any questions concerning our participation in this study, now or in the future, Linda D. Sucher, M.A. may be contacted at (248) 489-9696. Further, if we have any questions regarding our rights as research subjects, Dr. Peter A. Lichtenberg, Chairman of the Human Investigation Committee can be contacted at (313) 577-5174.

TITLE: FACTORS AFFECTING PATERNAL ADJUSTMENT
IN THE TRANSITION TO PARENTHOOD

We have read the above information. The contents and meaning of this information has been fully explained and understood. As such, we hereby consent and voluntarily offer to follow the study requirements and take part in the study. We further understand that we will receive a signed copy of this consent form.

Signed: _____ Date: _____, 1996

Signed: _____ Date: _____, 1996

Witnessed By: _____ Date: _____, 1996

Investigator: _____ Date: _____, 1996

For couples who are having difficulty adjusting to parenting, please contact your physician for assistance.

Appendix D
Name & Address Form

NAME AND ADDRESS FORM

Name of Husband and Wife Date

Current Address: _____

Telephone Number: _____

Couple Participant Code Number: _____

Appendix E
Birth Announcement Postcard

BIRTH ANNOUNCEMENT POSTCARD

I've Arrived!

Baby's Name: _____

Baby's Date of Birth: _____

Baby's Sex: _____ (Female) _____ (Male)

Has your phone/address recently changed? _____

Current address and phone number if different
since the Prenatal Questionnaire:

Couple Participant Code Number: _____

Appendix F
Expectant Father's Questionnaire

Expectant Father's Questionnaires

Instructions

Please fill out the questionnaires to the best of your ability. Be as honest as possible when answering the questions. Please complete the questions by yourself and do not ask your spouse for their response to your questions. Your answers will be kept strictly confidential.

Linda D. Sucher, M.A., L.L.P.

Code # _____

Date _____

Please complete the following questions.

1. Sex: Female _____ Male _____
2. Age: _____ years _____ months
3. Marital Status: (check one)
 - _____ married and living with spouse
 - _____ separated
 - _____ divorced
 - _____ widowed
 - _____ never been married
4. What is your race? (check one)
 - a. Caucasian _____
 - b. African American _____
 - c. Hispanic _____
 - d. Asian _____
 - e. Bi-racial _____
 - f. Other _____
5. Education:
 - Level of School Completed (please check):
 - _____ less than seventh grade
 - _____ junior high school (9th grade)
 - _____ partial high school (10th or 11th grade)
 - _____ high school graduate (whether private preparatory, parochial, trade, or public school)
 - _____ partial college (at least one year) or specialized training
 - _____ standard college or university graduation
 - _____ graduate professional training
5. Occupation: Full-time _____ Part-time _____
 Unemployed _____ Retired _____
 Occupational Title: (please be as specific as possible): _____
 Spouse's Employment Status: Full-time _____
 Part-time _____
 Unemployed _____
 Retired _____
 Spouse's Occupational Title: (please be as specific as possible): _____

6. What is your family's combined yearly income? (check one)
- a. Less than \$25,000 _____
 - b. \$25,000 to \$50,000 _____
 - c. \$50,000 to \$75,000 _____
 - d. \$75,000 to \$100,000 _____
 - e. \$100,000 to \$250,000 _____
 - f. \$250,000 or greater _____

7. Which of the following statements best describes how you feel about this pregnancy: (circle one)
- a. I really wanted my wife to get pregnant at this time.
 - b. It didn't matter if my wife got pregnant at this time.
 - c. I did not want my wife to get pregnant at this time.

8. Expected date of delivery: _____

9. Do you want: (circle one)
- a. a girl
 - b. a boy
 - c. no preference

10. What preparation have you had for parenthood?
(List books you have read, classes, etc.)

11. How many times have you been an expectant father? _____

12. What was the outcome of each of these pregnancies?

Listed below are a number of circumstances or conditions which husbands and wives often talk about in terms of their family or their personal relationship. Please use the scale below to indicate how you feel you and/or your spouse will be influenced by the birth of your baby.

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
1. I am happy about this pregnancy.	1	2	3	4	5
2. I will have enough energy to do whatever I want to do after the baby is born.	1	2	3	4	5
3. The baby will give me a new purpose for living.	1	2	3	4	5
4. My spouse and I will be able to get out of the house and do the things we want to do after the baby is born.	1	2	3	4	5
5. Even though postpartum depression is a biological reaction to the birth, I do not expect it to affect my wife much.	1	2	3	4	5
6. My spouse will be as sexually responsive to me after the birth as before the pregnancy.	1	2	3	4	5
7. Complaints about the demands and long hours required by parenthood are exaggerated.	1	2	3	4	5
8. Our family finances will be adequate to meet any costs that come up after the baby is born.	1	2	3	4	5
9. When I go out without the baby, I will worry about him/her.	1	2	3	4	5
10. I feel confident about my ability as a parent.	1	2	3	4	5
11. My spouse and I have a good marital relationship.	1	2	3	4	5
12. The baby will make me appreciate my parents more.	1	2	3	4	5
13. The baby will make me appreciate my in-laws more.	1	2	3	4	5
14. It will be easy to take the baby with us when we go places.	1	2	3	4	5
15. The baby will take precedence over my spouse most of the time.	1	2	3	4	5
16. The baby will make my spouse and me feel more like a family.	1	2	3	4	5
17. The baby will be fun to play with.	1	2	3	4	5

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
18. We will continue with our normal social life after the baby is born.	1	2	3	4	5
19. My parents will interfere with how I choose to care for the baby.	1	2	3	4	5
20. My in-laws will interfere with how I choose to care for the baby.	1	2	3	4	5
21. I expect to be quite satisfied with my parenting role.	1	2	3	4	5
22. I would not feel comfortable leaving the baby with a sitter in order to return to work if I decided to.	1	2	3	4	5
23. The baby will make my spouse and I drift apart.	1	2	3	4	5
24. My wife's physical appearance and general attractiveness will not be any different after the baby is born than it was before the pregnancy.	1	2	3	4	5
25. There will be no appreciable increase in housework after the baby is born.	1	2	3	4	5
26. My spouse will always be more important to me than our children.	1	2	3	4	5
27. I will be proud of the baby's growth and development.	1	2	3	4	5
28. I will be reluctant to lease the baby with a sitter.	1	2	3	4	5
29. The baby will make my spouse and I closer.	1	2	3	4	5

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 using the scale below from 0 to 5.

	Always Agree	Almost Always Agree	Occasionally Disagree	Frequently Disagree	Almost Always Disagree	Always Disagree
1. Handling family finances	5	4	3	2	1	0
2. Matters of recreation	5	4	3	2	1	0
3. Religious matters	5	4	3	2	1	0
4. Demonstrations of affection	5	4	3	2	1	0
5. Friends	5	4	3	2	1	0
6. Sex relations	5	4	3	2	1	0
7. Conventuality (correct or proper behavior)	5	4	3	2	1	0
8. Philosophy of life	5	4	3	2	1	0
9. Ways of dealing with parents or in-laws	5	4	3	2	1	0
10. Aims, goals, and things believed important	5	4	3	2	1	0
11. Amount of time spent together	5	4	3	2	1	0
12. Making major decisions	5	4	3	2	1	0
13. Household tasks	5	4	3	2	1	0
14. Leisure time interests and activities	5	4	3	2	1	0
15. Career decisions	5	4	3	2	1	0
	All the time	Most of the time	More often than not	Occasionally	Rarely	Never
16. How often do you discuss or have you considered divorce, separation, or terminating your relationship?	0	1	2	3	4	5
17. How often do you or your mate leave the house after a fight?	0	1	2	3	4	5
18. In general, how often do you think that things between you and your partner are going well?	5	4	3	2	1	0
19. Do you ever regret that you married? (or lived together?)	0	1	2	3	4	5
20. How often do you and your partner quarrel?	0	1	2	3	4	5
21. How often do you and your mate "get on each other's nerves?"	0	1	2	3	4	5
22. Do you kiss your mate?	EveryDay	Almost EveryDay	Occasionally	Rarely	Never	
23. Do you and your mate engage in outside interests together?	4	3	2	1	0	
	All of them	Most of them	Some of them	VeryFew of them	None of them	
	4	3	2	1	0	

