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THE EFFECTS OF EDUCATIONAL INTERVENTION ON FATHERS' RELATIONSHIPS WITH THEIR INFANTS

The University of North Carolina at Greensboro PH.D. 1984

THE EFFECTS OF EDUCATIONAL INTERVENTION ON FATHERS' RELATIONSHIPS WITH THEIR INFANTS

by

Margaret Bourdeaux Arbuckle

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Approved by

Nancy White
Dissertation Adviser

APPROVAL PAGE

This dissertation has been approved by the following committee of the Faculty of the Graduate School at the University of North Carolina at Greensboro.

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The purpose of this study was twofold: (1) to examine the impact educational intervention during the postpartum period has on fathers' attitudes toward involvement with their babies, their knowledge of infant capabilities, and their caregiving of their babies; and (2) to validate a research instrument for use with mothers and fathers of newborn infants. It was hypothesized that fathers participating in the educational intervention as compared to a control group would have scores indicating more positive parenting on five Theoretical Factors--(I) Parental knowledge of infant capabilities, (II) Parental perception of infant needs for affection and stimulation, (III) Parental perception of caregiving competence, (IV) Sex-role division of caregiving tasks, and (V) Negative affects of having a new baby. It was also hypothesized that fathers with maternal partners with higher expectations for fathers' involvement in daily caregiving would report more involvement than would those whose maternal partners had lower expectations.

The subjects were married, Caucasian couples who had delivered their first child in a hospital. There were 107 pairs of subjects, 50 of whom were randomly assigned equally to the experimental or control situations. All subjects completed a questionnaire in the hospital setting. The experimental group of fathers viewed a

videotape explaining infant capabilities and demonstrating caregiving tasks. Follow-up questionnaires were completed in the homes of the control and experimental groups.

A factor analysis of the research instrument indicated interpretable data for the Theoretical Factors for the mothers but not for the fathers. No multivariate difference was found between the groups on the Theoretical Factor Scores, but a difference was indicated at $p = .0175$ for Factor I and $p = .0167$ for Factor II. A multiple regression analysis indicated the group of fathers, experimental or control, approached significance at $p = .0576$ and the father's expectancy score to predict his involvement in later caregiving was significant at $p = .0015$. The mother's expectancy score was not significant.

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CHAPTER I

INTRODUCTION

A great deal of research has been conducted on mothers and their relationships to their infants. The early attachment literature of Ainsworth (1962) and Bowlby (1969) and the research of Klaus and Kennell (1976) are important examples of the emphasis put on the mother-infant relationship. Until recent years, fathers and their relationships with their infants have been virtually ignored. The reasons for this are in part because of the obvious biological relationship of mother and infant, in part because of the availability of the mother and infant for study, and in part because the father was not considered an important influence in the child's early development. Consequently, fathers have not been the subjects of as much research as have mothers.

In the past decade, this has begun to change and research has begun to be conducted on fathers' relationships and interactions with their infants.

Nature of the Problem

This study examined the father's relationship with his infant during the first two months of the infant's life. Although there is evidence in the literature that fathers experience a period of intense preoccupation with their neonates, termed "engrossment" by

Greenberg and Morris (1974), and that initial paternal behaviors of touching, looking at, and talking to neonates are similar to maternal behaviors (Chally, 1979; Parke, 1974), it is generally assumed in Western societies that fathers have little to do with the caregiving of their infants during the first months of life.

The mother's interactions and the importance of her role with the baby have been given such emphasis theoretically and in research that the presumption has been made that the father was either inept in caring for his infant or was indifferent to his infant. However, in recent examination of the father-infant relationship, it has been found that fathers are competent and nurturing caregivers (Parke & O'Leary, 1976; Parke, O'Leary, & West, 1972; Sawin & Parke, 1979). It has become apparent that the quality of the mother-infant relationship is affected by what occurs during the postpartum period (Klaus, Jerauld, Kreger, McAlpine, Steffa, & Kennell, 1972). The question proceeds to the father: Is the nature of his relationship with his infant affected by what occurs during the early days of the child's life?

The purpose of this study was to examine the impact educational intervention during the postpartum period has on fathers' attitudes toward involvement with their babies, their knowledge of infant capabilities, and their caregiving of their babies. The initial measure was made compared to the fathers' attitudes, knowledge, and actual involvement with their infants during the hospital stay of the mothers and infants and as reported four-to-six weeks postpartum.

Background of the Study

A great deal of emphasis and attention have been focused on the importance of the mother-infant relationship, but until recent years fathers have been virtually ignored as having any significant relationship directly with their infants. Any attention given to fathers in earlier literature emphasized the "crisis" of becoming a father (Fein, 1976); such studies reported psychological disorders in men resulting from entering parenthood. Studies of married couples' changing relationships resulting from having a baby have indicated greater difficulty in the transition period and marital adjustment for fathers than for mothers (Hobbs, 1965).

In popular written books addressed to new parents, husbands have been encouraged to be supportive of the new mothers, making certain her needs are met and the household runs smoothly for her benefit. Others have focused on the birth experience and the father's supportive role there rather than giving attention to the father's needs in adjusting to his new role or the couple's mutual needs.

Therefore, it can be generally stated that either the father and his importance in the infant's early development have been ignored or attention has been given to negative attributes and characteristics. The emphasis of research has been on fathers' difficulty in adjusting to parenthood.

The influence of Sigmund Freud's emphasis on the mother-infant relationship as the prototype of all later emotional relationships

has been great. The importance given to this early dyad as explanation of emotional development was central to Freud's theory of development. Freud's influence and this theme permeated other theoretical viewpoints and consequently Western society's cultural orientation to young children's relationships. So much importance was given to it that relationships with other adults have been ignored.

The early attachment literature gave credence to the same orientation of the importance of the mother-infant dyad (Bowlby, 1969). It was with mothers as primary caretakers that infants established an emotional bond and dependency. Although there was evidence of multiple attachments early in life (Schaffer & Emerson, 1964), it was ignored because the theoretical viewpoint of attachment developed by Bowlby, for example, was considered logical. The credence given to the infant's primary attachment to the mother gave additional importance to the infant-mother relationship and thereby gave less impetus for attention to be given to the infant-father relationship.

However, as Pederson (1980) pointed out, the same theoretical developments that gave credence to the importance of the mother-infant relationship also could be used as the basis for regarding the father-infant relationship as significant. For example, attachment theory regarded the infant's behavior as important in eliciting nurturant behaviors but did not restrict receptivity to such behavior to the mother. Certainly fathers could be just as receptive.

The evolutionary justifications for attachment that stress that the bond between the infant and mother provides for the infant to remain in close proximity to the protective adult also can expand to include protective adults other than the mother. During such a long period of helplessness as the human infant has, it would be advantageous for the protective response to be elicited from more than one source, as the mother and the father.

Lamb (1976a) stated that attention has been drawn to the father-infant relationship in recent years, because researchers reviewing the literature on infant relationships found the great attention to the mother-infant relationship unbalanced with respect to attention given other relationships. Questions naturally followed regarding the relevance or irrelevance of the father in the infant's social world. Secondly, the high divorce rate, often resulting in the disruption of the father-child relationship, led researchers to acknowledge that little was known about this relationship. Consequently, little could be forecast about the potential outcomes resulting from the disruption of this relationship. Thirdly, greater knowledge has been acquired about the infant as a social being and his sensory capabilities. Consequently, an interactional aspect of the social encounters of infants has been acknowledged. This has led researchers to recognize that the infant is not just a passive recipient of social interaction, but that there is a reciprocal quality to any interactions that occur between an infant and others--including fathers (Lewis & Rosenblum, 1974).

Additionally, two other cultural phenomena have affected the increased interest in the father-infant relationship--the changing birth practices, and the changing of traditional male-female role expectations in society.

In recent years, the birth of a baby has changed from an anesthetized mother in the delivery room and an anxious father in the waiting room to the couple's active involvement in the birth of their child. Beginning with the education of mothers and fathers in the process of pregnancy and birth (Bradley, 1965; Dick-Read, 1959; Lamaze, 1970), participatory childbirth is the presence and support of the father with the mother during the birth process. Additionally, the research of Klaus and Kennell (1976) which emphasized the importance of early contact (within hours after birth) with the neonate has changed hospital practices from separating the neonate from the mother to encouraging the parents to be with their neonate following birth. Most attention in research of these changes in both practices has been given to the effect on the mother and infant. Particular attention has been given to the importance of the initial early interactions of the infant with the mother. However, the question also has been raised about the effect of this period on the father's initial relationship with the neonate and their consequent later relationship (Chally, 1979; Greenberg & Morris, 1974; Parke & O'Leary, 1976; Parke, O'Leary, & West, 1972).

The changing of traditional male-female role expectations in society results from several major influences--the advent of

the Women's Movement, the increasing number of women with young children entering the labor force, and gradual change of the basic conceptualization of the traditional male-female dichotomy of sex-role behavior in society. All of these combine to allow for more androgynous behavior on the part of men and women, i.e., both instrumental and expressive behaviors, depending upon the situation (Bem, 1974). Thus, men are more free to be nurturant and caregiving with their young children rather than assuming the breadwinner role alone.

In summary, many factors have influenced the recent attention given to fathers' interactions and relationships with their young infants. These factors, the re-examination of the theoretical importance given the mother-infant dyad for emotional development and attachment, the recognition of the reciprocity of infant-other person interactions, and societal-cultural changes, have contributed to the focus on examining the nature of infant-father interactions.

Assumptions

With this information as background to explain the current interest in father-infant relationships, there are several basic assumptions to be made regarding a study of father-infant behavior.

1. Fathers and mothers have an important role in the lives of their children and their parental influence and importance begins with the child's life. This is in contrast to what has been previously assumed, which was that mothers

have influence initially, but a father's importance was delayed until much later in development, i.e., the Oedipal Period.

2. Early interactions between a parent and child set a pattern for later interactions (Parke, 1978). What occurs early in a child's life can influence the child's social and cognitive development later.
3. Parental knowledge, attitudes, perceptions, and cognitions must be considered as parts of the parent-child interactions (Erickson, 1976; Parke, 1978).
4. Both mothers and fathers have significant roles in the development of their infants, but they do not necessarily behave in the same ways (Lamb, 1976b, 1977). It has been assumed that fathers are neither as competent nor as nurturant as mothers; however, this has been disproved (Field, 1978; Parke & O'Leary, 1976; Parke, O'Leary, & West, 1972).
5. The behavior of the mother can affect the behavior of the father when interactions with the infant occur in the presence of the other (Brazelton, 1974; Parke & O'Leary, 1976). It is important not to isolate components of the family triad when analyzing the behavioral interactions of its components for there is mutual influence. Therefore, it is important to consider the child's mother's expectations for the father's behavior in analyzing the father's actual behavior.

6. The parent undergoes a developmental process during the transition to the parental role and obligations. The parent's attitudes about caring for the baby and knowledge about what behavior to expect from a baby affect the parent's behavior during this transitional period.

Research Questions

Part I: Construction and Validation of the Research Instrument

The first part of this study was to construct and validate a research instrument for use with mothers and fathers of newborn infants. The questions for the instrument were developed around the general content of the factors found using a similar instrument in a study conducted by Parke, Hymel, Power, and Tinsley (1980). These factors were parental knowledge of infant cognition and sensory capabilities, parental perceptions concerning infant needs for affection and stimulation, parental perception of own caregiving competence, parental sex-role attitudes regarding responsibility for infant care, and negative affect toward the infant.

Part II: Experiment to Determine Effect of Educational Intervention on Father's Caregiving Behaviors

Provided the factor analysis of the questionnaire produced meaningful and interpretable factors, the experimental section of this study proposed to investigate the following hypotheses:

1. Fathers in the experimental group who participated in an intervention program addressed to increasing their knowledge of infants' sensory perceptual and social capabilities, increasing the sex-role acceptability of fathers participating in the daily care of their infants and demonstrating diapering and feeding techniques would have factor scores indicating more positive parenting than fathers in the control group who do not participate in the intervention program on the following theoretical factors.
   - I. Parental knowledge of infant capabilities.
   - II. Parental perception of infant's need for affection and stimulation.
   - III. Parental perception of caregiving competence.
   - IV. Sex-role division of caregiving tasks.
   - V. Negative effect of having a new baby.
2. The fathers whose maternal partners reported at birth to have higher expectations for the fathers' involvement in caring for the infants would report more involvement in the daily care of their infants four-to-six weeks postpartum than those fathers whose maternal partners had lower expectations for the fathers' involvement as assessed at the infant's birth.
3. The fathers in the experimental group would report more involvement in the daily care of their infants four-to-six weeks postpartum than the fathers in the control group.

Definitions of Terms

For the purposes of this study, the following terms are defined:

Educational intervention is the viewing of a 15-minute videotape entitled "Becoming a family," developed by Dr. Ross Parke of the University of Illinois.

Infant capabilities are cognitive and sensory behaviors indicating functioning of the infant's brain and sensory organs. Examples are infant imitative behavior of adult and an infant visually tracking an object.

Perception of own caretaking competence is self-awareness of one's own level of capability to care for an infant.

Negative affect of having a new baby is the nonpositive feelings regarding becoming a new parent.

Limitations

The population was limited to subjects from one geographic area, although it generally may be assumed that the population of couples having their first child delivered in Moses Cone Memorial Hospital in Greensboro, North Carolina, is like other groups of couples delivering their first child in a hospital setting in other geographical areas.

There were certain limitations associated with this design:

1. The film used for the educational intervention was a limited means of attempting to affect changes in behavior and attitude.

2. Most mothers employed outside the home had not returned to their employment before the follow-up data collection (four-to-six weeks postpartum). Therefore, they were more available to care for the infant than they would be if their daily obligations included employment. The mothers' availability could have interfered with the involvement of the fathers in the caregiving.

CHAPTER II

REVIEW OF LITERATURE

The literature pertaining to father-infant relationships from 1969 to 1982 in the fields of child development, psychology, and medicine was reviewed. In theoretical explanations of a child's socialization process, mothers have been acknowledged as having primary influence on the child and fathers' importance has been interpreted as more indirect, providing financial security and support to the family. The father's influence during the period of infancy has been thought to be negligible. Not until a child is several years old has the father been acknowledged as having impact on the child's social and psychological development. However, recently as more attention has been given to infant development and research has found that the infant's social environment extends beyond the mother, the father's impact on his child's development has been receiving more acknowledgment and given more significance.

Studies of Father Involvement

Caregiving Behaviors of Fathers

Research on fathers and their involvement with their infants has been conducted only in recent years. Among the first reported studies was that done by Pederson and Robson (1969), who reported

in a study of fathers' participation in the lives of their infants that fathers were highly involved in caregiving behaviors such as bathing, feeding, etc. The results of this study have been questioned however as it was based on reports of mothers as to the father's involvement rather than a direct study of fathers. Studies of fathers' participating in infant caregiving have revealed little involvement of the fathers (Bem, 1974; Rebelsky & Hanks, 1971). However, it was found that a father's participation in the birth of his child was related to his later participation in caregiving (Manion, 1977).

Affiliative Behaviors of Fathers

In the examination of infant attachments, a number of reports have demonstrated that infants display as much separation protest behavior regarding their fathers as their mothers (Cohen & Campos, 1974; Kotelchuck, Zelazo, Kagan, & Spelke, 1975; Lamb, 1975, 1976b; Ross, Kagan, Zelazo, & Kotelchuck, 1975; Spelke, Zalazo, Kagan, & Kotelchuck, 1973). A differentation occurred in behaviors directed to mothers and fathers in that more affiliative behaviors were directed toward fathers (Lamb, 1975), and in stressful situations, infants sought their mothers for protection. However, in stress-free, natural situations, infants did not demonstrate an attachment preference regarding either parent; this was interpreted as demonstrating an attachment to both parents (Lamb, 1976b).

Similar results were found in another study of fathers' participation in caregiving of their first-born infants (Redina & Dickerscheid, 1976). Fathers were involved with social activities, i.e., play, whereas mothers were involved with the physical caregiving activities. Thus, both parents were taking traditional roles in their interactions. In research comparing play and physical contact of mothers and fathers with their infants, Lamb (1976b, 1977) found that mothers played more with their infants using toys and conventional games, but fathers participated in more vigorous physical play.