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
0	1	2	3	4	5
0	1	2	3	4	5
0	1	2	3	4	5
0	1	2	3	4	5

- 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. 0 1 Being too tired for sex.
- 30. 0 1 Not showing love.
- 31. 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 best 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	perfectly happy

32. Which of the following statements best describes how you feel about the future of your relationship?

- 5 I want desperately for my relationship to succeed, and would go to almost any length to see that it does.
- 4 I want very much for my relationship to succeed, and will do all I can to see that it does.
- 3 I want very much for my relationship to succeed, and will do my fair share to see that it does.
- 2 It would be nice if my relationship succeeded, but I can't do much more than I am doing now to keep the relationship going.
- 1 It would be nice if it succeeded, but I refuse to do any more than I am doing now to keep the relationship going.
- 0 My relationship can never succeed, and there is no more that I can do to keep the relationship going.

Appendix G
Expectant Mother's Questionnaire

Expectant Mother's Questionnaires**Instructions**

Please fill out the questionnaires to the best of your ability. Be as honest as possible when answering the questions. Please complete the questions by yourself and do not ask your spouse for their response to your questions. Your answers will be kept strictly confidential.

Linda D. Sucher, M.A., L.L.P.

Code # _____

Date _____

Please complete the following questions.

1. Sex: Female _____ Male _____
2. Age: _____ years _____ months
3. Marital Status:
 - _____ Married and living with spouse
 - _____ Separated
 - _____ Divorced
 - _____ Widowed
 - _____ Never been married
4. What is your race? (check one)
 - a. Caucasian _____
 - b. African American _____
 - c. Hispanic _____
 - d. Asian _____
 - e. Bi-racial _____
 - f. Other _____
4. Education: (Please check level of school completed)
 - _____ less than seventh grade
 - _____ Junior High School (9th grade)
 - _____ Partial High School (10th or 11th grade)
 - _____ High School Graduate (whether private preparatory, parochial, trade or public school)
 - _____ Partial college (at least one year) or specialized training
 - _____ Standard college or university graduation
 - _____ Graduate professional training (graduate degree)
5. Occupation: Full-time _____ Part-time _____
 Unemployed _____ Retired _____
 Occupational Title: (please be as specific as possible) _____
 Spouse's Employment Status: Full-time _____ Part-time _____
 Unemployed _____ Retired _____
 Spouse's Occupational Title: (please be as specific as possible) _____
6. What is your family's combined yearly income? (check one)
 - a. Less than \$25,000 _____
 - b. \$25,000 to \$50,000 _____
 - c. \$50,000 to \$75,000 _____
 - d. \$75,000 to \$100,000 _____
 - e. \$100,000 to \$250,000 _____

7. Which of the following statements best describes how you feel about this pregnancy: (circle one)
- a. I really wanted to get pregnant at this time.
 - b. It didn't matter if I got pregnant at this time.
 - c. I did not want to get pregnant at this time.
8. Expected date of delivery: _____
9. Do you want: (circle one)
- a. a girl
 - b. a boy
 - c. no preference
10. What preparation have you had for parenthood?
(List books you have read, classes, etc.)
- _____
- _____
11. Is this your first pregnancy? _____
12. How many times have you been pregnant? _____
13. What was the outcome of each of these pregnancies?
- _____
- _____
- _____

Appendix H
Summary of Instructions-Postnatal

Summary of Instructions-Postnatal

Thank you for participating in the prenatal phase of my research study. Congratulations on the birth of your infant and for graduating into the postnatal phase of this study. Enclosed please find the postnatal questionnaires, and as before, the pink questionnaire is for mom and the blue questionnaire packet is for dad. The PSI instruction/questionnaire booklet and answer sheet is also for dad, but due to copyright specifications it could not be duplicated onto blue paper. Please fill out all of these forms, confidentially, as quickly as possible (although I am sure you are quite busy) and return them to me in the envelope provided. Also, please remember to return the PSI instruction/questionnaire booklet. I sincerely appreciate your participation in helping complete my dissertation. If I can be of any assistance please do not hesitate to contact me.

Thank you very much again,

Linda D. Sucher, M.A.
Limited License Psychologist
(248) 489-9696

Appendix I
Father's Questionnaire

Father's Questionnaire

Please complete the following questions.

1. Baby's Date of Birth: _____

2. Baby's Sex: Female _____ Male _____

3. Were there any complications during delivery? (if so please list)

4. What type and amount of external support did you receive following the birth of your infant (i.e. nanny, nurse, relatives, friends etc...) PLEASE BE AS SPECIFIC AS POSSIBLE

5. Is your wife currently working outside of the home?

_____ Yes _____ No

Full-time _____ Part-time _____

Occupational Title _____

NOTE TO USERS

Page(s) not included in the original manuscript are unavailable from the author or university. The manuscript was microfilmed as received.

UMI

- 17. We have continued with our normal social life since the baby was born. --1-- --2-- --3-- --4-- --5--
- 18. My parents interfere with how I choose to care for the baby. --1-- --2-- --3-- --4-- --5--
- 19. My in-laws interfere with how I choose to care for the baby. --1-- --2-- --3-- --4-- --5--
- 20. I am quite satisfied with my parenting role. --1-- --2-- --3-- --4-- --5--
- 21. I do not feel comfortable leaving the baby with a sitter in order to return to work, if my wife decides to. --1-- --2-- --3-- --4-- --5--
- 22. The baby has made my spouse and me drift apart. --1-- --2-- --3-- --4-- --5--
- 23. My wife's physical appearance and general attractiveness are not any different since the baby was born than before the pregnancy. --1-- --2-- --3-- --4-- --5--
- 24. There has been no appreciable increase in the housework since the baby was born. --1-- --2-- --3-- --4-- --5--
- 25. My spouse will always be more important to me than our children. --1-- --2-- --3-- --4-- --5--
- 26. I feel proud of the baby's growth and development. --1-- --2-- --3-- --4-- --5--
- 27. I am reluctant to leave the baby with a sitter. --1-- --2-- --3-- --4-- --5--
- 28. The baby has made my spouse and me closer. --1-- --2-- --3-- --4-- --5--
- 29. My spouse and I are able to get out of the house and do the things we want to do since the baby was born. --1-- --2-- --3-- --4-- --5--
- 30. Please rate the items below in terms of how much you feel they have been problems for you. --1-- --2-- --3-- --4-- --5--

a. Exhaustion and fatigue	Extreme	2	Moderate	3	Slight	4	5
b. Additional housework	1	2	3	4	5		
c. Confidence as a parent	1	2	3	4	5		
d. Decreased sexual responsiveness of self or spouse	1	2	3	4	5		
e. Interference from parents or in-laws	1	2	3	4	5		
f. Lack of social life	1	2	3	4	5		
g. Less amount of time available for spouse	1	2	3	4	5		
h. Confinement to the house	1	2	3	4	5		
i. Increased money problems	1	2	3	4	5		
j. Upset schedules and routines	Extreme	2	Moderate	3	Slight	4	5
k. Work and time involved in parenting	1	2	3	4	5		

is soiled with bowel movement.