In these initial studies of fathers' caretaking behaviors, infants were at least six months of age. In the studies of infant attachments, infants were in the second half of the first year of life. The importance of the results from these studies (Lamb, 1976b, 1977) is summarized in the following quotation:

> . . . infants are attached to both parents . . . the relationships they experience with their fathers and mothers differ in quality, involve different sorts of interaction, and consequently, . . . fathers like mothers, have the potential for significant and differential impact on the psychological and social development of their infants from early in infancy. (Lamb, 1976a, p. 381)

Fathers' Involvement During the Neonatal Period

Interest in involvement of parents with their infants beginning with the neonatal period has stemmed from research of maternal bonding (Klaus, Jerauld, Kreger, McAlpine, Steffa, & Kennell, 1972). It was found that allowing mothers extended time with their neonates

resulted in greater investment of mothers in their babies as demonstrated by reluctance to leave their babies and more nurturing behaviors. These results and the instigation of childbirth preparation classes have played a significant part in the change in hospital birthing practices. An important part of this change has been the encouragement of fathers to participate in the mother's labor and the child's birth. This change led medical personnel to report on the enthusiastic response and intense involvement of fathers with their newborns. Greenberg and Morris (1974) defined this involvement as engrossment, "a sense of absorption, preoccupation, and interest in the infant" (p. 521), and found this characteristic among both men who witnessed the child's birth and those who had not, although it is implied there may be a qualitative difference in the level of engrossment between the two groups.

Contradictory Evidence to the Traditional View of Fathers' Involvement

One of the reasons fathers may have been less involved in caring for their young children may be the interference of societal expectations. It was traditionally expected that the mother would care for the infant, and that the father would not. Therefore, the assumption grew that fathers did not have the competence to care for infants. Parke (1976) summarized the traditional view of the father's role in infancy as four propositions:

> (1) Fathers are uninterested in and uninvolved with newborn infants. (2) Fathers are less nurturant toward infants than mothers. (3) Fathers prefer non-caretaking roles and leave the caretaking up to the mother. (4) Fathers are less competent than mothers to care for their infants. (p. 365).

Parke has contradicted these propositions based on findings of his research.

In studies of middle-class and lower-class mothers and fathers, it was observed that fathers were just as involved as mothers in looking, smiling, vocalizing, holding, kissing, touching, and exploring behaviors. It was concluded that fathers in a voluntary situation were as interested and involved in their newborn infants as were mothers (Parke & O'Leary, 1976; Parke, O'Leary, & West, 1972). In analyzing nurturant behaviors--touching, looking, vocalizing, and kissing--fathers were found to demonstrate more of these behaviors when together with the mother, but the mother did smile more in both studies.

In determining the variation in caretaking roles, a study of infant feeding was conducted. It was found that mothers were more involved in feeding and related behaviors (such as face wiping) than were fathers. This finding substantiated the third proposition and was consistent with findings of traditional role-related behavior of parents to their older infants (Parke & Sawin, 1976).

To assess the competency level of fathers as compared to mothers, Parke and O'Leary (1976) also studied the sensitivity to respond to infant cues during a feeding encounter. Although fathers spent less time in feeding overall, they were as sensitive as mothers in responding to infant cues. Thus, Parke concluded that fathers are as competent as mothers. The significance of Parke's data was that it was collected during the neonatal period

and demonstrated early father involvement with the infant during the period when it had been assumed that fathers were uninvolved.

Findings Related to Parent Education

Parents' Perceptions and Attitudes Influence Behavior Toward Infant

In acknowledging the importance of parent education, Parke (1976) stated that it is important to recognize that the knowledge and attitudes parents bring to the role of parenting effects the skill with which they perform. Previously, in studying the parent-child interaction, it had been viewed using the heritage of the S-R model in which the parent's behavior was considered to be a mechanistic or unthinking response to the child's behavior. This point of view should no longer be applied. Regarding the child's behavior as the stimulus and the parent's behavior as the response, and treating them equally is not regarding the entire interaction. Even when recognition was given to the interrelationship of a group of behaviors--as Bell identified in his research on the reciprocity of parent-child interactions (1968)--the behaviors of the parent and the behaviors of the infant were considered equally important. However, without denying the importance of the behaviors of both parent and child, Parke explained, it is necessary to remember that parents bring to the interaction the accumulation of prior experience. This prior experience has formulated attitudes, perceptions, knowledge, and cognitions, and now exists and acts as a filter or influence on their current behaviors with the infant and their

interpretation of these behaviors. This cannot be ignored. It is important to acknowledge that perceptions, knowledge, and attitudes do influence current behaviors.

Akin to this was the finding that a mother's perception of her neonate as high- or low-risk as compared to an "average" infant correlates highly with the child's actual development at four and one-half years of age (Broussard & Hartner, 1970). The impact of this perception of the neonate on the parent's interactions with the child can influence the actual development of the child over the years, because it influences the behavior of the parent. Therefore, importance must be given to the knowledge a parent brings to the initial interactions with the child, as this knowledge can influence the parent's perceptions and interactions with the child from the beginning and continue for a long time.

Effect of Parent Education

Education on childbirth. With the advent of childbirth preparation and the participation of fathers in the labor and delivery process, it has been important to examine the effect of such participation on the father's involvement with the infant postnatally. Wente and Crockenberg (1976) reported that Lamaze-educated fathers do not feel prepared for caring for their babies and reported a lack of knowledge about parenting. Variation has been found in father's caregiving involvements in spite of having participated in the birth experience (Fein, 1976; Parke, O'Leary, & West, 1972). Fein found

"women's pre-birth expectations of men's infant care involvements predicted men's involvements even more strongly than did men's expectations" (Fein, 1976, p. 346).

Education on infant capabilities. Parent education on infancy has provided information on developing skills in caregiving and information on infant capabilities and characteristics. In studies of the effects of parent education, it was found that parents react positively to the information (Davidson & Leonard, 1981). As their perceptions of their infant's capabilities are enhanced, their feelings of self-assurance increase (Hall, 1980).

Brazelton (1981), in his work as a pediatrician and researcher, reported incidents of demonstrating to parents infant capabilities such as imitation of a protruding tongue, preference for a female voice, tracking the movement of a human face. Parents who may have observed these same responsive behaviors themselves seemed to need them confirmed by the professional as appropriate forms of communication and behavior of an infant. With this confirmation, the parents relate to their baby, not as an "it," but as the unique human being the child is. Because all new parents can question their own competence, Brazelton recommended that professionals give support and education to new parents so that they can make a commitment to nurturing their children to their full potential.

Scazafabo (1980) described a model for parent education in which one component was directed toward increasing the involvement of fathers in the caregiving of the infant. This was done using

home visits by a nurse to educate the parents together on characteristics and needs of infants from the neonatal period through the second year. Although a full evaluation of the program has not been completed, it was subjectively evaluated by the nurse home visitors that fathers were "more active participants in the family" (Scazafabo, 1980, p. 27), and that a stronger family unit resulted.

In these stances and in others (Bronfenbrenner, 1975; Fein, 1976; Greenberg et al., 1974; Lamb, 1976a; Parke, 1979; Rendina & Dickerscheid, 1976), the recommendation for giving fathers the support and knowledge necessary to enhance their feelings of importance has been through parent education. In particular, it has been recommended that instruction be directed to fathers to give them knowledge of their importance in their infant's life and information pertaining to infants so they can relate to their babies as perceiving, feeling, capable human beings.

In research on the effects of education on fathers' behavior, Parke, Hymel, Power, and Tinsley (1980) reported a study using a hospital-based intervention model to give fathers information on infant capabilities and parental caregiving skills. The postpartum hospital stay was chosen because of fathers' accessibility and receptivity to the information. The intervention was a videotape of fathers in special interaction and caretaking activities with their infants. Two groups of fathers--the control group and the intervention group--were compared using an attitudinal measure and 20-minute observations of the father with his infant feeding and

playing in the hospital, three weeks and three months postpartum. Factor analysis of the attitudinal questionnaire found the following general areas measured:

> (1) parental knowledge of infant perceptual capabilities; (2) parent's perceptions concerning the infant's need for affection and stimulation; (3) parent's concern for infant happiness; (4) parental resentment of the infant; (5) parental perception of their caretaking competence; (6) parental sex-role attitudes concerning their attitudes regarding degree of parental responsibility for infant care. (Parke, Hymel, Power, & Tinsley, 1980, p. 182)

The results of this study found fathers' attitudes and knowledge were significantly altered by exposure to the film intervention. Caretaking behaviors, i.e., feeling and diapering, were increased for fathers of male infants for the three-month period. Parental knowledge of infant perceptual capabilities differed for the two groups at all three time points; fathers who viewed the film scored higher on parental perception of infant's needs for affection and stimulation at the hospital time point but not at three weeks and three months postpartum; and fathers in the film group scored higher on the factor "concern for infant happiness" at the initial time period.

Summary

There are blatant and subtle contradictions in research findings and society's expectations and support of fathers' participation in the care of their infants. On the one hand, it has been found that infants are attached to their fathers, and fathers are competent and sensitive in responding to their infants' needs. On

the other hand, both theoretically and culturally, the father's importance in relation to the young infant has not been recognized as critical to the baby's development.

However, a number of authors and researchers have stressed the need for a change in society's perception. Lamb (1976a) suggested that if fathers' importance were given societal recognition, the feelings of marital stress that have been acknowledged so strongly in the literature would be lessened. Bronfenbrenner (1975), in his arguments for strengthening the American family, emphasized the need to increase the self-esteem of fathers by emphasizing their importance in the development of their infants and thereby strengthening their commitment to marital and parental roles. Greenberg et al. (1974) stated the husband-wife competition that results from the birth of a baby could be decreased by acknowledgment of the father's engrossment with the baby and the mother's bonding to the baby. Both authors acknowledged that the parents could support each other in enhancing their relationship with the baby and each other's investment and importance as parents.

As a way of changing society's perception on the importance of the father's participation, Parke (1979) recommended providing opportunities for learning fathering skills as a first step in enhancing the role of the father. Acknowledging the importance of fathers in the social and cognitive development of children, Parke stated that society has a responsibility to provide "cultural supports for fathering activities" (1979, p. 577).

The intent of this study was to acknowledge the importance of fathers in the lives of their infant children. One means of doing this was to provide an opportunity for the fathers to learn fathering skills by reviewing a videotape on the caregiving of infants, and then discussing with the investigator the importance of both parents' involvement in that caregiving. Tangential to determining the effectiveness of this particular educational intervention was the desire to acknowledge the importance of fathers in caring for their infants, in the hope that, as their actual caregiving increased, their self-esteem as fathers would also increase.

CHAPTER III

METHODOLOGY

This study was divided into two sections. Part I was the construction and validation of a research instrument for use in Part II. Part II of the study was an experiment to determine the effectiveness of educational intervention on fathers' caregiving behaviors. In order to achieve both parts of this study, the investigator (1) developed the research instrument, (2) identified and recruited the study population, (3) administered the research instrument and experimental procedure, (4) analyzed the results, and (5) offered interpretation of the results.

Part I: Construction and Validation of a Research Instrument

Design of the Instrument

The first part of this study was the development of questionnaires for use with mothers and fathers of infants. The questionnaires were used by permission and modeled on the instruments used by Parke, Hymel, Power, and Tinsley (1980) in their study, "Fathers and risk: A hospital-based model of intervention."

The questions were developed around the general content of the factors of the study of Parke et al. (1980). The theoretical factors were the following: (1) parental knowledge of infant

capabilities; (2) parental perception concerning infant's need for affection and stimulation; (3) perception of own caregiving competence; (4) sex-role division of caregiving tasks; and (5) negative affect of having a new baby. The questions pertaining to each factor are listed in Appendix A.

The instruments--Mother's Hospital Questionnaire and Father's Hospital Questionnaire (Appendix B)-- were designed using a Likert-type scale. There were 35 items, and each item was stated in a concise sentence form. The statements were rated on a five-point scale ranging from strongly agree, agree, neither agree nor disagree, disagree, to strongly disagree. The subjects were asked to provide one response for each statement that best described the individual's opinion by circling either SA, A, NAND, D, or SD--symbols representing the range of responses available. Twenty of the items were constructed in a negative direction to avoid response set and were arranged randomly in the instruments. The items on the Mother's Hospital Questionnaire and on the Father's Hospital Questionnaire were identical, but they were arranged in a random order so that the sequence of items was not identical.

The second section of the questionnaires was two pages regarding the involvement of each parent in the caregiving of the infant.[1] Eleven caregiving activities were listed--(1) change the baby's diapers, (2) dress the baby, (3) feed the baby, (4) bathe the baby, (5) care for the baby alone, (6) wash the baby's diapers and/or clothes, (7) attend to the baby in the middle of the night, (8) play

with the baby, (9) rock the baby, (10) soothe the baby when crying, and (11) take the baby for a walk (see Appendix B). Beside the list of behaviors was a grid representing when the respondent would start doing this caregiving activity and how often the respondent would engage in it. The grid for "starting when" ranged from one to six: one represented the first week; two, the first month; three, three to six months; four, seven to 12 months; five, later than one year; six represented never. The grid for "about how often" ranged from one to six: one represented never; two, occasionally; three, about one-third of the time; four, about one-half of the time; five, more than half of the time; six, all of the time. On the first page of this section, the mothers were asked how involved they would like to be in the daily caregiving of the baby. The second page of this section was identical except the mothers were to respond how involved they would like their husbands to be in the daily caregiving of the baby. The format for the second section of the questionnaires for the fathers was identical to the second section of the mothers' questionnaires except fathers were asked to respond how involved they would like to be in the daily care of the infants on page one, and how involved they would like their wives to be in the daily care on page two.

Attached to the Mother's Hospital Questionnaire was a page of questions requesting demographic information on the couple--father's education, mother's education, mother's occupation, father's

occupation, family income, mother's age, father's age, and how long married. There were questions regarding the pregnancy: Is this your first child? Was this pregnancy planned? Did you and your husband attend childbirth preparation classes? There was a question concerning the birth of the child: Was your husband present at the birth of the baby? There were two questions concerning the baby: What is the sex of the child? Are you planning to breast- or bottle-feed the baby?

Attached to the Father's Hospital Questionnaire was a page of questions regarding the child and the birth: Is this your first child? Was this pregnancy planned? Did you and your wife attend childbirth preparation classes? Were you present at the birth of this child? Also, the father was asked, are you married to this child's mother? Do you plan to take time from work when your baby goes home from the hospital? If yes, how much time?

Identification and Recruitment of the Sample

The investigator received permission from the Chief of Obstetrics and the Obstetrical Committee of Moses Cone Memorial Hospital to conduct research on the obstetrical unit of the hospital. Approval and permission were also sought and granted from the administration of the hospital and the administration of nursing. A training session on the purpose and the procedures for the research was conducted for the nursing staff on the obstetrical unit.

Identification of the Sample

Using files and medical charts of patients on the obstetrical unit of the hospital, married Caucasian couples having their first child were identified for the sample of the study. There were no socioeconomic criteria for participation; as patients from public and private clinics deliver their babies at Moses Cone Memorial Hospital, it was hoped all socioeconomic levels would be represented.

Recruitment of the Sample

Upon identification of married Caucasian parents of a first child, the investigator visited the hospital rooms of the potential subjects. After introductions and identification of the research project, the mother was asked if the baby was doing well. Only couples whose babies were in the regular neonatal nursery or rooming-in with the mothers were asked to participate. Babies in intensive-care units were not included.

The subjects were told that although a great deal of research has been conducted on mothers and babies, not much research has been done with fathers or with parents as couples. This was an initial study conducted in Greensboro for the purpose of identifying factors that influence parents' interactions with their child. It was hoped the results would give professionals guidance in ways of assisting parents of first children in their adjustment to parenthood.

The procedures for the study were explained. Both parents were asked to answer a questionnaire which took approximately 15 to 20 minutes to complete. They were told there were no right or wrong answers on the questionnaires; only opinions and their anticipated involvement in the care of their baby were asked. It was explained that no subjects would be identified by name in the reporting of the results, and all information would remain confidential. For analysis of the data, all subjects would be given identification numbers.

Administration of the Questionnaires

Upon agreement of the couple to participate in the study, the mother and father were asked to sign a Statement of Agreement (Appendix B) stating their agreement to complete the questionnaires, their understanding of approval of the research by the administration and physicians of the hospital and the Human Subjects Review Committee of the Department of Child Development and Family Relations at the University of North Carolina at Greensboro, and their understanding of anonymity and confidentiality regarding their responses on the questionnaires.