- | | | |
|-----|---|-------------|
| 10. | The infant lies still (little squirming) during hair brushing. | 1 2 3 4 5 6 |
| 11. | The infant gets sleepy at about the same time each evening (within 1/2 hour). | 1 2 3 4 5 6 |
| 12. | The infant appears bothered (cries, squirms) when first put down to sleep in a different place than usual. | 1 2 3 4 5 6 |
| 13. | The infant resists (squirms, pulls away) hair brushing. | 1 2 3 4 5 6 |
| 14. | The infant vigorously cries when sleepy. | 1 2 3 4 5 6 |
| 15. | The infant is pleasant (coos, smiles) during face washing. | 1 2 3 4 5 6 |
| 16. | The infant will continuously look at mobile or toy in crib for 5 minutes or more. | 1 2 3 4 5 6 |
| 17. | The infant continues to resist when getting dressed and undressed despite efforts to distract him/her (signing, talking). | 1 2 3 4 5 6 |
| 18. | The infant reacts even to gentle touch (startles, laughs, wiggles). | 1 2 3 4 5 6 |
| 19. | The infant moves about much (kicks, waves arms, squirms) during dressing and undressing. | 1 2 3 4 5 6 |
| 20. | The infant wants and takes feedings at about the same times (within one hour) day tot day. | 1 2 3 4 5 6 |
| 21. | The infant objects (cries, frets) if someone other than main caregiver gives care. | 1 2 3 4 5 6 |
| 22. | The infant adjusts to change in sleep time within 2 or 3 days. | 1 2 3 4 5 6 |
| 23. | The infant displays much feeling (vigorous smile or cry) when dressing and undressing. | 1 2 3 4 5 6 |
| 24. | The infant is fussy during a bath (cries, frowns). | 1 2 3 4 5 6 |
| 25. | The infant will continuously watch parents during diaper changing. | 1 2 3 4 5 6 |
| 26. | If fussing in bath, infant will continue to protest despite efforts to quiet him (talking, singing to him/her). | 1 2 3 4 5 6 |
| 27. | The infant reacts (startles, stares) to sudden change in lighting (turning on light). | 1 2 3 4 5 6 |
| 28. | The infant lies still (little kicking, splashing) in bath. | 1 2 3 4 5 6 |

- | | |
|---|-------------|
| 29. The infant's time of waking in the morning varies greatly (by 1 hour or more) from day to day. | 1 2 3 4 5 6 |
| 30. The infant turns head away and looks for mother when held by new person. | 1 2 3 4 5 6 |
| 31. The infant adjusts to change in place of sleeping within 2 or 3 days. | 1 2 3 4 5 6 |
| 32. The infant displays much feeling (vigorous smile or cry) during diapering. | 1 2 3 4 5 6 |
| 33. The infant is fussy when put down for sleep (cries, frets). | 1 2 3 4 5 6 |
| 34. The infant continuously watches parents during changing of clothes. | 1 2 3 4 5 6 |
| 35. The infant's hungry cry can be stopped for over a minute by picking up or giving pacifier. | 1 2 3 4 5 6 |
| 36. The infant reacts (startles, cries) to sudden loud noises. | 1 2 3 4 5 6 |
| 37. The infant moves much (squirms, bounces) when lying awake in crib. | 1 2 3 4 5 6 |
| 38. The infant takes daytime naps at differing times (over 1 hour difference) from day to day. | 1 2 3 4 5 6 |
| 39. The infant does not feed well (fusses) when in new situation. | 1 2 3 4 5 6 |
| 40. The infant objects (fusses, squirms) to being bathed by a different person even after 2 or 3 tries. | 1 2 3 4 5 6 |
| 41. The infant is noisy (vocalizing loudly) on waking up. | 1 2 3 4 5 6 |
| 42. The infant is fussy when burped (cries, fusses) during feeding. | 1 2 3 4 5 6 |
| 43. The infant persistently (over 5 minutes) watches parent's face while parent is talking or singing. | 1 2 3 4 5 6 |
| 44. The infant can be distracted (singing, patted) from fussing or squirming during hair brushing. | 1 2 3 4 5 6 |
| 45. The infant notices (quiets, turns head) to music or voices in the next room. | 1 2 3 4 5 6 |
| 46. The infant moves about much (kicks, waves arms, squirms) during diapering. | 1 2 3 4 5 6 |
| 47. The infant wants an extra feeding at a different time each day (over 1 hour difference). | 1 2 3 4 5 6 |
| 48. The infant accepts right away a change in time of feeding. | 1 2 3 4 5 6 |

- | | |
|--|-------------|
| 49. The infant resists change in feeding schedule (1 hour or more) even after two tries. | 1 2 3 4 5 6 |
| 50. The infant cries loudly when diaper is soiled with bowel movement. | 1 2 3 4 5 6 |
| 51. The infant lies quietly, making happy noises upon waking. | 1 2 3 4 5 6 |
| 52. The infant continuously turns head toward the sound of a person talking (for 5 minutes or more). | 1 2 3 4 5 6 |
| 53. The infant can be soothed (patted, rocked) when sleepy. | 1 2 3 4 5 6 |
| 54. The infant notices (reacts differently) to a change in person giving care. | 1 2 3 4 5 6 |
| 55. The infant moves much during feeding (squirms, kicks, waves arms). | 1 2 3 4 5 6 |
| 56. The infant sucks for the same amount of time during feeding (within 10 minutes). | 1 2 3 4 5 6 |
| 57. The infant accepts his/her bath any time or day without resisting. | 1 2 3 4 5 6 |
| 58. The infant cries during a bowel movement. | 1 2 3 4 5 6 |
| 59. The infant watches parent's face for less than a minute during parent-child play activity. | 1 2 3 4 5 6 |
| 60. The infant continues to cry when frightened despite several minutes of soothing (picked up, patted). | 1 2 3 4 5 6 |
| 61. The infant turns away from parents to look at noises or movements in the room. | 1 2 3 4 5 6 |
| 62. The infant lies still during nail cutting. | 1 2 3 4 5 6 |
| 63. The infant's period of greatest physical activity comes at different times of the day (morning, afternoon, evening). | 1 2 3 4 5 6 |
| 64. The infant resists (squirms, fusses) regular nail cutting. | 1 2 3 4 5 6 |
| 65. The infant smiles or coos during nail cutting. | 1 2 3 4 5 6 |
| 66. The infant amuses self for 15 minutes or more in crib (looking at doll or toy). | 1 2 3 4 5 6 |
| 67. The infant notices (startles) sudden movements or bumps when in stroller or carriage. | 1 2 3 4 5 6 |
| 68. The infant's day time naps are varied lengths from day to day (more than 1 half hour differences). | 1 2 3 4 5 6 |

- | | |
|---|-------------|
| 69. The infant resists (squirms, fusses) during routine dressing or undressing. | 1 2 3 4 5 6 |
| 70. The infant smiles or coos during hair washing. | 1 2 3 4 5 6 |
| 71. The infant acts the same when the diaper is wet or dry. | 1 2 3 4 5 6 |
| 72. The infant;s bowel movements are at the same time each day (within 1 hour). | 1 2 3 4 5 6 |
| 73. The infant accepts routine washing of diaper area. | 1 2 3 4 5 6 |
| 74. The infant is positive (smiles, coos) when he/she sees mother. | 1 2 3 4 5 6 |
| 75. The infant reacts (startles) to differences in the temperature of the bath water. | 1 2 3 4 5 6 |
| 76. The infant is fussy for several minutes after feedings. | 1 2 3 4 5 6 |

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 using the scale below from 0 to 5.