The instructions for completion of the questionnaires were explained by the investigator: each was to complete the questionnaire without consultation with the other. An opportunity for questions and further explanation of the procedure was given if necessary. The investigator collected the questionnaires when they were completed and thanked the subjects for their participation.

Method of Statistical Analysis

All subjects were given identification numbers to assume confidentiality and anonymity. The questionnaires contained 35 variables, and therefore, the sample size had to be three times that number. There were 107 pairs of subjects.

A factor analysis was performed on the Likert-type scale section of the Fathers' Hospital Questionnaire and the Mothers' Hospital Questionnaire, and the two together to determine if the variables defined in the theoretical factors were the same as the variables defined by the varimax rotation of the factor analysis.

The demographic information was used to determine the distribution of subjects by social-class status as defined by the Hollingshead Two-Factor Index of Social Position (1957).

The section of the questionnaires on the anticipated involvement the mother had of the father in caring for the baby and the father's anticipated involvement for himself were used in the regression equation to predict the father's involvement in caregiving.

Part II: Experiment to Determine Effect of Educational Intervention on Fathers' Caregiving Behaviors

Statement of Hypotheses

Provided the factor analysis of the questionnaire produced meaningful and interpretable factors, the experimental section of this study proposed to investigate the following hypotheses:

1. Fathers in the experimental group who participated in an educational intervention program addressed to increasing their knowledge of infants' sensory perceptual and social capabilities, increasing the sex-role acceptability of fathers participating in the daily care of their infants and demonstrating diapering and feeding techniques would have factor scores indicating more positive parenting than would fathers in the control group who did not participate in the intervention program for the following factors:
   - I. Parental knowledge of infant capabilities.
   - II. Parental perception of infant's need for affection and stimulation.
   - III. Parental perception of caretaking competence.
   - IV. Sex-role division of caregiving tasks.
   - V. Negative affect of having a new baby.
2. The fathers whose maternal partners reported at birth to have higher expectations for the fathers' involvement in

caring for the infants would report more involvement in the daily care of their infants four-to-six weeks postpartum than would those fathers whose maternal partners had lower expectations for the fathers' involvement as assessed at the infants' births.

3. The fathers in the experimental group would report more involvement in the daily care of their infants four-to-six weeks postpartum than would the fathers in the control group.

Administration of the Experimental Procedure

Recruitment of the Sample

Subjects were recruited for Part II of this study following the same procedure as in Part I with the exception that only couples residing within the city limits of Greensboro, North Carolina, were recruited for Part II. This was for logistical reasons to limit the geographical area in which to make follow-up home visits. Subjects who participated in Part II of this study were randomly assigned to either the control group or to the experimental group.

The Statement of Agreement signed by the couples was altered according to the group assigned. The control-group couples signed an agreement to participate in the study by completing questionnaires in the hospital and follow-up questionnaires at home; the experimental-group couples agreed to complete questionnaires in the hospital, the father to view a videotape, and to complete follow-up

questionnaires at home. For the control and experimental groups, it was explained that a person assisting in the research would telephone for an appointment with them at a mutually agreeable time in order for them to complete the follow-up questionnaire. This would occur four to six weeks after leaving the hospital.

There were 26 couples in the control group and 26 couples in the experimental group.

Administration of the Questionnaire

The research instrument designed for Part I of this study was used in the pretest section of Part II. It was explained and administered in the same manner as in Part I: the subjects signed a Statement of Agreement appropriate to the group to which they were assigned (Appendix C). It was explained that confidentiality would be given to the responses, and anonymity would be used in reporting the data. However, subjects were asked their addresses and telephone numbers to facilitate the follow-up appointments and home visits. The investigator explained the instructions for completion of the questionnaires, and the subjects were told not to consult with each other during the completion of them. There was an opportunity for questions regarding the procedure. Upon completion, the investigator collected the questionnaires. For those in the control group, the couple was reminded of the follow-up procedure; for those in the experimental group, the father was given instructions as to the time and place for viewing the videotape.

Experimental Procedure

Fathers in the experimental group viewed a 14-minute videotape developed for research purposes.[2] Entitled "Becoming a family," the film was developed (1) to show adult males caring for infants in order to demonstrate this as appropriate behavior for adult males, (2) to demonstrate feeding and diapering of infants, and (3) to demonstrate infant capabilities. The narrative of the film discussed the importance of both parents caring for an infant and ways in which parents can support each other in doing this; it also pointed out infant capabilities and games parents can play with their infants that enhance these capabilities. The action of the film was sets of parents feeding and diapering their babies and playing games with their babies to demonstrate infant capabilities, such as visual tracking and imitative behaviors. Fathers and mothers were shown actively involved in the caregiving and the game playing.

The videotape was shown in a classroom in the hospital on a different floor from the obstetrical unit. It was shown in the evening following visiting hours but before babies were returned from the nursery to their mothers' rooms. This time was selected as the time most fathers were available, but the time least disruptive to fathers' being with their infants and wives.

Before showing the videotape, the investigator explained that it had been developed for research purposes by Dr. Ross Parke of The University of Illinois. It showed real parents with their

neonates. The couples had come to the University for filming and had been told to behave as they normally would with their babies and with each other. Although the feeding episodes all demonstrated bottle-feeding, an endorsement of bottle-feeding over breast-feeding was not to be construed. The assumption was that there could be some awkwardness in filming a mother breast-feeding. The investigator explained ways the father could be helpful and supportive of breast-feeding just as it was demonstrated in the videotape that both parents could participate in bottle-feeding.

Following the viewing of the videotape, the investigator asked if the fathers had questions or comments concerning the film or infant capabilities. When there were questions, they usually pertained to infant capabilities (i.e., Can babies hear? Are loud noises hurtful? When can babies really see?). In one instance, there was a question regarding what one does with a crying baby that led to a discussion of behavior management of children. In this instance, the father feared "spoiling" his child, and anticipated "slapping its hand" when the baby behaved in an annoying manner.

Depending on the number of couples meeting the criteria for inclusion in the sample on a particular evening, fathers viewed the film in a group of one to five fathers. In most instances, the group was two to three fathers.

When questions and comments had been completed, the investigator thanked the fathers for their participation, reminded them that

someone would telephone to arrange completion of the follow-up questionnaire in four to six weeks, and invited them to return to their babies and wives. The length of the intervention was 20 to 30 minutes, depending on the number of questions or comments made.

Design and Administration of the Posttest

Design of the Posttest Instrument

The posttest or follow-up questionnaires used in Part II of this research were similar to the ones used in Part I (Appendix D). The first section of the Mother's Home Questionnaire was a page of several sets of questions. Has your baby had a doctor's check-up since leaving the hospital? How are you feeding your baby? Have you had help at home since leaving the hospital? Have you left your baby for reasons other than work? Have you returned to work since your baby's birth? Have you and your husband discussed the questionnaire you completed in the hospital?

The first section of the Father's Home Questionnaire was a page of several sets of questions. Have you stayed alone with your baby? Have you and your wife had help at home since leaving the hospital? Have you returned to work on a schedule like the one you had before the baby's birth? Have you and your wife discussed the questionnaires you completed in the hospital?

The section of the questionnaire developed for the factor analysis of the Mother's Hospital Questionnaire and the Father's Hospital Questionnaire was used for the second sections of the posttest instruments called Mother's Home Questionnaire and Father's

Home Questionnaire. The sequence for the statements was selected randomly; therefore, all four instruments had a different ordering of the same set of variables.

The third section of the Mother's Home Questionnaire was a list of caregiving behaviors identical to the ones in the third section of the Mother's Hospital Questionnaire. The mother was asked to indicate by circling yes or no beside each caregiving activity if her husband had engaged in the activity with their baby during the past week. If yes, she was asked to indicate how many times during the week he engaged in such activity.

The third section of the Father's Home Questionnaire was the same list of caregiving activities. The father was asked to indicate by circling yes or no if he had performed the caregiving task during the past week. If yes, he was asked to indicate how many times during the week he had engaged in it.

Administration of the Posttest

Two female doctoral graduate students in the Department of Child Development and Family Relations at the University of North Carolina at Greensboro were employed to administer the posttests. They were blind to the group in which the subjects belonged, and trained in the procedure for administrating the questionnaires. They contacted the couples, arranged the appointments, and visited the homes to administer the posttest instruments. Three couples refused to participate in the follow-up--one because the husband was out of the country for an extended period of time; the other two, because of personal preferences.

Method of Statistical Analysis

A multivariate analysis of variance (MANOVA) was performed using the Theoretical Factors (as dependent variables) of the Father's Home Questionnaires and the group of the fathers (experimental or control) as the independent variable.

A regression equation was defined using the mother's expectancy score, the father's expectancy score, the father's socioeconomic index score, and the group (experimental or control) as independent variables and the father's reported involvement in the caregiving of the infant (father's score) as the dependent variable.

CHAPTER IV

ANALYSIS OF THE DATA

Description of the Total Sample

There were 107 married Caucasian couples in the sample. The mothers' ages ranged from 15 years to 36 years with a mean age of 25.35 years. The fathers' ages ranged from 17 years to 40 years with a mean age of 27.78 years. The length of time the couples had been married ranged from three months to 15 years with an average length of three and one-half years.

Hollingshead's (1959) Two-factor index of social position was used to define the socioeconomic groups of the sample. This index weighs educational level and occuaption to determine the social class. The educational level for both sets of parents ranged from eighth grade to graduate school; 47% of the fathers and 42% of the mothers had completed 12 or less years of schooling; 17% of the fathers and 19% of the mothers had education at the graduate level.

The fathers' and mothers' occupations ranged from unemployed to professional. Occupations were scored using the Hollingshead Occupational Scale (1959). Upon consultation with others who have used this scale, the investigator made two adaptations: mothers employed as homemakers were scored at the same level as nurses and

elementary and high school teachers, traditional women's jobs both encompassed in the homemaker occupation. Graduate students were scored at the mid-point of the index as they were not unemployed nor had they yet gained the professional status they sought.

The Hollingshead Index of Social Position Scores (1959) gave a range of scores from 11 to 77, the lowest score indicating the highest social position. The social classes were defined as follows:

Social Class	Range of Computed Scores
I	11 - 17
II	18 - 27
III	28 - 43
IV	44 - 60
V	61 - 77

The mothers' Social Position Scores ranged from 11 to 73. The mean was 34.98 or Social Class III. The fathers' Social Position Scores ranged from 11 to 69. The mean for fathers was 38.5 or Social Class III. A Social Position Score for the couple was determined by averaging the Social Position Score of both parents. The range was from 11 to 71 with a mean of 36.7 or Social Class III.

Family income ranged from less than $10,000 to more than $30,000; 67 percent of the sample had a family income of $29,000 or less.

The same number of boy infants and girl infants were born to the sample--54 males and 54 females. The pregnancy was planned by 67% of the mothers and 69% of the fathers. Of the sample couples, 83% had attended child-birth preparation classes; all the fathers had been present at the birth of the child and the immediate recovery period following the birth. When interviewed in the

hospital, 77% of the mothers planned to breast-feed their babies. When the mothers and babies left the hospital, 73% of the fathers planned to take time from work, and 75% of these reported it would be from one to four days.

Analysis of the Data of Part I: Construction and Validation of a Research Instrument

Part I of the study was the construction and validation of a research instrument for use with mothers and fathers of neonates. The instrument variables were selected by the investigator to describe five theoretical factors:

Factor I: Parental knowledge of infant capabilities.

Factor II: Parental perception concerning infant's needs for affection and stimulation.

Factor III: Perception of own caregiving competence.

Factor IV: Sex-role division of caregiving tasks.

Factor V: Negative affect of being a new parent.

(See Appendix A for listing of variables for each factor.) The variable numbers are those given to the variable statement on the Mother's Hospital Questionnaire.

A factor analysis was performed on the data for the set of couples in the total sample of subjects participating in Part I of the study. A factor analysis also was performed on the data for the set of fathers in the total sample and the set of mothers in the total sample.

Factor Analysis of the Hospital Questionnaires of the Set of Couples in the Total Sample

A factor analysis was performed on the set of data from the Mother's Hospital Questionnaires and the Father's Hospital Questionnaires together. Using the varimax rotation, 12 factors were defined. The investigator used 0.5000 as the criterion weight for selection of a variable in a factor. With the exception of one factor, Factor 9, there was no overlapping of questions as the investigator had defined the Theoretical Factors I through V.

Variables of the Theoretical Factors were divided into smaller factors (see Table 1). Therefore (Chart 1), Factor I, Parental knowledge of infant capabilities, was defined by Factor 2 and Factor 7. Question 13, newborns are unable to tell two different people apart, was a part of factor 9. Question 35, when young babies hear a human voice, they often try to search for the sound with their eyes, was not included in any factor.

Variables the investigator had defined as Factor II, Parental perception concerning infant's needs for affection and stimulation, did not appear in any of the factors of the varimax rotation.

Factor III, Perception of own caregiving competence, was Factor 1. Question 23, "A good time to play with a baby is when he/she is being diapered" was not included in any factor.

The sex-role division of caregiving tasks, Factor IV, was composed of Factor 3, Factor 4, Factor 6, and Factor 12. Question 20, "I am not interested in sharing the caregiving of the baby when he/

Table 1

Varimax Rotation of the Factor Analysis of the

Hospital Questionnaires of the Set of

Couples in the Total Sample

Factor	Eigenvalue	Theoretical Factor	Variables Included
1	2.921346	III	Q1: I've had a lot of experience looking after babies (like with younger brothers or sisters).
		III	Q6: I worry about hurting my baby when I hold him/her.
		III	Q7: I feel somewhat unsure of myself when around young babies.
		III	Q27: It's hard to calm a baby down when he/she is fussy.
		III	Q33: I'm nervous about holding my baby when I'm alone with him/her.
2	2.020008	I	Q24: Newborn babies can be very different--some are very quiet, some are very active.
3	2.316265	IV	Q25: A father's main responsibility to his baby during the first few months is to play with the baby and do fun things with him/her.

Table 1 (Continued)

Factor	Eigenvalue	Theoretical Factor	Variables Included
		IV	Q29: A mother's main responsibility during the first few months is to play with the baby and do fun things with him/her.
		IV	Q34: A mother's main responsibility during the first few months is to feed and diaper the baby.
4	1.776545	IV	Q8: I feel that the baby's mother should have primary responsibility for taking care of a baby.
		IV	Q32: Men and women should share equally in the job of taking care of a baby.
5	1.816355	V	Q15: It seems that babies require too much attention.
		V	Q28: Babies are too demanding of their parents.
6	1.375156	IV	Q3: My spouse has given me a number of helpful suggestions for taking care of a baby.
		IV	Q16: I feel that the baby's father should have primary responsibility for taking care of a baby.
7	1.912890	I	Q17: Newborn babies can follow a moving object with their eyes.

Table 1 (Continued)

Factor	Eigenvalue	Theoretical Factor	Variables Included
		I	Q21: Newborn babies like to look at bright-colored toys.
8	1.403343	V	Q2: I am worried that this baby will put a strain on our finances.
9	1.724466	V	Q12: Newborns are unable to tell two different people apart.
		I	Q13: My husband encourages me to spend a lot of time with our baby.
		IV	Q20: I am not interested in sharing the caregiving of the baby when he/she comes home.
10	1.560659	V	Q36: I'm really happy that we had this baby.
11	1.527645	V	Q11: Crying babies need to be spanked.
12	1.490204	IV	Q14: It seems that babies require too much attention.

Chart 1

Theoretical Factors as Defined by Varimax Rotation

of Mother's Hospital Questionnaire and Father's

Hospital Questionnaire

Factor I: Parental knowledge of infant capabilities.

Factor 2: Q 24: Newborn babies can be very different--some are very quiet, some are very active.

Factor 7: Q 17: Newborn babies can follow a moving object with their eyes.

(Q 13 was a part of Factor 9; Q 35 not included.)

Factor II: Parental perception of infant's needs for affection and stimulation.

No Factors.

Factor III: Perception of own caregiving competence.

Factor 1: Q 1: I've had a lot of experience looking after babies (like with younger brothers or sisters).

Q 6: I worry about hurting my baby when I hold him/her.