	Always Agree	Almost Always Agree	Occasionally Disagree	Frequently Disagree	Almost Always Disagree	Always Disagree
1. Handling family finances	5	4	3	2	1	0
2. Matters of recreation	5	4	3	2	1	0
3. Religious matters	5	4	3	2	1	0
4. Demonstrations of affection	5	4	3	2	1	0
5. Friends	5	4	3	2	1	0
6. Sex relations	5	4	3	2	1	0
7. Conventionality (correct or proper behavior)	5	4	3	2	1	0
8. Philosophy of life	5	4	3	2	1	0
9. Ways of dealing with parents or in-laws	5	4	3	2	1	0
10. Aims, goals, and things believed important	5	4	3	2	1	0
11. Amount of time spent together	5	4	3	2	1	0
12. Making major decisions	5	4	3	2	1	0
13. Household tasks	5	4	3	2	1	0
14. Leisure time interests and activities	5	4	3	2	1	0
15. Career decisions	5	4	3	2	1	0

	All the time	Most of the time	More than not	Occasionally	Rarely	Never
16. How often do you discuss or have you considered divorce, separation, or terminating your relationship?	0	1	2	3	4	5
17. How often do you or your mate leave the house after a fight?	0	1	2	3	4	5
18. In general, how often do you think that things between you and your partner are going well?	5	4	3	2	1	0
19. Do you confide in you mate?	5	4	3	2	1	0
20. Do you ever regret that you married? (or lived together?)	0	1	2	3	4	5
21. How often do you and your partner quarrel?	0	1	2	3	4	5
22. How often do you and your mate "get on each other's nerves?"	0	1	2	3	4	5

	EveryDay	Almost EveryDay	Occasionally	Rarely	Never
23. Do you kiss your mate?	4	3	2	1	0
24. Do you and your mate engage in outside interests together?	4	3	2	1	0

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	0	1	2	3	4	5
26. Laugh together	0	1	2	3	4	5
27. Calmly discuss something	0	1	2	3	4	5
28. Work together on a project	0	1	2	3	4	5

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. 0 Being too tired for sex.
 30. 0 Not showing love.
 31. 1 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 best describes the degree of happiness, all things considered, of your relationship.

0 1 2 3 4 5 6
 Extreme- fairly a little happy very extreme- perfect
 ly unhappy unhappy happy happy ly happy

32. Which of the following statements best describes how you feel about the future of your relationship?

- 5 I want desperately for my relationship to succeed, and would go to almost any length to see that it does.
4 I want very much for my relationship to succeed, and will do all I can to see that it does.
3 I want very much for my relationship to succeed, and will do my fair share to see that it does.
2 It would be nice if my relationship succeeded, but I can't do much more than I am doing now to keep the relationship going.
1 It would be nice if it succeeded, but I refuse to do any more than I am doing now to keep the relationship going.
0 My relationship can never succeed, and there is no more that I can do to keep the relationship going.

Appendix J
Mother's Questionnaire

Maternal Postpartum Questionnaire

Please complete the following questions:

1. Baby's Date of Birth: _____
2. Baby's Sex: Female _____ Male _____
3. Were there any complications during delivery? (if so please list and explain):

4. What type and amount of external support did you receive following the birth of your infant (i.e., nanny, nurse, relatives, friends, etc...). PLEASE BE AS SPECIFIC AS POSSIBLE

5. Are you currently working outside of the home?

_____ Yes _____ No

Full-time _____ Part-time _____

Occupational Title _____

What date did you return back to work? _____

Mother's Questionnaire

Listed below are a number of circumstances or conditions which husbands and wives often talk about in terms of their family or their personal relationship. Please use the scale below to indicate how you feel you and/or your spouse have been influenced by the birth of your baby. Check the category which best describes how you feel.

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
1. I was happy about this pregnancy.	--1--	--2--	--3--	--4--	--5--
2. I have enough energy to do whatever I want to do since the baby was born.	--1--	--2--	--3--	--4--	--5--
3. The baby has given me a new purpose for living.	--1--	--2--	--3--	--4--	--5--
4. Even though postpartum depression is a biological reaction to the birth, I did not experience it much.	--1--	--2--	--3--	--4--	--5--
5. My spouse is as sexually responsive to me now as before the pregnancy.	--1--	--2--	--3--	--4--	--5--
6. Complaints about the demands and long hours required by parenthood are exaggerated.	--1--	--2--	--3--	--4--	--5--
7. Our family finances have been adequate to meet the costs that have come up since the baby was born.	--1--	--2--	--3--	--4--	--5--
8. When I go without the baby, I worry about her/him.	--1--	--2--	--3--	--4--	--5--
9. I am confident about my ability as a parent.	--1--	--2--	--3--	--4--	--5--
10. My spouse and I have a good marital relationship.	--1--	--2--	--3--	--4--	--5--
11. The baby makes me appreciate my parents more.	--1--	--2--	--3--	--4--	--5--
12. The baby makes me appreciate my in-laws more.	--1--	--2--	--3--	--4--	--5--
13. It is easy to take the baby with us when we go places.	--1--	--2--	--3--	--4--	--5--
14. The baby takes precedence over my spouse most of the time.	--1--	--2--	--3--	--4--	--5--
15. The baby will make my spouse and I feel more like a family.	--1--	--2--	--3--	--4--	--5--

- 16. The baby is fun to play with. --1-- --2-- --3-- --4-- --5--
- 17. We have continued with our normal social life since the baby was born. --1-- --2-- --3-- --4-- --5--
- 18. My parents interfere with how I choose to care for the baby. --1-- --2-- --3-- --4-- --5--
- 19. My in-laws interfere with how I choose to care for the baby. --1-- --2-- --3-- --4-- --5--
- 20. I am quite satisfied with my parenting role. --1-- --2-- --3-- --4-- --5--
- 21. I do not feel comfortable leaving the baby with a sitter in order to return to work, if I decide to. --1-- --2-- --3-- --4-- --5--
- 22. The baby has made my spouse and me drift apart. --1-- --2-- --3-- --4-- --5--
- 23. My physical appearance and general attractiveness are not any different since the baby was born than before the pregnancy. --1-- --2-- --3-- --4-- --5--
- 24. There has been no appreciable increase in the housework since the baby was born. --1-- --2-- --3-- --4-- --5--
- 25. My spouse will always be more important to me than our children. --1-- --2-- --3-- --4-- --5--
- 26. I feel proud of the baby's growth and development. --1-- --2-- --3-- --4-- --5--
- 27. I am reluctant to leave the baby with a sitter. --1-- --2-- --3-- --4-- --5--
- 28. The baby has made my spouse and me closer. --1-- --2-- --3-- --4-- --5--
- 29. My spouse and I are able to get out of the house and do the things we want to do since the baby was born. --1-- --2-- --3-- --4-- --5--
- 30. Please rate the items below in terms of how much you feel they have been problems for you. --1-- --2-- --3-- --4-- --5--

	Extreme	2	Moderate	4	Slight
a. Exhaustion and fatigue	1	2	3	4	5
b. Additional housework	1	2	3	4	5
c. Confidence as a parent	1	2	3	4	5
d. Decreased sexual responsiveness of self or spouse	1	2	3	4	5
e. Interference from parents or in-laws	1	2	3	4	5
f. Lack of social life	1	2	3	4	5
g. Less amount of time available for spouse	1	2	3	4	5
h. Confinement to the house	1	2	3	4	5
i. Increased money problems	1	2	3	4	5
j. Upset schedules and routines	1	2	3	4	5
k. Work and time involved in parenting	1	2	3	4	5

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 using the scale below from 0 to 5.

	Always Agree	Almost Always Agree	Occasionally Disagree	Frequently Disagree	Almost Always Disagree	Always Disagree
1. Handling family finances	5	4	3	2	1	0
2. Matters of recreation	5	4	3	2	1	0
3. Religious matters	5	4	3	2	1	0
4. Demonstrations of affection	5	4	3	2	1	0
5. Friends	5	4	3	2	1	0
6. Sex relations	5	4	3	2	1	0
7. Conventionality (correct or proper behavior)	5	4	3	2	1	0
8. Philosophy of life	5	4	3	2	1	0
9. Ways of dealing with parents or in-laws	5	4	3	2	1	0
10. Aims, goals, and things believed important	5	4	3	2	1	0
11. Amount of time spent together	5	4	3	2	1	0
12. Making major decisions	5	4	3	2	1	0
13. Household tasks	5	4	3	2	1	0
14. Leisure time interests and activities	5	4	3	2	1	0
15. Career decisions	5	4	3	2	1	0
	All the time	Most of the time	More often than not	Occasionally	Rarely	Never
16. How often do you discuss or have you considered divorce, separation, or terminating your relationship?	0	1	2	3	4	5
17. How often do you or your mate leave the house after a fight?	0	1	2	3	4	5
18. In general, how often do you think that things between you and your partner are going well?	5	4	3	2	1	0
19. Do you confide in you mate?	5	4	3	2	1	0
20. Do you ever regret that you married? (or lived together?)	0	1	2	3	4	5
21. How often do you and your partner quarrel?	0	1	2	3	4	5
22. How often do you and your mate "get on each other's nerves?"	0	1	2	3	4	5
23. Do you kiss your mate?	EveryDay	Almost EveryDay	Occasionally	Rarely	Never	
	4	3	2	1	0	
24. Do you and your mate engage in outside interests together?	All of them	Most of them	Some of them	Very few of them	None of them	
	4	3	2	1	0	

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
0	1	2	3	4	5
0	1	2	3	4	5
0	1	2	3	4	5
0	1	2	3	4	5

- 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. 0 Being too tired for sex.
- 30. 0 Not showing love.
- 31. 1 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 best 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	perfectly happy

32. Which of the following statements best describes how you feel about the future of your relationship?

- 5 I want desperately for my relationship to succeed, and would go to almost any length to see that it does.
- 4 I want very much for my relationship to succeed, and will do all I can to see that it does.
- 3 I want very much for my relationship to succeed, and will do my fair share to see that it does.
- 2 It would be nice if my relationship succeeded, but I can't do much more than I am doing now to keep the relationship going.
- 1 It would be nice if it succeeded, but I refuse to do any more than I am doing now to keep the relationship going.
- 0 My relationship can never succeed, and there is no more that I can do to keep the relationship going.

References

- Abiden, R.R. (1981). The parenting stress index: A concurrent validity study using medical utilization data. Unpublished manuscript, Institute of Clinical Psychology, University of Virginia.
- Albrecht, S.L., Thomas, D.L., and Chadwick, B.A. (1980). Social Psychology. Prentice-Hall, Englewood Cliffs, NJ.
- Antonucci, T.C., and Mikus, K. (1988). The power of parenthood: Personality and attitudinal changes during the transition to parenthood. In G. Michaels and W. Goldberg (Eds.). The Transition to parenthood: Current Theory and Research. 62-84, Cambridge University Press, New York.
- Bandura, A., and Walters, R. (1963). Social Learning and Personality Development. Rinehart & Winston, New York.
- Bates, J.E., Freeland, C.A.B., and Lounsbury, M.L. (1979). Measurement of infant difficultness. Child Development, 50, 794-803.
- Belsky, J. (1984). The determinants of parenting: A process model. Child Development, 55, 83-96.
- Belsky, J. (1996). Parent, infant, and social-contextual antecedents of father-son attachment security. Developmental Psychology, 32 (5), 905-913.
- Belsky, J., Garduque, L., and Hrcir, E. (1984). Assessing performance, competence, and executive capacity in infant play: Relations to home environment and security of attachment. Developmental Psychology, 20, 406-417.
- Belsky, J., Lang, M.E., and Rovine, M. (1985). Stability and change in marriage across the transition to parenthood: A second study. Journal of Marriage and the Family, 47, 855-865.
- Belsky, J., Spanier, G., and Rovine, M. (1983). Stability and change in marriage across the transition to parenthood. Journal of Marriage and the Family, 45, 567-577.
- Belsky, J., Ward, M.J., and Rovine, M. (1986). Prenatal expectations, postnatal experiences, and the transition to parenthood. In R. Ashmore and D. Brodinsky (Eds.), Thinking about the family: Views of parents and children. 119-145. Hillsdale, NJ: Lawrence Erlbaum.
- Berk, R.A., and Berk, S.F. (1979). Labor and Leisure at Home: Content and Organization of the Household Day. Sage, Beverly

Hills, CA.

Bogren, L.Y. (1986). The couvade syndrome. International Journal of Family Psychiatry, 123-136.

Bon, P., and Lewis, M. (1974). Mothers and fathers, girls and boys: attachment behaviors in the one-year-old. Merrill-Palmer Quarterly, 20, 195-204.

Boukydis, C., and Burgess, R. (1982). Adult physiological response to infant cries: Effects of temperament in infants, parental status and gender. Child Development, 53, 1291-1298.

Broom, B.L., (1984). Consensus about the marital relationship during the transition to parenthood. Nursing Research, 33, 223-228.

Broussard, E., and Hartner, M. (1970). Maternal perception of the neonate as related to development. Child Psychiatry and Human Development, 16, 16-25.

Brown, P., Rustia, J., and Schappert, P. (1991). A comparison of fathers of high-risk newborns and fathers of healthy newborns. Journal of Pediatric Nursing, 6, 269-273.

Brunnquell, D., Crichton, L., and Egeland, B. (1981). Maternal personality and attitude in disturbances of child rearing. American Journal of Orthopsychiatry, 51, 680-691.

Burke, W.T., and Abiden, R.R. (1980). Parenting stress index (PSI): A family system assessment approach. In R.R. Abiden (Ed.) Parent Education and Intervention Handbook. Thomas, Springfield.

Burlingham, D. (1973). The pre-oedipal father-infant relationship. Psychoanalytic Study of the Child, 28, 23-47.

Calvert, B, and Stanton, W.R. (1992). Perceptions of parenthood: Similarities and differences between 15-year-old girls and boys. Adolescence, 27, 315-328.

Campbell, S.B., Cohn, J.F., Flanagan, C., Popper, S., and Meyers, T. (1992). Course and correlates of postpartum depression during the transition to parenthood. Development and Psychopathology, 4, 29-47.

Carey, W.B. (1986). The difficult child. Pediatrics in Review, 8 (2), 39-45.

Clarke-Stewart, A. (1980). The father's contribution to children's cognitive and social development. Pp. 111-146 in F.A. Pedersen (Ed.), The Father-Infant Relationship: Observational Studies in the Family Setting. Praeger, New

York.

Clarke-Stewart, K.A. (1978). And daddy makes three: The father's impact on mother and young child. Child Development, 44, 466-478.

Cowan, C.P., and Cowan, P.A. (in press). Men's involvement in parenthood: Identifying the antecedents and understanding the barriers. In P. Berman and F.A. Pedersen (Eds). Fathers' Transitions to Parenthood. Hillsdale, NJ: Erlbaum.

Cowan, C.P., Cowan, P.A., Coie, L., and Coie, J.D. (1978). The impact of a first child's birth on the couple's relationship. Pp. 296-324 in W.B. Miller and L.F. Newman (Eds). The First Child and Family Formation. Chapel Hill: Carolina Population Center, University of North Carolina.

Cowan, C.P., Cowan, P.A., Homing, G., Garrett, E., Coyish, W.S., Curtis-Boles, H., and Boles III, A.J. (1985). Transition to parenthood: His, hers and theirs. Journal of Family Issues, 6, 451-481.

Cowan, P.A., and Cowan, C.P. (1983). Quality of couple relationships and parenting stress in beginning families. Presented at meetings for the Society for Research in Child Development, Detroit.

Cox, M., Owen, M., Handerson, V., and Margand, N. (1992). Prediction of infant-father and infant-mother attachment. Developmental Psychology, 28, 474-483.

Coyish, W.S. (1983). Factors influencing men's roles in caring for their children and the effects of father involvement. Unpublished doctoral dissertation, University of California, Berkeley.

Crockenberg, S.B. (1981). Infant irritability, mother responsiveness, and social support influences on the security of infant-mother attachment. Child Development, 52, 857-869.