Q 7: I feel somewhat unsure of myself when around young babies.

Q 27: It's hard to calm a baby down when he/she is fussy.

Chart 1 (Continued)

Factor 1: (Continued)

Q 33: I'm nervous about holding my baby when I'm alone with him/her.

(Q 23 was not included in any factor.)

Factor IV: Sex-role division of caregiving tasks.

Factor 3: Q 25: A father's main responsibility to his baby during the first few months is to play with the baby and do fun things with him/her.

Q 29: A mother's main responsibility during the first few months is to play with the baby and do fun things with him/her.

Q 34: A mother's main responsibility during the first few months is to feed and diaper the baby.

Factor 4: Q 8: I feel that the baby's mother should have primary responsibility for taking care of a baby.

Q 32: Men and women should share equally in the job of taking care of a baby.

Factor 6: Q 3: My spouse has given me a number of helpful suggestions for taking care of a baby.

Q 16: I feel that the baby's father should have primary responsibility for taking care of a baby.

Chart 1 (Continued)

Factor 12: Q 14: My husband encourages me to spend a lot of time with our baby.

(Q 20 was a part of Factor 9; Q 22 and Q 19 were not included.)

Factor V: Negative affect.

Factor 5: Q 15: It seems that babies require too much attention.

Q 28: Babies are too demanding of their parents.

Factor 8: Q 2: I am worried that this baby will put a strain on our finances.

Q 36: I'm really happy that we had this baby.

Q 11: Crying babies need to be spanked.

(Q 12 was part of Factor 9.)

she comes home," was a part of Factor 9. Question 22, "I am very satisfied with the way my spouse and I have divided up the work of taking care of our baby," and Question 19, "females are by nature much better at taking care of babies than are males," were not included in any factor.

Factor V, Negative affect, was defined as Factor 5, Factor 8, Factor 10, and Factor 11. Question 12, "I'm disappointed my baby doesn't recognize me better," was a part of Factor 9.

Factor Analysis of the Set of Mother's Hospital Questionnaires

A factor analysis was performed on the set of variables from the Mother's Hospital Questionnaires. Using the varimax rotation, 13 factors were defined (see Table 2). With the exception of Factor 9, there were no factors that had questions from more than one of the Theoretical Factors.

Variables of the Theorized Factors were divided among several factors (see Chart 2). Therefore, Factor I, Parental knowledge of infant capabilities, was composed of Factor 10 and Factor 12. Question 13, newborns are unable to tell two different people apart, was not included in any factor, nor was Question 35, when young babies hear a human voice, they often try to search for the sound with their eyes.

Factor II, Parental perception concerning infant's needs for affection and stimulation, was defined by Factor 3. Question 30,

Table 2

Varimax Rotation of Factor Analysis of Mother's

Hospital Questionnaire

Factor	Eigenvalue	Theoretical Factor	Variables Included	
1	2.637461	III	Q1:	I've had a lot of experience looking after babies (like with younger brothers or sisters).
		III	Q6:	I worry about hurting my baby when I hold him/her.
		III	Q7:	I feel somewhat unsure of myself when around young babies.
		III	Q33:	I'm nervous about holding my baby when I'm alone with him/her.
2	2.520193	IV	Q25:	A father's main responsibility to his baby during the first few months is to play with the baby and do fun things with him/her.
		IV	Q29:	A mother's main responsibility during the first few months is to play with the baby and do fun things with him/her.
		IV	Q34:	A mother's main responsibility during the first few months is to feed and diaper the baby.

Table 2 (Continued)

Factor	Eigenvalue	Theoretical Factor	Variables Included
3	1.936398	II	Q18: Parents should smile a lot at their babies.
		II	Q26: It doesn't make any difference to a young baby's development whether you talk to him/her or not.
		II	Q31: It's good for young babies to be cuddled.
4	2.237911	V	Q10: Having a baby forces you to give up too many of your favorite activities.
		V	Q11: Crying babies need to be spanked.
		V	Q15: It seems that babies require too much attention.
		V	Q28: Babies are too demanding of their parents.
5	1.814648	IV	Q 8: I feel that the baby's mother should have primary responsibility for taking care of a baby.
		IV	Q19: Females are by nature much better at taking care of babies than are males.
		IV	Q32: Men and women should share equally in the job of taking care of a baby.

Table 2 (Continued)

Factor	Eigenvalue	Theoretical Factor	Variables Included
6	1.839791	V	Q 5: Our baby seems very attached to me.
		V	Q12: I'm disappointed that my baby doesn't recognize me better.
7	1.601563	V	Q36: I'm really happy that we had this baby.
8	1.388840	IV	Q16: I feel that the baby's father should have primary responsibility for taking care of a baby.
9	1.375247	V	Q 4: I don't think a mother should have to give up some of her own activities to take care of a baby.
		II	Q30: It will be fun to make up new games to play with our baby.
10	1.751769	I	Q17: Newborn babies can follow a moving object with their eyes.
		I	Q21: Newborn babies like to look at bright-colored toys.

Table 2 (Continued)

Factor	Eigenvalue	Theoretical Factor	Variables Included
11	1.676465	IV	Q20: I am not interested in sharing the caregiving of the baby when he/she comes home.
12	2.092084	I	Q24: Newborn babies can be very different--some are very quiet, some are very active.
13	1.324752	IV	Q 3: My spouse has given me a number of helpful suggestions for taking care of a baby.

Chart 2

Theoretical Factors as Defined by Varimax Rotation

of Mother's Hospital Questionnaires

Factor I: Parental knowledge of infant capabilities.

Factor 10: Q 17: Newborn babies can follow a moving object with their eyes.

Q 21: Newborn babies like to look at bright-colored toys.

Factor 12: Q 24: Newborn babies can be very different--some are very quiet, some are very active.

(Questions 13 and 35 were not included in any factor.)

Factor II: Parental perception concerning infant's needs for affection and stimulation.

Factor 3: Q 18: Parents should smile a lot at their babies.

Q 26: It doesn't make any difference to a young baby's development whether you talk to him/her or not.

Q 31: It's good for young babies to be cuddled.

(Question 30 was included in Factor 9.)

Chart 2 (Continued)

Factor III: Perception of own caregiving competence.

Factor 1: Q 1: I've had a lot of experience looking after babies (like with younger brothers or sisters).

Q 6: I worry about hurting my baby when I hold him/her.

Q 7: I feel somewhat unsure of myself when around young babies.

Q33: I'm nervous about holding my baby when I'm alone with him/her.

(Questions 23 and 27 were not included in any factor.)

Factor IV: Sex-role division of caregiving tasks.

Factor 2: Q25: A father's main responsibility to his baby during the few few months is to play with the baby and do fun things with him/her.

Q29: A mother's main responsibility during the first few months is to play with the baby and do fun things with him/her.

Q34: A mother's main responsibility during the first few months is to feed and diaper the baby.

Factor 5: Q 8: I feel that the baby's mother should have primary responsibility for taking care of a baby.

Q19: Females are by nature much better at taking care of babies than are males.

Chart 2 (Continued)

Factor 5: (Continued)

Q32: Men and women should share equally in the job of taking care of a baby.

Factor 8: Q16: I feel that the baby's father should have primary responsibility for taking care of a baby.

Factor 11: Q20: I am not interested in sharing the caregiving of the baby when he/she comes home.

Factor 13: Q 3: My spouse has given me a number of helpful suggestions for taking care of a baby.

(Questions 14 and 22 were not included in any factor.)

Factor V: Negative affect

Factor 4: Q10: Having a baby forces you to give up too many of your favorite activities.

Q11: Crying babies need to be spanked.

Q15: It seems that babies require too much attention.

Q28: Babies are too demanding of their parents.

Factor 6: Q 5: Our baby seems very attached to me.

Q12: I'm disappointed that my baby doesn't recognize me better.

Chart 2 (Continued)

Factor 7: Q36: I'm really happy that we had this baby.
(Question 4 was included in Factor 9.)

it will be fun to make up new games to play with our baby, was in Factor 9.

Perception of own caregiving competence, Factor III, was defined by Factor 1. Question 23, a good time to play with a baby is when he/she is being diapered, and Question 27, it's hard to calm a baby when he/she is fussy, were not included in any factor.

Sex-role division of caregiving tasks, Factor IV, was defined by Factors 2, 5, 8, 11, and 13. Question 14, my spouse encourages me to spend a lot of time with our baby, and Question 22, I am very satisfied with the way my spouse and I have divided up the work of taking care of our baby, were not included in any factor.

Factor V, Negative affect, was defined as Factors 4, 6, and 7. Question 4, I don't think a mother should have to give up some of her own activities to take care of the baby, was included in Factor 9.

Factor Analysis of the Set of Father's Hospital Questionnaires

A factor analysis was performed on the set of Father's Hospital Questionnaires. Using the varimax rotation, 11 factors were defined. Factors 2, 4, 5, 9, and 11 were the only factors that contained variables from one theoretical factor as defined by the investigator. Factors 1, 3, 6, 7, 8, and 10 contained one or more variables from more than one of the theoretical factors (see Table 3).

There were no theorized factors that could be clearly defined by this factor analysis (see Chart 3).

Table 3

Varimax Rotation of Factor Analysis of

Father's Hospital Questionnaires

Factor	Eigenvalue	Theoretical Factor	Variables Included
1	1.723206	IV	Q14: My spouse has given me a number of helpful suggestions for taking care of our baby.
		II	Q18: Having a baby forces you to give up too many of your favorite activities.
2	3.108392	III	Q 6: A mother's main responsibility during the first few months is to feed and diaper the baby.
		III	Q 7: When young babies hear a human voice, they often try to search for the sound with their eyes.
		III	Q27: I am very satisfied with the way my wife and I have divided up the work of taking care of our baby.
		III	Q33: It seems that babies require too much attention.
3	2.127535	III	Q23: Newborn babies can be very different--some are very quiet, some are very active.

Table 3 (Continued)

Factor	Eigenvalue	Theoretical Factor	Variables Included
		IV	Q25: I feel that the baby's mother should have primary responsibility for taking care of the baby.
		IV	Q29: I feel that the baby's father should have primary responsibility for taking care of a baby.
4	1.890505	V	Q 5: Newborns are unable to tell two different people apart.
5	2.083635	IV	Q 8: Babies are too demanding of their parents.
		IV	Q32: A mother's main responsibility during the first few months is to play with the baby and do fun things with him/her.
		IV	Q34: Men and women should share equally in the job of taking care of a baby.
6	2.211814	V	Q12: Parents should smile a lot at their babies.
		I	Q13: I'm really happy that we had this baby.
		IV	Q20: I am not interested in sharing the caregiving of the baby when he/she comes home.

Table 3 (Continued)

Factor	Eigenvalue	Theoretical Factor	Variables Included
7	2.197716	III	Q 1: I worry about hurting my baby when I hold him/her.
		I	Q21: My wife encourages me to spend a lot of time with our baby.
		II	Q30: It's good for young babies to be cuddled.
		I	Q17: It will be fun to make up new games to play with our baby.
8	2.024057	V	Q 2: Newborn babies can follow a moving object with their eyes.
		IV	Q 3: Having a baby forces you to give up too many of your favorite activities.
		V	Q36: I've had a lot of experience looking after babies (like with younger brothers or sisters).
9	1.469470	V	Q 4: A father's main responsibility to his baby during the first few months is to play with the baby and do fun things with him/her.

Table 3 (Continued)

Factor	Eigenvalue	Theoretical Factor	Variables Included
10	2.078850	V	Q11: Our baby seems very attached to me.
		II	Q26: It doesn't make any difference to a young baby's development whether you talk to him/her or not.
		II	Q31: A good time to play with a baby is when he/she is being diapered.
11	1.960376	V	Q15: I'm nervous about holding my baby when I'm alone with him/her.
		V	Q28: Females are by nature much better at taking care of babies than are males.

Chart 3

Theoretical Factors as Defined by Varimax Rotation

of Father's Hospital Questionnaires

Factor I: Parental knowledge of infant capabilities.

Part of Factor 6: Q13: I'm really happy that we had this baby.

Q17: It will be fun to make up new games to play with our baby.

Part of Factor 7: Q21: My wife encourages me to spend a lot of time with our baby.

(Question 24 and Question 35 were not included in any factor.)

Factor II: Parental perception concerning infant's needs for affection and stimulation.

Part of Factor 1: Q18: Having a baby forces you to give up too many of your favorite activities.

Part of Factor 7: Q30: It's good for young babies to be cuddled.

Part of Factor 10: Q26: It doesn't make any difference to a young baby's development whether you talk to him/her or not.

Q31: A good time to play with a baby is when he/she is being diapered.

Chart 3 (Continued)

Factor III: Perception of own caregiving competence.

Factor 2: Q 6: A mother's main responsibility during the first few months is to feed and diaper the baby.

Q 7: When young babies hear a human voice, they often try to search for the sound with their eyes.

Q27: I am very satisfied with the way my wife and I have divided up the work of taking care of our baby.

Q33: It seems that babies require too much attention.

Part of Factor 3: Q23: Newborn babies can be very different--some are very quiet, some are very active.

Part of Factor 7: Q 1: I worry about hurting my baby when I hold him/her.

Factor IV: Sex-role division of caregiving tasks.

Part of Factor 1: Q14: My spouse has given me a number of helpful suggestions for taking care of our baby.

Part of Factor 3: Q25: I feel that the baby's mother should have primary responsibility for taking care of the baby.

Q29: I feel that the baby's father should have primary responsibility for taking care of a baby.

Chart 3 (Continued)

Factor 5: Q 8: Babies are too demanding of their parents.

Q32: A mother's main responsibility during the first few months is to play with the baby and do fun things with him/her.

Q34: Men and women should share equally in the job of taking care of a baby.

Part of Factor 6: Q20: I am not interested in sharing the caregiving of the baby when he/she comes home.

Part of Factor 8: Q 3: Having a baby forces you to give up too many of your favorite activities.

(Questions 19, 16, and 22 were not included in any factor.)

Factor V: Negative affect.

Factor 4: Q 5: Newborns are unable to tell two different people apart.

Part of Factor 6: Q12: Parents should smile a lot at their babies.

Part of Factor 8: Q 2: Newborn babies can follow a moving object with their eyes.

Q36: I've had a lot of experience looking after babies (like with younger brothers or sisters).

Factor 9: Q 4: A father's main responsibility to his baby during the first few months is to play with the baby and do fun things with him/her.

Chart 3 (Continued)

Factor 11:	Q15:	I'm nervous about holding my baby when I'm alone with him/her.
	Q28:	Females are by nature much better at taking care of babies than are males.
Part of Factor 10:	Q11:	Our baby seems very attached to me.

(Question 10 was not included in any factor.)

Comparison of the Three Factor Analyses

The varimax rotation of the factor analysis of the Mother's Hospital Questionnaires is the most clear, and although the theoretical factors are broken into components, they all correspond to the variables in the theoretical factors, with the exception of Factor 9 which has variables of Theoretical Factor II and Theoretical Factor V. The varimax rotation of the factor analysis of the Father's Hospital Questionnaires is the most unclear and is likely to cloud the analysis of all the questionnaires together.