Crockenberg, S.B. (1986). Are temperamental differences in babies associated with predictable differences in care giving? In J.V. Lerner and R.M. Lerner (Eds). Temperament and Social Interaction During Infancy and childhood. Pp. 53-73. San Francisco: Jossey-Bass.

Cummings, T. (1976). The impact of the child's deficiency on the father: a study of fathers of mentally retarded and of chronically ill children. American Journal of Orthopsychiatry, 46, 246-255.

Curry, D. (1991, April). The relationship between separation anxiety and mental health in fathers and mothers at three

months. Paper presented at the meeting of the Society for Research in Child Development, Seattle, WA.

Darling-Fisher, C., and Tiedje, L. (1990). The impact of maternal employment characteristics on fathers' participation in child care. Family Relations, 39, 20-26.

Davis, A. & De Luccie, M. (1989). Determinants of fathering: Child competence and temperament. Poster presented at the Biennial Meeting of the Society for Research in Child Development, Kansas City, Mo.

De Luccie, M. (1996). Predictors of paternal involvement and satisfaction. Psychological Reports, 79, 1351-1359.

De Luccie, M. (1995). Mothers: Influential agents in father-child relations. Genetic, Social and General Psychology Monographs, 287-307.

Deutsch, H. (1949). An introduction to the discussion of the psychological problems of pregnancy. In M.J. Senn (Ed.), Problems of Early Infancy. Josiah Macy, Jr. Foundation, New York.

Dragonas, T., Thorpe, K., and Golding, J. (1992). Transition to fatherhood: A cross-cultural comparison. Journal of Psychosomatic obstetrics and Gynaecology, 13, 1-19.

Dyer, E.D. (1963). Parenthood as crisis: A re-study. Marriage and Family Living, 25, 196-201.

Easterbrooks, M.A., and Goldberg, W.A. (1984). Toddler development in the family: Impact of father involvement and parenting characteristics. Child Development, 55, 740-752.

Erikson, E.H. (1959). Identity and the life cycle: Selected papers. Psychological Issues Monograph Series, I. International Universities, New York.

Erikson, E.H. (1965). Eight ages of man. Childhood and Society. 239-268. London, Penguin Books.

Fawcett, J.T. (1988). The value of children and the transition to parenthood. Marriage and Family Review, 13, 11-33.

Fein, G., Gariboldi, A., and Boni, R. (1993). Antecedents of maternal separation anxiety. Merrill-Palmer Quarterly, 39, 481-495.

Feldman, S.S. (1984). Predicting strain in mothers and fathers of 6 month old infants: A short term longitudinal study. In F. Pedersen and P. Berman (Eds). Becoming a

- Father. Erlbaum, Hillsdale, New Jersey.
- Feldman, S.S., and Nash, S.C. (1984). The transition from expectancy to parenthood--impact of the firstborn child on men and women. Sex Roles, 11, 61-78.
- Feldman, S.S., and Nash, S.C. (1985). Antecedents of early parenting. In A.D. Fogel and G.F. Nelson (Eds.), Origins of Nurturance. Erlbaum, Hillsdale, NJ.
- Feldman, S.S., Nash, S.C., and Aschenbrenner, B.G. (1983). Antecedents of fathering. Child Development, 54, 1628-1636.
- Fleming, A.S., Flett, G.L., Ruble, D.N., and Wagner, V.V. (1990). Adjustment in first-time mothers: Changes in mood and mood content during the early postpartum months. Developmental Psychology, 26, 137-143.
- Fishbein, E.G. (1984). Expectant father's stress--Due to the mother's expectations? Journal of Obstetric, Gynecologic and Neonatal Nursing, 13, 325-328.
- Garrett, E. (1983). Women's expectations of early parenthood: Expectations versus reality. Paper presented at the American Psychological Association Meetings, Anaheim, CA.
- Gibaud-Wallston, A., and Wandersman, L.P. (1978 August/September). Development and utility of the parenting sense of competence scale. Paper presented at the 86th annual meeting of the American Psychological Association, Toronto, Canada.
- Glass, J. (1983). Pre-birth attitudes and adjustment to parenthood: When 'preparing for the worst' helps. Family Relations, 32, 377-386.
- Glenn, N.D., and McLanahan, S. (1982). Children and marital happiness: A further specification of the relationship. Journal of Marriage and the Family, 44, 63-72.
- Goldberg W., & Easterbrooks, M. (1984). The role of marital quality in toddler development. Developmental Psychology, 20, 504-514.
- Goldberg, S. (1983). Parent-infant bonding: Another look. Child Development, 54, 1355-1382.
- Goldberg, W.A., Michaels, G.Y., and Lamb, M.E. (1985). Husbands' and wives' adjustment to pregnancy and first parenthood. Journal of Family Issues, 6, 483-503.
- Gotlib, I.H., Whiffen, V.E., Wallace, P.M., and Mount, J.H. (1991). Prospective investigation of postpartum depression:

Factors involved in onset and recovery. Journal of Abnormal Psychology, 100, 122-132.

Grossman, F.K. (in press). Separate and together: Men's autonomy and affiliation in the transition to parenthood. In F. Pedersen and P. Berman (Eds.) Men's Transition to Parenthood. Erlbaum, Hillsdale, NJ.

Grossman, F.K. (1988). Strain in the transition to parenthood. Transitions to parenthood. 85-104. Haworth Press.

Gutmann, D. (1975). Parenthood: A key to the comparative study of the life cycle. In N. Datan and L.H. Ginsbert (Eds.), Life-span Developmental Psychology: Normative life crises. 231-254. Academic Press, New York.

Hall, W.A. (1992). Comparison of the experience of women and men in dual-earner families following the birth of their first infant. Image: Journal of Nursing Scholarship, 24, 33-38.

Hangsleben, K.L. (1983). Transition to fatherhood: An exploratory study. Journal of Obstetric, Gynecologic & Neonatal Nursing, 12, 265-270.

Hanson, L.B., and Jacob, E. (1992). Intergenerational support during the transition to parenthood: Issues for new parents and grandparents. Families in Society: The Journal of Contemporary Human Services, Oct. 471-479.

Heider, F. (1958). The Psychology of Interpersonal relations. Wiley, New York.

Heinicke, C.M. (1984). Impact of prebirth parent personality and marital functioning of family development: A framework and suggestions for further research. Developmental Psychology, 20, 1004-1053.

Hill, R. (Ed.), (1949). Families Under Stress. Harper, New York.

Hobbs, D. (1965). Parenthood as crisis: A third study. Journal of Marriage and the Family, 27, 367-372.

Hobbs, D., and Cole, S.P. (1976). Transition to parenthood: A decade replication. Journal of Marriage and the Family, 38, 723-731.

Hobbs, D., and Wimbish, J. (1977). Transition to parenthood by black couples. Journal of Marriage and the Family, 39, 677-689.

Hock, E., McBride, S., and Gnezda, M. (1989). Maternal

- separation anxiety: Mother-infant separation from the maternal perspective. Child Development, 60, 793-802.
- Hock, E., and Schritzing, M. (1992). Maternal separation anxiety: Its developmental course and relations to maternal mental health. Child Development, 63, 93-102.
- Hoffman, L.W., & Nye, F.I. (1975). Working Mothers. San Francisco: Jossey-Bass.
- Holmes, T.H., and Rahe, R.H. (1967). The social readjustment rating. Journal of Psychosomatic Research, 11, 213-228.
- Holt, L.H. (1988). Medical perspectives on pregnancy and birth: Biological risks and technological advances. In G.Y. Michaels and W.A. Goldberg (Eds.). The transition to parenthood: Current theory and research, Pp. 157-175. Cambridge University Press, Cambridge.
- Hultsch, D.K., and Plemons, J.K. (1979). Life events and life span development. In P.B. Baltes and O.G. Frim, Jr. (Eds.), Life-span Development and Behavior. Vol. 2, Pp. 206-229. Academic Press, New York.
- Jones, C., and Lenz, E.R. (1986). Father-newborn interactions: effects on social competence and infant state. Nursing Research, 35, 149-153.
- Jordan, P.L. (1990). Laboring for relevance: Expectant and new fatherhood. Nursing Research, 39, 11-16.
- Kach, J., and McGhee, P. (1982). Adjustment to early parenthood: The role of accuracy of pre-parenthood experiences. Journal of Family Issues, 3, 375-388.
- Kalmuss, D., Davidson, A., and Cushman, L. (1992). Parenting expectations, experiences, and adjustment to parenthood: A test of the violated expectations framework. Journal of Marriage and the Family, 54, 516-526.
- Klaus, M.H., and Kennell, J. (1976). Maternal-Infant Bonding. St. Louis: Mosby.
- Klein, H. (1991). Couvade syndrome: Male counterpart to pregnancy. International Journal of Psychiatry in Medicine, 21, 57-69.
- Lamb, M. (1997). Father-infant and mother-infant interaction in the first year of life. Child Development, 48, 167-181.
- Lamb, M.E. (1980). The development of parent-infant attachments in the first two years of life. In F.A. Pedersen (Ed.). The Father-infant Relationship: Observational Studies

- in the Family Setting. Pp. 21-43, Praeger, New York.
- LaRossa, R., and LaRossa, M.M. (1981). Transition to Parenthood: How Infants Change Families. Sage, Beverly Hills, CA.
- LeMasters, E.E. (1957). Parenthood as crisis. Marriage and Family Living, 19, 352-355.
- Levy-Shiff, R. (1994). Individual and contextual correlates of marital change across the transition to parenthood. Developmental Psychology, 30 (4), 591-601.
- Levy-Shiff, R., and Israelashvili (1988). Antecedents of fathering: Some further exploration. Developmental Psychology, 24 (3), 434-440.
- Levy-Shiff, R., Goldshmidt, I., and Har-Even, D. (1991). Transition to parenthood in adoptive families, Developmental Psychology, 27, 131-140.
- Mackey, W.C., White, U., and Day, R.D. (1992). Reasons American Men become fathers: Men's divulgences, women's perceptions. Journal of Genetic Psychology, 153, 435-445.
- Main, M., and Weston, D. (1981). The quality of the toddler's relationship to mother and father: Related to conflict behavior and readiness to establish new relationships. Child Development, 52, 932-940.
- Marut, J., and Mercer, R. (1979). comparison of primipara's perceptions of vaginal and Caesarian births. Nursing Research, 28, 260-266.
- McGillicuddy-DeLisi, A.V. (1980). The role of parental beliefs in the family as a system of mutual influences. Family Relations, 29, 317-323.
- McHale, S.M., and Huston, T.L. (1985). The effect of the transition to parenthood on the marriage relationship: A longitudinal study. Journal of Family Issues, 6, 409-433.
- Mebert, C.J. (1989). Stability and change in parents' perceptions of infant temperament: Early pregnancy to 13.5 months postpartum. Infant Behavior and Development, 12, 237-244.
- Mebert, C.J., and Kalinowski, M.F. (1986). Parents' expectations and perceptions of infant temperament: "Pregnancy status" differences. Infant Behavior and Development, 9, 321-334.
- Merton, R.K. (1957). Social Theory and Social Structure.

- Free Press, New York.
- Miller, B., and Sollie, D. (1980). Normal stresses during the transition to parenthood. Family Relations, 29, 459-465.
- Nevill, D., and D'Amico, S. (1977). Developmental components of role conflict in women. Journal of Psychology, 95, 195-199.
- Nichols, M.R. (1992). Adjustment to new parenthood: Relationship among prenatal factors, intrapartal events, and new parent experiences for primiparous mothers and fathers who share childbirth. Dissertation Abstracts International, 53, 1788b.
- Nicholson, J., Gist, N., Klein, R., and Stadley, K. (1983). Outcomes of father involvement in pregnancy and birth. Birth, 10, 5-9.
- O'Hara, M.W., Zekoski, E.M., Phillips, L.H., and Wright, E.J. (1990). Controlled prospective study of postpartum mood disorders: Comparison of Childbearing and nonchildbearing women. Journal of Abnormal Psychology, 99, 3-25.
- Olson, D.H., Portner, J., and Lavee, Y. (1985). Faces III. St. Paul, MN: Family Social Science, University of Minnesota.
- Orbutz, L.A.J. (1976). Expectant fathers' perceptions of fathering. American Journal of Nursing, 76, 1440-1442.
- Owens, M., and Cox, M. (1998). Maternal employment and the transition to parenthood. In A. Gottfried and A. Gottfried (Eds.), Maternal Employment and Children's Development. New York: Plenum Press.
- Palkovitz, R. (1980). Predictors of involvement in first time fathers. Dissertation Abstracts International, 40, 3603b-3604b.
- Palkovitz, R. (1984). Parental attitudes and fathers' interactions with their five-month-old infants. Developmental Psychology, 20, 1054-1060.
- Palkovitz, R. (1985). Fathers' birth attendance, early contact, and extended contact with their newborns: A critical review. Child Development, 56, 392-406.
- Palkovitz, R. (1987a). Consistency and stability in the family microsystem environment. In D.L. Peters and S. Kontos (Eds.), Annual Advances in Applied Developmental Psychology, Vol. II. Ablex Publishing Co., Norwood, NJ.
- Palkovitz, R. (1987b). Fathers and families: Facts, fictions

and fantasies. Paper presented at the Third Annual Parenting Symposium, International Society for Parenting Research, Los Angeles, CA, March.

Palkovitz, R. (1992). Changes in Father-Infant bonding beliefs across couples first transition to parenthood. Maternal-Child Nursing Journal, 20 (3,4), 141-154.

Palkovitz, R., and Copes, M. (1988). Changes in attitudes, beliefs and expectations associated with the transition to parenthood. Marriage and Family Review, 6, 183-199.

Parke, R.D. (1979). Perspectives on father-infant interaction. Pp. 549-590 in J.D. Osofsky (ed.), Handbook of Infant Development. Wiley, New York.

Parke, R., and Tinsley, B. (1987). Family interaction in infancy. In J.Osofsky (Ed.), Handbook of Infant Development (2nd Ed). New York: John Wiley & Sons.

Pederson, F. and Robson, K. (1969). Father participation in infancy. American Journal Orthopsychiatry. 39, 466-472.

Pleck, J. (1983). Husbands' paid work and family roles: Current research issues. In Z. Lopata & J. Pleck (Eds.), Research in the interweave of social roles: Families and jobs, 3, 251-333. Greenwich, CT: JAI Press.

Radin, N. (1981). Child rearing fathers in intact families, Merrill-Palmer Quarterly, 27, 489-514.

Roberts, F. (1983). Infant behavior and the transition to parenthood. Nursing Research, 32, 213-217.

Rossi, A.S. (1977). Transition to parenthood. In L. Allman and D. Jaffe (Eds). Readings in Adult Psychology: Contemporary Perspectives. 229-241. New York: Haper & Row.

Ruble, D.N., Fleming, A.S., Hackel, L.S., and Stangor, C. (1988). Changes in the marital relationship during the transition to first time motherhood: Effects of violated expectations concerning division of household labor. Journal of Personality and Social Psychology, 55, 78-87.

Russell, C.S. (1974). Transition to parenthood: Problems and gratifications. Journal of Marriage and the Family, 36, 294-302.

Rustia, J., and Abbott, D. (1993). Father involvement in infant care: Two longitudinal studies. International Journal of Nursing Studies. 30, 467-476.