As shown in Table 4, in Factor I, parental knowledge of infant capabilities, Question 17, newborn babies can follow a moving object with their eyes, and Question 21, newborn babies like to look at bright-colored toys, are highly correlated and appear together in the Mother's Hospital Questionnaire, Father's Hospital Questionnaire, and the combined Mother's Hospital Questionnaire and Father's Hospital Questionnaire. Question 24, newborn babies can be very different--some are very quiet, some are very active, is not correlated with another variable but stands alone as a variable in the Mother's Hospital Questionnaire and the Mother's Hospital Questionnaire/ Father's Hospital Questionnaire. Question 35 is not included in any factor in either of the data sets. Question 13 appears as a portion of a factor with variables from other theoretical factors in Father's Hospital Questionnaire and Mother's Hospital Questionnaire/Father's Hospital Questionnaire. Therefore, it can be concluded that parental knowledge of infant capabilities was correlated as it related to

Table 4

Comparisons of the Three Factor Analyses

With the Theoretical Factors

Factor	Theoretical Variables	Varimax-All MHQ/FHQ	Varimax Mothers' MHQ	Varimax Fathers' FHQ
I	Q 13	Factor 2: Q24	Factor 12: Q24	
	Q 17	Factor 7: Q17, Q21	Factor 10: Q17, Q21	Part of Factor 7: Q17 Q21
	Q21	*Part of Factor 9: Q13	Q13 and Q35 not included in any factor	Part of Factor 6: Q13
	Q24	Q35 not included in any factor		Q24 and Q35 not included in any factor
II	Q18	No Factors	Factor 3: Q18, Q26 Q31	Part of Factor 1: Q18
	Q26			Part of Factor 7: Q30
	Q30		Part of Factor 9: Q30	Part of Factor 10: Q26 Q31
	Q31			

Table 4 (Continued)

Factor	Theoretical Variables	Varimax-All MHQ/FHQ	Varimax Mothers' MHQ	Varimax Fathers' FHQ
III	Q1	Factor 1: Q1, Q6, Q7, Q27, Q33	Factor 1: Q1, Q6, Q7, Q33	Factor 2: Q6, Q7, Q27 Q33
	Q6			
	Q7			
	Q23	Q23 not included in any factors.	Q23 and Q27 not included in any factors	Part of Factor 3: Q23
	Q27			Part of Factor 7: Q1
	Q33			
IV	Q3	Factor 3: Q25, Q29, Q34	Factor 2: Q25, Q29, Q34	Part of Factor 3: Q25, Q29
	Q8			
	Q14	Factor 4: Q8, Q32	Factor 5: Q8, Q32, Q19	Factor 5: Q8, Q32, Q34
	Q16			
	Q19	Factor 6: Q3, Q16	Factor 8: Q16 Factor 13: Q3	Part of Factor 1: Q14 Part of Factor 8: Q3

Table 4 (Continued)

Factor	Theoretical Variables	Varimax-All MHQ/FHQ	Varimax Mothers' MHQ	Varimax Fathers' FHQ
IV	Q20	Factor 12: Q14		
	Q22	Part of Factor 9: Q20	Factor 11: Q20	Part of Factor 6: Q20
	Q25			
	Q29	Q22, Q19 not included in any factors	Q22 and Q14 not included in any factors	Q19, Q16, and Q22 not included in any factors
	Q32			
	Q34			
V	Q 2	Factor 5: Q15, Q28	Factor 4, Q10, Q11, Q15, Q28	Factor 11: Q15, Q28
	Q4			
	Q5	Factor 8: Q2		
	Q9	Part of Factor 9: Q12	Factor 6: Q5, Q12	Factor 4: Q5 Part of Factor 6: Q12
	Q10			

Table 4 (Continued)

Factor	Theoretical Variables	Varimax-All MHQ/FHQ	Varimax Mothers' MHQ	Varimax Fathers' FHQ
V (Cont'd)	Q11	Factor 10: Q36	Factor 7: Q36	Part of Factor 8: Q2, Q36
	Q12	Factor 11: Q11		Part of Factor 10: Q11
	Q15		Part of Factor 9: Q4	Factor 9: Q4
	Q28	Q4, Q5, Q9, Q10 not included in any factor.	Q2, Q9 not included in any factor.	
	Q36			Q10 not included in any factor.

*Part of Factor means that this variable is a part of a factor that includes variables placed in other Theoretical Factors.

knowledge of individual differences and visual capabilities. The other variables were independent.

For Factor II, Parental perception concerning infants' needs for affection and stimulation, the varimax rotation of the Mother's Hospital Questionnaire showed Question 18, parents should smile a lot at their babies, Question 26, it doesn't make any difference to a young baby's development whether you talk to him/her or not, and Question 31, it's good for young babies to be cuddled, as highly correlated. Questions 26 and 31 are together in Father's Hospital Questionnaire, but are with variables from other theoretical factors. Smiling, talking, and cuddling for all nurturing behaviors, not physical caregiving behaviors; parents do these to their infants, and therefore, they can be defined as affection and stimulation. It will be fun to make up new games to play with our baby, Question 30, does not correlate with the other variables and is included with variables from other theoretical factors in the Mother's Hospital Questionnaire and the Father's Hospital Questionnaire.

In Factor III, Perception of own caregiving competency, Question 6, I worry about hurting my baby when I hold him/her," Question 7, I feel somewhat unsure of myself when around young babies, and Question 33, I'm nervous about holding my baby when I'm alone with him/her, are highly correlated in Mother's Hospital Questionnaire, Father's Hospital Questionnaire, and Mother's Hospital Questionnaire/Father's Hospital Questionnaire. All three of these variables relate to feelings of uneasiness regarding caring for the baby.

Question 1, I've had a lot of experience looking after babies, correlates with Questions 6, 7, and 33 in the Mother's Hospital Questionnaire and the Mother's Hospital Questionnaire/Father's Hospital Questionnaire, but not in the Father's Hospital Questionnaire. Question 27, It's hard to calm a baby down when he/she is fussy, correlates with Questions 6, 7, and 33 in the Father's Hospital Questionnaire and the Mother's Hospital Questionnaire/ Father's Hospital Questionnaire. Question 23 is part of another factor in Father's Hospital Questionnaire, but not included in Mother's Hospital Questionnaire or Mother's Hospital Questionnaire/ Father's Hospital Questionnaire. Therefore, the most clear component of the parental perception of caregiving competence relates to feelings of uneasiness regarding caring for the baby.

Factor IV, sex-role division of caregiving tasks, has several components according to the factor analysis. Question 25, a father's main responsibility to his baby during the first few months is to play with the baby and do fun things with him/her, correlates with Question 29, a mother's main responsibility during the first few months is to play with the baby and do fun things with him/her, in all three sets of data. Question 34, a mother's main responsibility during the first few months is to feed and diaper the baby, is included in the same factor with Questions 25 and 29 in the Mother's Hospital Questionnaire and the Mother's Hospital Questionnaire/ Father's Hospital Questionnaire. All three of these variables refer to the person responsible for specific caregiving behaviors. I feel that the baby's mother should have primary responsibility

for taking care of a baby, Question 8, and Question 32, men and women should share equally in the job of taking care of a baby, are correlated in all three sets of data. These two variables refer to the responsibility in general of caring for the baby. Question 22, I am very satisfied with the way my spouse and I have divided up the work of taking care of our baby, does not appear in any factor in either of the three sets of data.

The final theoretical factor, Factor V, negative affect, has two variables that appear together in all three data sets. Question 15, it seems that babies require too much attention, and Question 28, babies are too demanding of their parents, are correlated. In the Mother's Hospital Questionnaire, Question 10, having a baby forces you to give up too many of your favorite activities, and Question 11, crying babies need to be spanked, are also included with Questions 15 and 28. All of these questions suggest that babies have a negative affect on their parents, and imply that babies are too demanding of their parents. Question 36, I'm really happy we had this baby, stands by itself in the Mother's Hospital Questionnaire/Father's Hospital Questionnaire, and the Mother's Hospital Questionnaire. There are no other variables that are highly correlated or independent that appear in the same way in any two of the three data sets.

Question 35, when young babies hear a human voice, they often try to search for the sound with their eyes, and Question 22, I am very satisfied with the way my spouse and I have divided up the

work of taking care of our baby, were not included in any factors in any of the three factor analyses.

Part II: The Experimental Procedure

Description of the Sample of the Experimental and Control Groups

There were 52 couples in this set of the sample--26 in the control group, and 26 in the experimental group.

Experimental group. In the experimental group, the mothers' ages ranged from 15 years to 36 years with a mean age of 26.6 years. The fathers' ages ranged from 21 years to 40 years with a mean age of 28.96 years. The length of time the couples had been married ranged from six months to twelve and one-half years with a mean length of 3.85 years.

The mothers' educational levels ranged from eighth grade to graduate school; 34% had completed 12 years of school or less; 26% had graduate school training. Fathers' educational levels ranged from twelfth grade to graduate school; 38% had completed 12 years of school or less; 30% had graduate school training.

The mothers' and fathers' occupations ranged from unemployed to professional. Family income ranged from less than $10,000 to more than $30,000; 62.5% had a family income of $29,000 or less.

There were 11 females and 15 males born to the experimental group. The pregnancy was planned by 69% of the mothers and 69% of the fathers. In this group, 25 of the 26 couples attended childbirth preparation classes. When responding in the hospital, 24

(92%) of the mothers planned to breast feed. When the mother and baby left the hospital, 20 (76.9%) of the fathers planned to take time from work, and 25% of these reported they planned to take one week.

Control group. In the control group, the mothers' ages ranged from 16 years to 33 years with a mean of 24.5 years. The fathers' ages ranged from 18 years to 38 years with a mean of 27 years. The length of time the couples had been married ranged from three months to seven years with a mean length of 2.9 years.

The mothers' educational levels ranged from eighth grade to graduate school; 44% had completed 12 years of school or less; 24% had attended graduate school. Fathers' educational levels ranged from tenth grade to graduate school; 60% had completed 12 years of school or less; 4% had attended graduate school. The mothers' and fathers' occupations ranged from unemployed to professional.

Family income ranged from less than $10,000 to more than $30,000, with 63% having incomes of $29,000 or less.

There were 12 females and 14 males born to the control group. The pregnancy was planned by 61% of the mothers and 69% of the fathers. In this group, 19 (73%) of the couples attended childbirth classes. When responding in the hospital, 20 (76.9%) of the mothers planned to breast feed. When the mother and baby left the hospital, 17 (65%) of the fathers planned to take time from work, and four of these (24%) reported they planned to take one week or more.

Experimental and Control Groups Combined

On the home questionnaires, 51 mothers reported their babies had had a doctor's check-up since leaving the hospital, and no babies had any physical problems. Twenty-eight (53.8%) of the mothers were breastfeeding. Seventeen were in the experimental group, and nine were in the control group. Forty-one (89%) of the fathers had fed the babies--20 in the experimental group, and 21 in the control group. This would include those whose babies were bottlefed and those who had given supplemental feedings of formula or pumped breastmilk or water to the babies.

To the question, have you had help at home since leaving the hospital? 36 (70%) reported yes, and 23 (67%) of these said the help had been a relative; two (5%) fathers who were not working were reported as help at home.

Forty-five (91%) of the fathers had been left alone with the babies. Fifty (96%) of the mothers had left the babies for reasons other than work and six (11%) of the mothers had returned to work since the baby's birth--three in each group. Forty-eight (96%) of the fathers had returned to work on the same schedule as before the baby was born.

Analysis of Hypothesis 1

A multivariate analysis of variance was performed to investigate Hypothesis 1. Fathers in the experimental group who participated in an educational intervention program addressed to increasing

their knowledge of infants' sensory perceptual and social capabilities, increasing the sex-role acceptability of fathers participating in the daily care of their infants and demonstrating diapering and feeding techniques would have factor scores indicating more positive parenting than fathers in the control group who did not participate in the intervention program for the following factors:

Factor I: Parental knowledge of infant capabilities.

Factor II: Parental perception of infant's needs for affection and stimulation.

Factor III: Parental perception of own caregiving competence.

Factor IV: Sex-role division of caregiving tasks.

Factor V: Negative affect of having a new baby.

Because the factor analysis of the Father's Hospital Questionnaires did not produce factors that were meaningful and interpretable, the investigator defined the dependent variables for the multivariate analysis of variance by using the five theoretical factors composed of the variables described in Appendix A. These factors as defined by these variables previously had been reviewed and accepted by a panel of experts. To determine the differences in the scores of the theoretical factors for the fathers in the experimental group and the control group, a multivariate analysis of variance (MANOVA) was performed with the groups, experimental or control--the independent variables, and the scores on the theoretical factors--the dependent variables. The factor scores were determined by adding the responses for each variable in the factor and determining the

mean. For those variables requiring directional change, the scoring pattern was reversed. Consequently, the lower the score on the factor, the more positive the interpretation of the factor. Thus, a lower score on Factor I, parental knowledge of infant's capabilities, indicated more knowledge of infant capabilities; a lower score on Factor II, parental perception of infant's need for affection and stimulation, indicated greater perception of infant's need for affection and stimulation. A lower score on Factor III, parental perception of own caregiving competence, indicated stronger perception of caregiving competence; a lower score on Factor IV, sex-role division of caregiving tasks, indicated more equal division between mother and father of caregiving tasks; and a lower score on Factor V, negative affect of having a new baby, indicated less negative feelings toward having a new baby.

A comparison of the mean scores for each factor is in Table 5. The mean factor scores showed differences between the two groups for all factors except Factor V. The difference between the means shows a lower score or score indicating more positive parenting for the experimental group on Factors I through IV.

The MANOVA Wilks' lambda statistic indicated no significance at the 0.05 level ($p = 0.0941$) (see Table 6). Univariate analysis of variance, performed as part of the multivariate analysis, indicated significant differences between the two groups for Factor I, parental knowledge of infant capabilities, at the 0.0175 level of significance, and for Factor II at the 0.0167 level of significance (see Table 7).

Table 5

Mean Scores of Theoretical Factors of Fathers'

Home Questionnaires

	Group A			Group B			Group C		
Factor	Mean	Range	Std. Dev.	Mean	Range	Std. Dev.	Mean	Range	Std. Dev.
I	9.96154	6-15	9.96154	9.19231	6-13	2.02028	10.7308	6-15	2.35894
II	6.38462	4-9	1.62280	5.88462	4-9	1.65715	6.88462	4-9	1.45126
III	14.1765	8-21	3.00470	13.57690	8-19	2.77378	14.8	9-21	3.16228
IV	27.7885	19-36	3.37818	27.0869	19-35	3.70862	28.5	20-36	3.70135
V	18.6923	11-29	3.29907	18.7308	11-25	3.36521	18.6538	13-29	3.29778

Note. Group A (N = 52); Group B (N = 26) = Experimental; Group C (N = 26) = Control.

Table 6

Multivariate Analysis of Variance for Difference in Effect of Father's Group on Factor Scores for Factors I-V

	F (5.45)	Prob.
Wilks' Criterion	2.02	0.0941

Table 7

Univariate Analysis of Variance From the

Multivariate Analysis of Variance of

Factors I-V

Source of Variance	df	SS	MS	F-Value	p Value	R^2
Factor I						
Model	1	29.7450678	29.74504787	6.05	0.0175	0.109832
Error	49	241.07846154	4.91996860			
Factor II						
Model	1	14.73909502	14.73909502	6.14	0.0167	0.11362
Error	49	117.61384615	2.40028257			
Factor III						
Model	1	19.06561086	19.06561086	2.16	0.1480	0.042236
Error	49	432.34615385	8.82339089			
Factor IV						
Model	1	28.03306184	28.03306184	2.01	0.1628	0.039370
Error	49	684.00615385	13.95930926			
Factor V						
Model	1	0.01088989	0.01088989	0.00	0.9752	0.000020
Error	49	547.67538462	11.17704867			

Because the probability level (p = .9752) was so high and the R-square (R^2 = 0.000020) value so low for Factor V, the investigator eliminated this variable and did a repeat MANOVA using Factors I through IV. The Wilks' lambda statistic approached significance at a probability level of 0.0677 (Table 8). The same significant differences between the experimental and control groups for Factor I and Factor II were again present (see Table 9).

Table 8

Multivariate Analysis of Variance for Difference in Effect of Father's Group on Factor Scores for Factors I-IV

	F (4.46)	Prob.
Wilks' Criterion	2.35	0.0677

Table 9

Univariate Analysis of Variance From the

Multivariate Analysis of Variance of

Factors I-IV

Source of Variance	df	SS	MS	F-Value	p-Value	R^2
Factor I						
Model	1	29.74506787	29.74506787	6.05	0.0175	0.109832
Error	49	241.07846154	4.91996860			
Factor II						
Model	1	14.73909502	14.73909502	6.14	0.0167	0.111362
Error	49	117.61384615	2.40028257			
Factor III						
Model	1	19.06561086	19.06561086	2.16	0.1480	0.042236
Error	49	432.34615385	8.82339089			
Factor IV						
Model	1	28.03306184	28.03306184	2.01	0.1628	0.039370
Error	49	684.00615385				

Analysis for Hypotheses 2 and 3

A multiple regression analysis was performed to investigate Hypotheses 2 and 3.

Hypothesis 2: the fathers whose maternal partners reported at birth to have higher expectations for the fathers' involvement in caring for the infants would report more involvement in the daily care of their infants four to six weeks postpartum than those fathers whose maternal partners had lower expectations for the fathers' involvement as assessed at the infants' births.

Hypothesis 3: the fathers in the experimental group would report more involvement in the daily care of their infants four to six weeks postpartum than the fathers in the control group.

The independent variables in the regression equation were (1) group, experimental, or control; (2) father's score on the Hollingshead Social Index; (3) mother's expectancy score for the father's involvement in caregiving; and (4) father's expectancy score for his own involvement in caregiving. These variables were used to predict the dependent variable, father's score.

The Hollingshead Social Index (1959) score was explained in Chapter III, Methodology. It is a score that weighs educational level achieved and occupation to obtain a socioeconomic ranking.

The mothers' expectancy scores were obtained from the section of the Mother's Hospital Questionnaire on which they were asked to indicate how involved they would like their husbands to be in the daily caregiving of their babies. A list of 11 caregiving behaviors

was stated. The mothers were asked to indicate when they would like their husbands to begin the caregiving behavior, from the first week to never, and how often they would like their husbands to do the activity as compared to themselves from all the time to never. A mother's expectancy score was obtained by adding the coding one to six for "starting when" and one to six for "about how often"--the higher the score, the greater the expectancy. The mothers' expectancy scores ranged from 62 to 120 for all subjects (N = 100); from 67 to 100 for the experimental group (N = 25); from 71 to 104 for the control group (N = 22) (see Table 10).

Table 10

Expectancy Scores for Mothers and Fathers

	Mean	Range
Fathers*		
Group A (N = 93)	88.6344	64 - 112
Group B (N = 22)	87.2727	74 - 110
Group C (N = 20)	89.6	69 - 110
Mothers*		
Group A (N = 100)	86.25	62 - 120
Group B (N = 25)	84.64	67 - 100
Group C (N = 22)	86.1818	71 - 104

Note. Group A = All Subjects; Group B = Experimental; Group C = Control.

*Subjects with any missing variables were not included.

The fathers' expectancy scores were obtained from the section on the Father's Hospital Questionnaires on which they were asked to indicate how involved they would like to be in the daily caregiving of their babies. A list identical to the one on the Mother's Hospital Questionnaire was stated, and the fathers were asked to indicate when they would begin the caregiving behavior and how often they would anticipate being involved in the activities. A father's expectancy score was obtained by adding the coding one to six for "starting when" and one to six for "about how often"--the higher the score, the greater the expectancy. The fathers' expectancy scores ranged from 64 to 112 for all subjects (N = 93); from 74 to 110 for the experimental group (N = 22); from 69 to 110 for the control group (N = 20) (see Table 10).

The father's score was obtained from the section on the Father's Home Questionnaire in which there was the same list of 11 caregiving behaviors as had been on the Father's Hospital Questionnaire and the Mother's Hospital Questionnaire. The fathers were asked to recollect the past week and to indicate by circling yes or no if the activity was one they had done with their babies. The score was obtained by adding the yes responses. The range of fathers' scores for the experimental and control groups (N = 52) was from five to 11.

The multiple regression equation, using the four variable--group, the father's social index score, mother's expectancy score, and the father's expectancy score to predict the father's score of

involvement in caregiving for the infant--was significant at the p = .0048 level. The R-square value was .3564; thus, 35.64% of the variability in the score was defined by the regression equation. Of the variables in the equation, the group, experimental or control, approached significance at the p = 0.0931 level, and the father's expectancy score was significant at the p = 0.0023 level (see Table 11). The father's social index score and the mother's expectancy score were not significant.

A backward elimination procedure was used to define better the effects of each variable (see Tables 12 through 14). At Step 2, after eliminating the father's social index score in Step 1, and the mother's expectancy score in Step 2, the regression equation to predict the father's score was significant at the p = 0.0024 level with an R-square of 0.29206786. Thus, 29% of the variability in the score can be explained using the variables group and father's expectancy score. The group approached significance at the p = 0.0576 level with Beta value equal to .90381366, and the father's expectancy score was significant at the p = 0.0015 level with Beta value equal to .07992535.

As the groups were coded (experimental equals one and control equals zero), the experimental group's fathers' scores were increased as a result of the experimental procedure.

Table 11

Multiple Regression for Fathers' Scores

Source	df	SS	MS	F-Value	p	R^2	Adjusted R^2
Dependent Variable: Father's Score							
Model	4	34.663848	8.665962	4.568	0.0048	0.3564	0.2784
Error	33	62.599310	1.896949				

Variable	df	Parameter Estimate	Probability
Intercept	1	-1.331046	0.6331
Group	1	0.801513	0.0931
FSES	1	-0.012090	0.4189
MEXPEC	1	0.035347	0.1677
FEXPEC	1	0.078566	0.0023

Table 12

Backward Elimination Procedure for

Multiple Regression

Source	df	SS	MS	F	Prob > F
Dependent Variable: Father's Score*					
Regression	4	34.66384795	8.66596199	4.57	0.0048
Error	33	62.59930994	1.89694879		

Variable	B-Value	F	Prob > F
Intercept	-1.33104554		
REGGROUP	0.80151293	2.99	0.0931
FSES	0.80151293	0.67	0.4189
MEXPECT	0.03534702	1.99	0.1677
FEXPECT	0.07856584	10.97	0.0023

*Step 0 all variables entered. R-Square = 0.35639238.

Table 13

Backward Elimination Procedure

Source	df	SS	F	Prob > F
Dependent Variable: Father's Score*				
Regression	3	33.39293420	5.93	0.0023
Error	34	63.87023369		

Variable	B-Value	F	Prob > F
Intercept	-1.80467455		
REGGROUP	0.88425411	3.86	0.0577
MEXPECT	0.03969387	2.65	0.1125
FEXPECT	0.07395531	10.40	0.0028

*Step 1 Variable FSES Removed. R-Square = 0.34332552.

Table 14

Backward Elimination Procedure

Source	df	SS	F	Prob > F
Dependent Variable: Father's Score*				
Regression	2	28.40744275	7.22	0.0024
Error	35	68.85571514		

Variable	B-Value	F	Prob > F
Intercept	1.02080080		
REGGROUP	0.90381366	3.85	0.0576
FEXPECT	0.07992535	11.91	0.0015

*Step 2 Variable MEXPECT removed. R-Square = 0.29206786.

CHAPTER V

DISCUSSION OF THE ANALYSES

Part I: Verification of the Research Instrument

The factor analyses of the Likert-type scale section of the three sets of data from the Mother's Hospital Questionnaires, the Father's Hospital Questionnaires, and the two together did not produce the five theoretical factors defined by the investigator. In all three analyses, the factor analysis produced more than five factors.

The theoretical factors as defined by the investigator may be composed of too many independent variables rather than highly correlated ones, and therefore, the factor analyses of the data sets produced more than the five heoretical actors. However, the Mother's Hospital Questionnaire factor analysis produced factors that could be grouped into the heoretical actor format, and there was no cross-over of variables defined as belonging in one theoretical factor with variables defined as belonging to another theoretical factor (with the exception of Question 4 and Question 30). On this basis, it can be concluded the theoretical factors were composed of several components, and were not a single group of highly correlated variables.

The factor analysis of the Mother's Hospital Questionnaire provided interpretable data. The theoretical factors were defined as several components rather than one succinct unit. In each instance, the variables of the components as factored were compatible with the variables in the theoretical factors.

The factor analysis of the Father's Hospital Questionnaires was not clear, and consequently, almost noninterpretable. The theoretical factors were not defined by smaller components of variables. There was overlap of variables, and the groupings did not correspond to those defined as the theoretical factors. There may be several explanations for the noninterpretable data from the set of Father's Hospital Questionnaires. First, the instrument may not be capable of measuring what was intended. However, because the mothers in the sample did respond in a manner that was interpretable, this explanation is questionable.

A second explanation may relate to the report in the literature that fathers feel a general lack of knowledge and preparation for parenting and caregiving of babies (Wente & Crockenberg, 1976). This general feeling of lack of preparation and lack of knowledge could have influenced the fathers' interpretations of the variables so that those an experienced trained person defined as being correlated were not to the inexperienced, unknowledgable father completing the questionnaire.

The variables on this section of the research instrument requested knowledge of infant capabilities and infant needs beyond their needs for physical caregiving. It also requested information on the attitude the parent had toward sharing the caregiving with his spouse, and the attitude the parent had toward the effect a baby would have on the activities and general lifestyle of the parents. Although this information is rather general as opposed to technical, it is not necessarily information one would receive without specific experiences or instructions.

The difference between the mothers and fathers can only be speculated upon. Perhaps it is the result of the cultural influence of the sexist childrearing of our society in general. Girls growing up generally are encouraged to see and play with babies, and are encouraged to play with dolls. Through these experiences and the effect of the media and literature in which females are depicted as mothers, their sensitivity to the phenomena of being a mother and their general knowledge of infants are greater than those of boys who generally do not receive the same kind of encouragement or have the same experiences. For example, in the variable Question 1, I've had a lot of experience looking after babies, 16% of fathers strongly agreed or agreed, but 37% of mothers strongly agreed or agreed. This difference may reflect the overall difference between the mothers and fathers in their feelings about themselves as caregivers, their general feelings of confidence in their knowledge of babies, and consequently, their attitudes toward the effect having an infant to care for will have upon their lives.

Although both parents attended childbirth preparation classes, this same sensitivity could have influenced the receptivity of the parents to the information about infants, if this were included as a part of the class.

Therefore, the development and verification of the research instrument for use with mothers and fathers of neonates had mixed results. For the mothers, the variables generally seemed to be comprehensible and were verified as being components of the theorized factors. For the fathers, this was not the case.

Part II: Experimental Procedure

The multivariate analysis of variance did not find significant differences between the experimental and control groups of fathers. However, the univariate analysis of variance found differences between the two groups on two theoretical factors: Parental knowledge of infant capabilities, and parental perception of infants' needs for affection and stimulation. Both of these factors were addressed directly in the videotape, "Becoming a Family," viewed by the experimental fathers.

In the videotape, fathers were shown interacting with their babies. The narrator called some of this interaction"playing games with your baby." These games demonstrated infants' abilities to track objects with their eyes and to search for voices with their eyes. Individual differences in babies were spoken of by the narrator. Babies' abilities to distinguish between people (in the

film, the mother and father) were addressed indirectly by referring to the child's recognition of the father when the mother handed the infant to him and vice versa. In the film, parents were shown talking to their infants and cuddling and smiling at their infants.

All the variables used to define these two theoretical factors were a part of the videotape presented to the experimental group. Therefore, it can be concluded that the difference in the scores of the two groups on these two theoretical factors directly related to the experimental procedure.

The lack of difference on the other three theoretical factors deserves comment. Although it was hoped the perception of caregiving competence would be enhanced by the attention and information given to the experimental group, the complexity of this variable may be such that this limited intervention did not make a difference. The variables in this factor reflected a person's self-perception and feelings of self-confidence about being a father and the person's prior experience with babies. It may be too complex to be changed within the limitations of the experimental procedure. The difference in the mean scores did indicate the subjects in the experimental group perceived themselves as more competent, but this difference was not great enough to be statistically significant.

The factor related to sex-role division of caregiving tasks was complex as well. The film viewed by the experimental group showed mothers and fathers involved in caregiving tasks, and the narration discussed the importance of mothers and fathers

participating in the care of the infant. It was hoped the experimental group would report scores indicating more androgynous behavior than the control group. However, it may be that the complexity of sex roles and persons' perceptions of them are too great to be influenced with a limited intervention.

The final factor, negative affect of having a new baby, found no difference between the mean scores of the two groups. It may be that all the fathers had generally positive feelings about their babies and their new roles as fathers. This factor may also be reflective of the percentage of fathers who reported the pregnancy was planned (69% of fathers in both groups), and therefore, a general feeling of readiness for and acceptance of any lifestyle changes a baby brings.

The multiple regression procedure used to investigate the determinants of the difference in the level of the father's involvement in the daily caregiving of the babies found a difference between the experimental and control groups. The experimental group was more involved in the caregiving than was the control group.

Hypothesis 2 had speculated that the influence of what mothers expect fathers to do in the caregiving would influence the fathers' actual involvement. It was hypothesized that the greater the mothers' expectations for the fathers' involvement, the greater the fathers' involvement would be. It was found that this variable was not significant in the regression equation, and therefore, based on

these data, this hypothesis was not supported. This contradicts Fein's (1976) finding that the mother's expectation for the father's involvement predicted the father's involvement even more than the father's own expectation predicted his involvement.

The experimental and control groups differed in their reported involvement in the actual caregiving of their babies. According to these data, the variable, father's expectation, was the most significant variable in influencing the difference in the two groups. The father's expectation score was assessed during the data-gathering session in the hospital. Several factors could have influenced the father's expectancy score: the engrossment of the father, the influence of childbirth preparation classes in exciting the father about being involved in the caregiving of their infant, the encouragement of the hospital staff to fathers to hold the infant during the recovery period and to be in the hospital room with the mother and baby whenever possible during the early postpartum period, and the very act of being asked how involved he intended to be in the caregiving. The combination of this preoccupation with being a new father, termed engrossment, with the encouragement of the medical staff and someone inquiring about when and how often he planned to do caregiving could all combine to have made the father expect to be involved. This expectation was then enhanced for the experimental group by the viewing of a videotape that stated and demonstrated that fathers should be participating in the daily caregiving of the infants, and was reinforced by the attention of the investigator to this, as well.

Therefore, it can be concluded that fathers expect to be involved with the caregiving of their infants during the early weeks of the children's lives. This involvement can be increased by educational intervention as demonstrated in this experimental procedure.

CHAPTER VI

SUMMARY, CONCLUSIONS, AND RECOMMENDATION

Summary

This research was conducted to determine the effectiveness of a research instrument in measuring parents' knowledge of infants and of their attitudes regarding the caregiving of infants. The instrument was developed using a Likert-type scale for 35 variables. Each variable had been selected to measure one of five theoretical factors defined by the investigator. This instrument was adapted from an instrument used by Parke (1980).

A second purpose of this research was to determine the effectiveness of an educational intervention program for fathers designed to (1) increase fathers' investment in their babies as measured by their caregiving behaviors of their babies, (2) increase their knowledge about infant capabilities and needs, and (3) positively alter their attitudes regarding parenting and sex-role division of caregiving tasks. Additionally, data were collected to determine the effect of the mother's expectation for the father's involvement.

The target population were 107 Caucasian married couples who had delivered their first child at a hospital in Greensboro, North Carolina. In the part of the study directed to verify the research instrument, 52 couples participated in the experimental procedures

--26 in the experimental group, and 26 in the control group. The data were collected during the postpartum hospital stay of the mother and baby. The follow-up data were collected four to six weeks postpartum in the home of the subjects. The experimental procedure for the fathers occurred in the hospital following the initial data collection.

The data were analyzed using the SAS computer program. A factor analysis was done of the Likert-type scaled section of the instrument. A multivariate analysis of variance was done to determine the difference between the experimental group and the control group on the scores of the theoretical factors. A multiple regression was performed to determine the difference in the two groups' participation in caregiving behaviors and the influence of the mother's expectation for the father's involvement in caregiving on his actual involvement in caregiving.

Conclusions

The following conclusions were made following the analysis of the data.

1. The Likert-type scaled section of the research instrument was verified as measuring the theoretical factors for the data from the Mother's Hospital Questionnaire.
2. The Likert-type scaled section of the research instrument was <u>not</u> verified as measuring the theoretical factors for the data from the Father's Hospital Questionnaire.

3. The experimental group had scores indicating more knowledge of infant capabilities and greater perception of infant needs for affection and stimulation than did the control group.
4. There was no statistical difference between the experimental and control groups of fathers as to their perception of their own caregiving competence, the sex-role division of caregiving tasks, and the negative affect of being a new parent.
5. The experimental group of fathers reported more involvement in the caregiving of their infants four to six weeks postpartum than did the control group.
6. The mother's expectation for the father's involvement in the caregiving tasks of the infants was found not to be significant in effecting the father's involvement in caregiving.
7. The father's expectation for his own involvement was found to be influential in effecting the father's actual involvement in the caregiving tasks of the infants.

Recommendation

As researchers strive to identify means for both enhancing children's development and mothers' and fathers' skills in parenting, it seems logical to examine the two together. Parents are significant in their children's lives and have the potential

for impacting on their children's development in every area--physically, emotionally, socially, and cognitively. It is important to acknowledge this potential from the beginning and to give new parents the information and support to achieve quality parenting.