Rustia, J., and Malcolm, C. (1989). Infant Health and

- Paternal Role Perceptions. Unpublished research project, University of Nebraska Medical Center, College of Nursing, Omaha, NE.
- Ryder, R. B. (1973). Longitudinal data relating marriage satisfactions and having a child. Journal of Marriage and the Family, 35, 604-606.
- Schooler, C., Miller, J., Miller, K.A., and Richtand, C.N. (1984). Work for the household: Its nature and consequences for husbands and wives. American Journal of Sociology, 90, 97-124.
- Shereshefsky, P., Liebenberg, B., and Lockman, R. (1973). Adaptation in P. Shereshefsky and M. Yarrow (Eds.), Psychological aspects of a first pregnancy and early postnatal adaptation. Raven Press, New York.
- Shereshefsky, P., and Yarrow, L. (1973). Psychological Aspects of a First Pregnancy and Early Postnatal Adaptation. Raven Press, New York.
- Short Tomlinson, P. (1987). Spousal Differences in marital satisfaction during transition to parenthood. Nursing Research, 36 (4), 239-243.
- Silverman, I.W., and Dubow, E.F. (1991). Looking ahead to parenthood: Nonparents' expectations of themselves and their future children. Merrill-Palmer Quarterly, 37, 231-250.
- Sirignano, S.W., and Lachman, M.E. (1985). Personality change during the transition to parenthood: The role of perceived infant temperament. Developmental Psychology, 21, 558-567.
- Smith, R.L., Ager, J.W., and Williams, D.L. (1992). Suppressor effects in multiple regression/correlation. Educational and Psychological Measurement, 52, 17-29.
- Solnit, A.J., and Stark, M.H. (1961). Mourning and the birth of a defective child. Psychoanalytic Study of the Child, 16, 523-537.
- Spanier, G. (1976). Measuring dyadic adjustment: New scales for assessing the quality of marriage and similar dyads. Journal of Marriage and the Family, 38, 15-28.
- Spelke, E., Zelazo, P., Kagan, J., and Katelchuck, M. (1973). Father interaction and separation protest. Developmental Psychology, 9, 83-90.
- Strassberg, S. (1978). Paternal involvement with first-born's during infancy. Unpublished doctoral dissertation, Boston University Graduate School.

- Terry, D.J. (1991). Stress, coping and adaptation to new parenthood. Journal of Social and Personal Relationships, 8, 527-547.
- Thomas, A., Chess, S., and Birch, H.G. (1968). Temperament and Behavior Disorders in Children. New York University Press, New York.
- Touke, S. (1974). Adjustment to parenthood among a select group of disadvantaged parents. Unpublished master's thesis, Montana State University.
- Uhlenberg, B. (1970). Crisis factors in transition of college students to parenthood. Unpublished master's thesis, Otto State University.
- Velicer, W.F. (1978). Suppressor variables and the semipartial correlation coefficient. Educational and Psychological Measurement, 38, 953-958.
- Ventura, J. (1982). Parent coping behaviors, parent functioning and infant temperament characteristics. Nursing Research, 31, 269-273.
- Ventura, J. (1986). Parent coping: A replication. Nursing Research, 35, 77-80.
- Waldron, H., and Routh, D. (1981). The effects of the first child on the marital relationship. Journal of Marriage and the Family, 43, 785-788.
- Wandersman, L., and Wandersman, A. (1980). Social support in the transition to parenthood. Journal of Community Psychology, 8, 332-342.
- Wandersman, L., Wandersman, A., and Kahn, S. (1980). Social support in the transition to parenthood. Journal of Community Psychology, 8, 332-342.
- Wayland, J. (1987). Pregnancy and parenting adolescence. Unpublished doctoral dissertation, University of Texas at Austin.
- Weaver, R.H., and Cranley, M.S. (1983). An exploration of paternal-infant behavior. Nursing Research, 32, 68-72.
- Weinraub, M., and Frankel, J. (1977). Sex differences in parent-infant interaction during free play, departure, and separation. Child Development, 48, 1240-1249.
- Wente, A.S., and Crockenberg, S.B. (1976). Transition to fatherhood: Lamaze preparation, adjustment difficulty and the husband-wife relationship. Family Coordinator, 25, 351-357.

Wille, D.E. (1995). The 1990s: Gender differences in parenting roles. Sex Roles, 33 (11-12), 803-817.

Wolkind, S.N., and DeSalis, W. (1982). Infant temperament, maternal mental state and child behavior problems. In R. Porter and G. Collins (Eds). Temperamental Differences in Infants and Young Children. Pp. 221-239. London: Pitman Books, Ltd. (Ciba Foundation Symposium 89).

Zeanah, C.H., Keener, M.A., and Anders, T.F. (1986). Developing perceptions of temperament and their relation to mother and infant behavior. Journal of Child Psychology, Psychiatry, and Allied Disciplines, 24, 499-512.

Zeanah, C.H., Keener, M.A., Stewart, L., and Anders, T.F. (1985). Parental perception of infant personality: A preliminary investigation. Journal of the American Academy of Child Psychiatry, 24, 204-210.

Zelkowitz, P., and Milet, T.H. (1996). Postpartum psychiatric disorders: Their relationship to psychological adjustment and marital satisfaction in spouses. Journal of Abnormal Psychology, 105 (2), 281-285.

ABSTRACT

FACTORS AFFECTING PATERNAL ADJUSTMENT DURING THE TRANSITION TO PARENTHOOD

by

LINDA D. SELTZER-SUCHER

December 1998

Advisor: Dr. Barry Markman

Major: Educational Psychology

Degree: Doctor of Philosophy

An emerging body of research is identifying factors which put individuals at risk for experiencing a difficult adjustment during the transition to parenthood. The purpose of this study was to test a model for the prediction and identification of paternal risk factors. Forty seven couples expecting their first child were the subjects. Questionnaires which assessed paternal expectations regarding parenthood and prenatal marital satisfaction were administered in the third trimester of their wife's pregnancy. Two months postpartum, a second questionnaire was administered which included measures of paternal violated expectations, paternal postpartum marital satisfaction, paternal stress, infant temperament, maternal marital satisfaction, maternal postpartum depression, the presence of external support and maternal change in employment status. Multiple regression analyses were conducted to identify which variables significantly predicted the presence of postpartum paternal stress.

In general, two hypotheses were supported. Paternal

postpartum stress was predicted by (1) higher quality of paternal marital satisfaction assessed prenatally, and (2) infants' whose temperaments were paternally assessed as slowly adaptable, less persistent, and more distractable. Statistically significant bivariate correlations were also identified among the predictor variables. Paternal prenatal marital satisfaction was positively correlated with maternal and paternal postpartum marital satisfaction, and a higher incidence of paternal violated expectations. A higher quality of maternal marital satisfaction was correlated with a lower incidence of maternal postpartum depression. Various infant temperament subscales were correlated with other temperament subscales and with some of the predictor variables. The clinical and research implications associated the findings of this study were discussed.

AUTOBIOGRAPHICAL STATEMENT

Linda D. Seltzer-Sucher

Education

Master of Arts, with high honors 12/88
School and Community Psychology
Wayne State University

Bachelor of Science, with distinction, 12/84
Psychology
Wayne State University

Clinical Experience

Practicum
St. Joseph Mercy Hospital
Pontiac, Michigan
May 1988-July 1988

Doctoral Internship
St. Joseph Mercy Hospital
Pontiac, Michigan
August 1988-July 1989

Research Experience

Undergraduate Research Assistant
Laurence Stettner, Ph.D., Department of Psychology
Research on emotions expressed through facial expressions.
Wayne State University

Pre-Med Research Fellowship
Mark Goldberg, M.D., Cardiology Department-Sinai Hospital
Research on the presence of cardiac enzymes following
myocardial infarctions and cardiogenic shock.
May 1983-June 1984

Awards and Distinction

Wayne State University Graduate-Professional Scholarship
Psi-Chi National Honor Society
Golden Key National Honor Society

Employment Experience

Affiliated Psychologists of Michigan, P.C.
Bloomfield Hills, MI.
May 1991-present