The intervention described in this research impacted on the investment fathers made in the caregiving of their infants by increasing caregiving behaviors during the first month of the child's life. If indeed early parenting establishes the patterns for later involvement, the investment in caregiving this early in the child's life has the potential for continued, if not greater, involvement in the child's life later. Also, the intervention increased the father's knowledge of infant capabilities and sensitivity to the infant's needs for affection and stimulation. As reported (Braussard & Hartner, 1970), the early perception of the infant can effect the continuing perception of the child by the parent and thereby effect the interaction between the two and the subsequent development of the child. Brazelton (1981) emphasized the importance of confirmation by the professional to the parent of the infant's capabilities.

It is recommended that professional attention be given to all new parents to give them increased knowledge about their infants in the hope this will lead to a perception of their children as sensitive learning human beings, and that this will

lead to an increased parental investment in children so that parents will make a commitment to nurturing their children to full potential.

REFERENCE NOTES

[1]This section was modeled after a research instrument used by Dr. Ross Parke of The University of Illinois, and was used with his permission.

[2]This 14-minute videotape was developed for research purposes by Dr. Ross Parke of The University of Illinois, and was used with his permission.

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APPENDIX A

FACTORS I THROUGH V

FACTORS I THROUGH V

Factor I

Dependent Variable: Parental Knowledge of Infant Capabilities.

1. Newborn babies can be very different--some are very quiet, some are very active.
2. Newborns are unable to tell two different people apart.
3. When young babies hear a human voice, they often try to search for the sound with their eyes.
4. Newborn babies can follow a moving object with their eyes.
5. Newborn babies like to look at bright-colored toys.

Factor II

Dependent Variable: Parental Perception Concerning Infant's Needs for Affection and Stimulation.

1. Parents should smile a lot at their babies.
2. It's good for young babies to be cuddled.
3. It will be fun to make up new games to play with our baby.
4. It doesn't make any difference to a young baby's development whether you talk to him/her or not.

Factor III

Dependent Variable: Perception of Own Caretaking Competence.

1. I've had a lot of experience looking after babies (like with younger brothers or sisters).
2. I'm nervous about holding my baby when I'm alone with him/her.
3. It's hard to calm a baby down when he/she is fussy.
4. I worry about hurting my baby when I hold him/her.
5. A good time to play with a baby is when he/she is being diapered.
6. I feel somewhat unsure of myself when around young babies.

Factor IV

Dependent Variable: Sex-Role Division of Caregiving Tasks.

1. Men and women should share equally in the job of taking care of a baby.

2. I feel that the baby's mother should have primary responsibility for taking care of a baby.

3. I feel that the baby's father should have primary responsibility for taking care of a baby.

4. My spouse has given me a number of helpful suggestions for taking care of our baby.

5. A father's main responsibility to his baby during the first few months is to play with the baby and do fun things with him/her.

6. I am very satisfied with the way my spouse and I have divided up the work of taking care of our baby.

7. Females are by nature much better at taking care of babies than are males.

8. My husband (wife) encourages me to spend a lot of time with our baby.

9. A mother's main responsibility during the first few months is to play with the baby and do fun things with him/her.

10. A mother's main responsibility during the first few months is to feed and diaper the baby.

11. I am not interested in sharing the caregiving of the baby when he/she comes home.

Factor V

Dependent Variable: Negative Affects.

1. Our baby seems very attached to me.

2. Babies are too demanding of their parents.

3. I'm really happy that we had this baby.

4. I don't think a mother should have to give up some of her own activities to take care of the baby.

5. It seems that babies require too much attention.

6. Having a baby forces you to give up too many of your favorite activities.

7. I am worried that this baby will put a strain on our finances.

8. Crying babies need to be spanked.

9. I'm disappointed that my baby doesn't recognize me better.

APPENDIX B

STATEMENT OF AGREEMENT FOR FACTOR ANALYSIS GROUP AND CONTROL GROUP

MOTHER'S HOSPITAL QUESTIONNAIRE

FATHER'S HOSPITAL QUESTIONNAIRE

STATEMENT OF AGREEMENT FOR FACTOR ANALYSIS

GROUP AND CONTROL GROUP

We agree to participate in the study, "Parents with Their Newborn Babies." We understand our participation will involve completion of questionnaires by both of us.

We understand we will not be identified by name in the reporting of the data, and our confidentiality will be respected in the responses given to the questionnaires.

We understand this study has been approved by the Human Subjects Review Committee of the Department of Child Development and Family Relations at the University of North Carolina at Greensboro, the Administration, and the Chief of Obstetrics at Moses Cone Memorial Hospital.

Should we have further questions, we can contact Margaret Arbuckle (274-7122) at any time during the study.

_____

Mother's Signature

_____

Father's Signature

Date: _____

Mother's Hospital Questionnaire

Name--Mother_____Father_____

Address_____
Street City Zip

Telephone Number (Home)_____(Work)_____

Date of Delivery_____Sex of Child_____

Name of Child_____

Is this your first child? Yes_____No_____

Was this pregnancy planned? Yes_____No_____

Father's Education 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 more than 16_____
(Circle the number indicating years of schooling completed.)

Mother's Education 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 more than 16_____
(Circle the number indicating years of schooling completed.)

Mother's Occupation_____

Father's Occupation_____

Family Income--Less than $10,000/year_____$10,000-$19,000/year_____
$20,000-$29,000/year_____More than $30,000/year_____

Mother's Age_____Father's Age_____How long Married?_____

Did you and your husband attend childbirth preparation classes?
Yes_____No_____

Was your husband present at the birth of this baby? Yes_____No_____

Are you planning to breast feed or bottle feed your baby?
Breast feed_____
Bottle feed_____

Mother's Hospital Questionnaire

For each of the following statements, please circle the answer as described below which best describes how you feel about the statement.

SA indicates you "strongly agree" with the statement.

A indicates you "agree" with the statement.

NAND indicates you "neither agree nor disagree with the statement.

D indicates you "disagree" with the statement.

SD indicates you "strongly disagree" with the statement.

		Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree
1.	I've had a lot of experience looking after babies (like with younger brothers or sisters).	SA	A	NAND	D	SD
2.	I am worried that this baby will put a strain on our finances.	SA	A	NAND	D	SD
3.	My spouse has given me a number of helpful suggestions for taking care of a baby.	SA	A	NAND	D	SD
4.	I don't think a mother should have to give up some of her own activities to take care of a baby.	SA	A	NAND	D	SD
5.	Our baby seems very attached to me.	SA	A	NAND	D	SD
6.	I worry about hurting my baby when I hold him/her.	SA	A	NAND	D	SD
7.	I feel somewhat unsure of myself when around young babies.	SA	A	NAND	D	SD

		Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree
8.	I feel that the baby's mother should have primary responsibility for taking care of a baby.	SA	A	NAND	D	SD
9.	Having a baby forces you to give up too many of your favorite activities.	SA	A	NAND	D	SD
10.	Crying babies need to be spanked.	SA	A	NAND	D	SD
11.	I'm disappointed that my baby doesn't recognize me better.	SA	A	NAND	D	SD
12.	Newborns are unable to tell two different people apart.	SA	A	NAND	D	SD
13.	My husband encourages me to spend a lot of time with our baby.	SA	A	NAND	D	SD
14.	It seems that babies require too much attention.	SA	A	NAND	D	SD
15.	I feel that the baby's father should have primary responsibility for taking care of a baby.	SA	A	NAND	D	SD
16.	Newborn babies can follow a moving object with their eyes.	SA	A	NAND	D	SD
17.	Parents should smile a lot at their babies.	SA	A	NAND	D	SD
18.	Females are by nature much better at taking care of babies than are males.	SA	A	NAND	D	SD
19.	I am not interested in sharing the caregiving of the baby when he/she comes home.	SA	A	NAND	D	SD
20.	Newborn babies like to look at bright-colored toys.	SA	A	NAND	D	SD

		Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree
21.	I am very satisfied with the way my husband and I have divided up the work of taking care of our baby.	SA	A	NAND	D	SD
22.	A good time to play with a baby is when he/she is being diapered.	SA	A	NAND	D	SD
23.	Newborn babies can be very different --some are very quiet, some are very active.	SA	A	NAND	D	SD
24.	A father's main responsibility to his baby during the first few months is to play with the baby and do fun things with him/her.	SA	A	NAND	D	SD
25.	It doesn't make any difference to a young baby's development whether you take to him/her or not.	SA	A	NAND	D	SD
26.	It's hard to calm a baby down when he/she is fussy.	SA	A	NAND	D	SD
27.	Babies are too demanding of their parents.	SA	A	NAND	D	SD
28.	A mother's main responsibility during the first few months is to play with the baby and do fun things with him/her.	SA	A	NAND	D	SD
29.	It will be fun to make up new games to play with our baby.	SA	A	NAND	D	SD
30.	It's good for young babies to be cuddled.	SA	A	NAND	D	SD
31.	Men and women should share equally in the job of taking care of a baby.	SA	A	NAND	D	SD

	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree
32. I'm nervous about holding my baby when I'm alone with him/her.	SA	A	NAND	D	SD
33. A mother's main responsibility during the first few months is to feed and diaper the baby.	SA	A	NAND	D	SD
34. When young babies hear a human voice, they often try to search for the sound with their eyes.	SA	A	NAND	D	SD
35. I'm really happy that we had this baby.	SA	A	NAND	D	SD

The following questions are about how involved you would like to be with the daily care-giving of your baby during his/her first year.

For each of the following activities, please indicate when you anticipate starting the activity (at what age of the child) and how often you anticipate being involved in the activity. To do this, please circle the numbers in each line that best indicate what you would like to do.

	STARTING WHEN?						ABOUT HOW OFTEN?					
	First Week	First Month	3-6 Months	7-12 Months	Later Than One Year	Never	Never	Occasionally	About 1/3 of the Time	About 1/2 of the Time	More Than Half of the Time	All of the Time
1. Change the baby's diapers	1	2	3	4	5	6	1	2	3	4	5	6
2. Dress the baby	1	2	3	4	5	6	1	2	3	4	5	6
3. Feed the baby	1	2	3	4	5	6	1	2	3	4	5	6
4. Bathe the baby	1	2	3	4	5	6	1	2	3	4	5	6
5. Care for the baby alone	1	2	3	4	5	6	1	2	3	4	5	6
6. Wash the baby's diapers and/or clothes	1	2	3	4	5	6	1	2	3	4	5	6

		STARTING WHEN?						ABOUT HOW OFTEN?					
		First Week	First Month	3-6 Months	7-12 Months	Later Than One Year	Never	Never	Occasionally	About 1/3 of the Time	About 1/2 of the Time	More Than Half of the Time	All of the Time
7.	Attend to the baby in the middle of the night	1	2	3	4	5	6	1	2	3	4	5	6
8.	Play with the baby	1	2	3	4	5	6	1	2	3	4	5	6
9.	Rock the baby	1	2	3	4	5	6	1	2	3	4	5	6
10.	Soothe the baby when crying	1	2	3	4	5	6	1	2	3	4	5	6
11.	Take the baby for a walk	1	2	3	4	5	6	1	2	3	4	5	6

The following questions are about how involved you would like your husband to be with the daily caregiving of your baby during his/her first year.

For each of the following activities, please indicate when you would like your husband to start the activity (at what age of the child) and how often you would like him to do the activity as compared to yourself. To do this, please circle the numbers in each line that best indicate what you would like him to do.

	STARTING WHEN?						ABOUT HOW OFTEN?					
	First Week	First Month	3-6 Months	7-12 Months	Later Than One Year	Never	Never	Occasionally	About 1/3 of the Time	About 1/2 of the Time	More Than Half of the Time	All of the Time
1. Change the baby's diapers	1	2	3	4	5	6	1	2	3	4	5	6
2. Dress the baby	1	2	3	4	5	6	1	2	3	4	5	6
3. Feed the baby	1	2	3	4	5	6	1	2	3	4	5	6
4. Bathe the baby	1	2	3	4	5	6	1	2	3	4	5	6
5. Care for the baby alone	1	2	3	4	5	6	1	2	3	4	5	6
6. Wash the baby's diapers and/or clothes	1	2	3	4	5	6	1	2	3	4	5	6

	STARTING WHEN?						ABOUT HOW OFTEN?					
	First Week	First Month	3-6 Months	7-12 Months	Later Than One Year	Never	Never	Occasionally	About 1/3 of the Time	About 1/2 of the Time	More Than Half of the Time	All of the Time
7. Attend to the baby in the middle of the night	1	2	3	4	5	6	1	2	3	4	5	6
8. Play with the baby	1	2	3	4	5	6	1	2	3	4	5	6
9. Rock the baby	1	2	3	4	5	6	1	2	3	4	5	6
10. Soothe the baby when crying	1	2	3	4	5	6	1	2	3	4	5	6
11. Take the baby for a walk	1	2	3	4	5	6	1	2	3	4	5	6

Father's Hospital Questionnaire

Name_____

Address_____
Street City Zip

Telephone Number (Home)_____(Office)_____

Date of Delivery_____Sex of Child_____

Is this your first child? Yes_____No_____

Was this pregnancy planned? Yes_____No_____

Are you married to this child's mother? Yes_____No_____

Did you and your wife attend childbirth preparation classes?
Yes_____No_____

Were you present at the birth of this child? Yes_____No_____

Do you plan to take time from work when your baby goes home from the hospital?
Yes_____No_____

If yes, how much time? 1-4 Days_____1 Week_____2 Weeks_____

More than 2 Weeks_____

Paternity Leave_____How long?_____

Father's Hospital Questionnaire

For each of the following statements, please circle the answer as described below which best describes how you feel about the statements:

SA indicates you "strongly agree" with the statement.

A indicates you "agree" with the statement.

NAND indicates you "neither agree nor disagree" with the statement.

D indicates you "disagree" with the statement

SD indicates you "strongly disagree" with the statement.

		Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree
1.	I worry about hurting my baby when I hold him/her.	SA	A	NAND	D	SD
2.	Newborn babies can follow a moving object with their eyes.	SA	A	NAND	D	SD
3.	Having a baby forces you to give up too many of your favorite activities.	SA	A	NAND	D	SD
4.	A father's main responsibility to his baby during the first few months is to play with the baby and do fun things with him/her.	SA	A	NAND	D	SD
5.	Newborns are unable to tell two different people apart.	SA	A	NAND	D	SD
6.	A mother's main responsibility during the first few months is to feed and diaper the baby.	SA	A	NAND	D	SD
7.	When young babies hear a human voice, they often try to search for the sound with their eyes.	SA	A	NAND	D	SD

		Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree
8.	Babies are too demanding of their parents.	SA	A	NAND	D	SD
9.	I am worried that this baby will put a strain on our finances.	SA	A	NAND	D	SD
10.	It's hard to calm a baby down when he/she is fussy.	SA	A	NAND	D	SD
11.	Our baby seems very attached to me.	SA	A	NAND	D	SD
12.	Parents should smile a lot at their babies.	SA	A	NAND	D	SD
13.	I'm really happy that we had this baby.	SA	A	NAND	D	SD
14.	My spouse has given me a number of helpful suggestions for taking care of our baby.	SA	A	NAND	D	SD
15.	I'm nervous about holding my baby when I'm alone with him/her.	SA	A	NAND	D	SD
16.	I feel somewhat unsure of myself when around young babies.	SA	A	NAND	D	SD
17.	It will be fun to make up new games to play with our baby.	SA	A	NAND	D	SD
18.	Having a baby forces you to give up too many of your favorite activities.	SA	A	NAND	D	SD
19.	I'm disappointed that my baby doesn't recognize me better.	SA	A	NAND	D	SD
20.	I am not interested in sharing the caregiving of the baby when he/she comes home.	SA	A	NAND	D	SD

		Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree
21.	My wife encourages me to spend a lot of time with our baby.	SA	A	NAND	D	SD
22.	Crying babies need to be spanked.	SA	A	NAND	D	SD
23.	Newborn babies can be very different--some are very quiet, some are very active.	SA	A	NAND	D	SD
24.	Newborn babies like to look at bright-colored toys.	SA	A	NAND	D	SD
25.	I feel that the baby's mother should have primary responsibility for taking care of the baby.	SA	A	NAND	D	SD
26.	It doesn't make any difference to a young baby's development whether you talk to him/her or not.	SA	A	NAND	D	SD
27.	I am very satisfied with the way my wife and I have divided up the work of taking care of our baby.	SA	A	NAND	D	SD
28.	Females are by nature much better at taking care of babies than are males.	SA	A	NAND	D	SD
29.	I feel that the baby's father should have primary responsibility for taking care of a baby.	SA	A	NAND	D	SD
30.	It's good for young babies to be cuddled.	SA	A	NAND	D	SD
31.	A good time to play with a baby is when he/she is being diapered.	SA	A	NAND	D	SD
32.	A mother's main responsibility during the first few months is to play with the baby and do fun things with him/her.	SA	A	NAND	D	SD

	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree
33. It seems that babies require too much attention.	SA	A	NAND	D	SD
34. Men and women should share equally in the job of taking care of a baby.	SA	A	NAND	D	SD
35. I don't think a mother should have to give up some of her own activities to take care of a baby.	SA	A	NAND	D	SD
36. I've had a lot of experience looking after babies (like with younger brothers or sisters).	SA	A	NAND	D	SD

The following questions are about how involved you would like to be with the daily care-giving of your baby during his/her first year.

For each of the following activities, please indicate when you anticipate starting the activity (at what age of the child) and how often you anticipate being involved in the activity. To do this, please circle the numbers in each line that best indicate what you would like to do.

	STARTING WHEN?						ABOUT HOW OFTEN?					
	First Week	First Month	3-6 Months	7-12 Months	Later Than One Year	Never	Never	Occasionally	About 1/3 of the Time	About 1/2 of the Time	More Than Half of the Time	All of the Time
1. Change the baby's diapers	1	2	3	4	5	6	1	2	3	4	5	6
2. Dress the baby	1	2	3	4	5	6	1	2	3	4	5	6
3. Feed the baby	1	2	3	4	5	6	1	2	3	4	5	6
4. Bathe the baby	1	2	3	4	5	6	1	2	3	4	5	6
5. Care for the baby alone	1	2	3	4	5	6	1	2	3	4	5	6
6. Wash the baby's diapers and/or clothes	1	2	3	4	5	6	1	2	3	4	5	6

	STARTING WHEN?						ABOUT HOW OFTEN?					
	First Week	First Month	3-6 Months	7-12 Months	Later Than One Year	Never	Never	Occasionally	About 1/3 of the Time	About 1/2 of the Time	More Than Half of the Time	All of the Time
7. Attend to the baby in the middle of the night	1	2	3	4	5	6	1	2	3	4	5	6
8. Play with the baby	1	2	3	4	5	6	1	2	3	4	5	6
9. Rock the baby	1	2	3	4	5	6	1	2	3	4	5	6
10. Soothe the baby when crying	1	2	3	4	5	6	1	2	3	4	5	6
11. Take the baby for a walk	1	2	3	4	5	6	1	2	3	4	5	6

The following questions are about how involved you would like your wife to be with the daily caregiving of your baby during his/her first year.

For each of the activities, please indicate when you would like your wife to start the activity (at what age of the child) and how often you would like her to do the activity as compared to yourself. To do this, please circle the numbers in each line that best indicate what you would like to do.

	STARTING WHEN?						ABOUT HOW OFTEN?					
	First Week	First Month	3-6 Months	7-12 Months	Later Than One Year	Never	Never	Occasionally	About 1/3 of the Time	About 1/2 of the Time	More Than Half of the Time	All of the Time
1. Change the baby's diapers	1	2	3	4	5	6	1	2	3	4	5	6
2. Dress the baby	1	2	3	4	5	6	1	2	3	4	5	6
3. Feed the baby	1	2	3	4	5	6	1	2	3	4	5	6
4. Bathe the baby	1	2	3	4	5	6	1	2	3	4	5	6
5. Care for the baby alone	1	2	3	4	5	6	1	2	3	4	5	6
6. Wash the baby's diapers and/or clothes	1	2	3	4	5	6	1	2	3	4	5	6
7. Attend to the baby in the middle of the night	1	2	3	4	5	6	1	2	3	4	5	6

	STARTING WHEN?						ABOUT HOW OFTEN?					
	First Week	First Month	3-6 Months	7-12 Months	Later Than One Year	Never	Never	Occasionally	About 1/3 of the Time	About 1/2 of the Time	More Than Half of the Time	All of the Time
8. Play with the baby	1	2	3	4	5	6	1	2	3	4	5	6
9. Rock the baby	1	2	3	4	5	6	1	2	3	4	5	6
10. Soothe the baby when crying	1	2	3	4	5	6	1	2	3	4	5	6
11. Take the baby for a walk	1	2	3	4	5	6	1	2	3	4	5	6

APPENDIX C

STATEMENT OF AGREEMENT FOR EXPERIMENTAL GROUP

MOTHER'S HOME QUESTIONNAIRE

FATHER'S HOME QUESTIONNAIRE

STATEMENT OF AGREEMENT FOR EXPERIMENTAL GROUP

We agree to participate in the study, "Parents with Their Newborn Babies." We understand our participation will involve completion of questionnaires by both of us and viewing of a film for fathers.

We understand we will not be identified by name in the reporting of the data, and our confidentiality will be respected in the responses given to the questionnaires.

We understand this study has been approved by the Human Subjects Review Committee of the Department of Child Development and Family Relations at the University of North Carolina at Greensboro, the Administration, and the Chief of Obstetrics at Moses Cone Memorial Hospital.

Should we have further questions, we can contact Margaret Arbuckle (274-7122) at any time during the study.

_____

Father's Signature

_____

Mother's Signature

Date:_____

Mother's Home Questionnaire

Name_____

Address_____

Telephone Numbers: (Home)_____(Work)_____

Has your baby had a doctor's check-up since leaving the hospital?
Yes_____No_____

If yes, is there any physical problem with your child?
Yes_____No_____

If yes, please explain:_____

_____

How are you feeding your baby? Breastfeeding_____Bottlefeeding_____

Has your baby's father fed your baby? Yes_____No_____

Have you had help at home since leaving the hospital? Yes____No___

If yes, who has it been? Baby nurse?_____Relative?_____
Father who is not working?_____Other?_____
If other, please explain:_____

Have you left your baby alone with his/her father? Yes_____No_____

Have you left your baby for reasons other than work (for shopping, visiting friends, going out for an evening with your husband, etc.)?
Yes_____No_____

If yes, who stayed with your baby?_____

Have you returned to work since your baby's birth? Yes_____No_____

If yes, who has kept your baby? Father?_____
Another Relative?_____Day-Care Home?_____Day-Care Center?_____
Other?_____If other, please explain:_____

Have you and your husband discussed the questionnaire you completed in the hospital? Yes_____No_____

Mother's Home Questionnaire

For each of the following statements, please circle the answer as described below which best describes how you feel about the statements:

SA indicates you "strongly agree" with the statement.

A indicates you "agree" with the statement.

NAND indicates you "neither agree nor disagree" with the statement.

D indicates you "disagree" with the statement.

SD indicates you "strongly disagree" with the statement.

		Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree
1.	Men and women should share equally in the job of taking care of a baby.	SA	A	NAND	D	SD
2.	I've had a lot of experience looking after babies (like with younger brothers or sisters).	SA	A	NAND	D	SD
3.	I am not interested in sharing the caregiving of the baby.	SA	A	NAND	D	SD
4.	It's hard to calm a baby down when he/she is fussy.	SA	A	NAND	D	SD
5.	Babies are too demanding of their parents.	SA	A	NAND	D	SD
6.	Parents should smile a lot at their babies.	SA	A	NAND	D	SD
7.	A mother's main responsibility during the first few months is to feed and diaper the baby.	SA	A	NAND	D	SD

8.	It's good for young babies to be cuddled.	SA	A	NAND	D	SD
9.	Females are by nature much better at taking care of babies than are males.	SA	A	NAND	D	SD
10.	It doesn't make any difference to a young baby's development whether you talk to him/her or not.	SA	A	NAND	D	SD
11.	I am very satisfied with the way my husband and I have divided up the work of taking care of our baby.	SA	A	NAND	D	SD
12.	I feel that the baby's mother should have primary responsibility for taking care of a baby.	SA	A	NAND	D	SD
13.	I worry about hurting my baby when I hold him/her.	SA	A	NAND	D	SD
14.	It seems that babies require too much attention.	SA	A	NAND	D	SD
15.	A mother's main responsibility during the first few months is to play with the baby and do fun things with him/her.	SA	A	NAND	D	SD
16.	A good time to play with a baby is when he/she is being diapered.	SA	A	NAND	D	SD
17.	I feel that the baby's father should have primary responsibility for taking care of a baby.	SA	A	NAND	D	SD
18.	My husband encourages me to spend a lot of time with our baby.	SA	A	NAND	D	SD
19.	Newborns are unable to tell two different people apart.	SA	A	NAND	D	SD
20.	My spouse has given me a number of helpful suggestions for taking care of our baby.	SA	A	NAND	D	SD
21.	I'm disappointed that my baby doesn't recognize me better.	SA	A	NAND	D	SD

22.	It will be fun to make up new games to play with our baby.	SA	A	NAND	D	SD
23.	I am worried that this baby will put a strain on our finances.	SA	A	NAND	D	SD
24.	I feel somewhat unsure of myself when around young babies.	SA	A	NAND	D	SD
25.	I'm nervous about holding my baby when I'm alone with him/her.	SA	A	NAND	D	SD
26.	A father's responsibility to his baby during the first few months is to play with the baby and do fun things with him/her.	SA	A	NAND	D	SD
27.	Our baby seems very attached to me.	SA	A	NAND	D	SD
28.	I'm really happy that we had this baby.	SA	A	NAND	D	SD
29.	When young babies hear a human voice, they often try to search for the sound with their eyes.	SA	A	NAND	D	SD
30.	Having a baby forces you to give up too many of your favorite activities.	SA	A	NAND	D	SD
31.	Newborn babies can follow a moving object with their eyes.	SA	A	NAND	D	SD
32.	I don't think a mother should have to give up some of her own activities to take care of the baby.	SA	A	NAND	D	SD
33.	Newborn babies like to look at bright-colored toys.	SA	A	NAND	D	SD
34.	Newborn babies can be very different --some are very quiet, some are very active.	SA	A	NAND	D	SD
35.	Crying babies need to be spanked.	SA	A	NAND	D	SD

The following list is of activities one may do with a baby. Remember the past week (seven days). Please indicate if the activity is one your husband has done with your baby. If the answer is "yes," please indicate how many times during the week he did it.

		YES/NO		IF YES, HOW MANY TIMES?
1.	Change the baby's diaper	Yes	No	_____
2.	Dress the baby	Yes	No	_____
3.	Feed the baby.	Yes	No	_____
4.	Bathe the baby.	Yes	No	_____
5.	Care for the baby alone.	Yes	No	_____
6.	Wash the baby's diapers and/or clothes.	Yes	No	_____
7.	Attend to the baby in the middle of the night.	Yes	No	_____
8.	Play with the baby.	Yes	No	_____
9.	Rock the baby.	Yes	No	_____
10.	Soothe the baby when crying.	Yes	No	_____
11.	Take the baby for a walk.	Yes	No	_____

Father's Home Questionnaire

Name_____

Address_____

Telephone Numbers: (Home_____(Work)_____

1. Have you stayed alone with your baby? Yes_____No_____

2. Have you and your wife had help at home since leaving the hospital? Yes_____No_____

   If yes, who was it?_____

3. Have you returned to work on a schedule like the one you had before the baby's birth? Yes_____no_____

   If no, how has your schedule changed? Fewer hours?_____ Home earlier?_____Longer hours?_____Home later?_____

4. Have you and your wife discussed the questionnaires you completed in the hospital? Yes_____No_____

Father's Home Questionnaire

For each of the following statements, please circle the answer as described below which best describes how you feel about the statements:

SA indicates you "strongly agree" with the statement.

A indicates you "agree" with the statement.

NAND indicates you "neither agree nor disagree" with the statement.

D indicates you "disagree" with the statement.

SD indicates you "strongly disagree" with the statement.

		Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree
1.	When young babies hear a human voice, they often try to search for the sound with their eyes.	SA	A	NAND	D	SD
2.	A mother's main responsibility during the first few months is to play with the baby and do fun things with him/her.	SA	A	NAND	D	SD
3.	Men and women should share equally in the job of taking care of a baby.	SA	A	NAND	D	SD
4.	It will be fun to make up new games to play with our baby.	SA	A	NAND	D	SD
5.	I feel somewhat unsure of myself when around young babies.	SA	A	NAND	D	SD
6.	Parents should smile a lot at their babies.	SA	A	NAND	D	SD
7.	My wife encourages me to spend a lot of time with our baby.	SA	A	NAND	D	SD

8.	It's good for young babies to be cuddled.	SA	A	NAND	D	SD
9.	Our baby seems very attached to me.	SA	A	NAND	D	SD
10.	Newborns are unable to tell two different people apart.	SA	A	NAND	D	SD
11.	A good time to play with a baby is when he/she is being diapered.	SA	A	NAND	D	SD
12.	I'm really happy that we had this baby.	SA	A	NAND	D	SD
13.	Having a baby forces you to give up too many of your favorite activities.	SA	A	NAND	D	SD
14.	I'm nervous about holding my baby when I'm alone with him/her.	SA	A	NAND	D	SD
15.	I'm very satisfied with the way my wife and I have divided up the work of taking care of our baby.	SA	A	NAND	D	SD
16.	Babies are too demanding of their parents.	SA	A	NAND	D	SD
17.	I feel that the baby's father should have primary responsibility for taking care of a baby.	SA	A	NAND	D	SD
18.	It's hard to calm a baby when he/she is fussy.	SA	A	NAND	D	SD
19.	Females are by nature much better at taking care of babies than are males.	SA	A	NAND	D	SD
20.	It doesn't make any difference to a young baby's development whether you talk to him/her or not.	SA	A	NAND	D	SD
21.	I feel that the baby's mother should have primary responsibility for taking care of a baby.	SA	A	NAND	D	SD
22.	I worry about hurting my baby when I hold him/her.	SA	A	NAND	D	SD

23.	I'm disappointed that my baby doesn't recognize me better.	SA	A	NAND	D	SD
24.	I am not interested in sharing the ciregiving of the baby.	SA	A	NAND	D	SD
25.	Crying babies need to be spanked.	SA	A	NAND	D	SD
26.	I've had a lot of experience looking after young babies (like with younger brothers or sisters).	SA	A	NAND	D	SD
27.	I don't think a mother should have to give up some of her own activities to take care of the baby.	SA	A	NAND	D	SD
28.	Newborn babies like to look at bright-colored toys.	SA	A	NAND	D	SD
29.	A mother's responsibility during the first few months is to feed and diaper the baby.	SA	A	NAND	D	SD
30.	It seems that babies require too much attention.	SA	A	NAND	D	SD
31.	I am worried that this baby will put a strain on our finances.	SA	A	NAND	D	SD
32.	My spouse has given me a number of helpful suggestions for taking care of our baby.	SA	A	NAND	D	SD
33.	Newborn babies can be very different --some are very quiet, some are very active.	SA	A	NAND	D	SD
34.	Newborn babies can follow a moving object with their eyes.	SA	A	NAND	D	SD
35.	A father's main responsibility to his baby during the first few months is to play with the baby and do fun things with him/her.	SA	A	NAND	D	SD

The following list is of activities one may do with a baby. Remember the past week (seven days). Please indicate if the activity is one you have done with your baby. If the answer is yes, please indicate how many times during the week you did it.

		YES/NO		IF YES, HOW MANY TIMES?
1.	Change the baby's diapers.	Yes	No	_____
2.	Dress the baby.	Yes	No	_____
3.	Feed the baby.	Yes	No	_____
4.	Bathe the baby.	Yes	No	_____
5.	Care for the baby alone.	Yes	No	_____
6.	Wash the baby's diapers and/or clothes.	Yes	No	_____
7.	Attend to the baby in the middle of the night.	Yes	No	_____
8.	Play with the baby.	Yes	No	_____
9.	Rock the baby.	Yes	No	_____
10.	Soothe the baby when crying.	Yes	No	_____
11.	Take the baby for a walk.	Yes	No	_____