

FATHER'S PARTICIPATION IN INFANT CARETAKING ACTIVITIES  
AS RELATED TO HIS PRESENCE AT DELIVERY

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A THESIS

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## TABLE OF CONTENTS

ACKNOWLEDGMENTS . . . . .	iii
TABLE OF CONTENTS . . . . .	iv
LIST OF TABLES . . . . .	vii

### Chapter

1. INTRODUCTION . . . . .	1
Problem of Study . . . . .	2
Justification of Problem . . . . .	2
Theoretical Framework . . . . .	3
Assumptions . . . . .	5
Hypotheses . . . . .	6
Definition of Terms . . . . .	8
Limitations . . . . .	9
Summary . . . . .	10
2. REVIEW OF LITERATURE . . . . .	11
Literature Emphasizing Maternal- Child Dyad . . . . .	11
Nonhuman Primate Fathering . . . . .	13
Father-Absent Studies . . . . .	14
Possible Father-Participation Variables . . . . .	15
Early Child Care Experience . . . . .	15
Past Parental Relationships . . . . .	16
Educational Level and Social Class . . . . .	17

Chapter	Page
Desire for Child . . . . .	18
Preparation for Childbirth . . . . .	18
Participation in the Birth Event . . . . .	19
Sex of Child . . . . .	20
Contact with Infant in the Hospital . . . . .	22
Inclusion of Father in Care Instruction . . . . .	23
Father Participation Literature . . . . .	24
Summary . . . . .	25
3. PROCEDURE FOR COLLECTION AND TREATMENT	
OF DATA . . . . .	27
Setting . . . . .	27
Population and Sample . . . . .	28
Protection of Human Subjects . . . . .	28
Instruments . . . . .	29
Data Collection . . . . .	31
Treatment of Data . . . . .	31
4. ANALYSIS OF DATA . . . . .	33
Description of Sample . . . . .	33
Control Group . . . . .	34
Experimental Group . . . . .	35
Findings . . . . .	35
Presence in the Delivery Room . . . . .	37

Chapter	Page
Testing Extraneous Variables for Members of Both Groups . . . . .	37
Early Child Care Experience . . . . .	40
Preparation for Childbirth . . . . .	40
Contact with Infant in the Hospital . . . . .	40
Inclusion in Care Instructions . . . . .	40
Summary . . . . .	41
5. SUMMARY OF THE STUDY . . . . .	42
Summary of Study Methodology . . . . .	43
Discussion of the Findings . . . . .	44
Conclusions and Implications . . . . .	49
Recommendations for Further Study . . . . .	51
APPENDIXES . . . . .	52
A. Father's First Questionnaire . . . . .	53
B. Father's Second Questionnaire . . . . .	61
C. Demographic and Delivery Data . . . . .	69
D. First Cover Letter . . . . .	71
E. Second Cover Letter . . . . .	73
F. Variable Scoring . . . . .	75
REFERENCES . . . . .	78

## LIST OF TABLES

Table	Page
1. Demographic Characteristics of Sample . . . . .	36
2. Extraneous Variable Findings . . . . .	38
3. Fathers' Participation in Infant Care Activities . . . . .	46

## CHAPTER 1

### INTRODUCTION

Until recently, the father's role in infant care and social development was viewed as a background to the mother's role. The father was to provide financial support for the family and emotional support for the mother. His participation during labor was limited and rarely, if ever, was he allowed in the delivery room. After the delivery, providing love, compassion, and physically caring for the infant was considered part of the mothering role and the father was not encouraged to share in this role.

Today many couples are sharing both the financial burden and the home responsibilities. As a part of this sharing, many men are becoming active participants in their wives' pregnancy and delivery process. Infant bonding studies indicate nonparticipating fathers may be missing a critical period in the delivery room when parent-infant bonding begins (Barnette, Leiderman, Grobstein, & Klaus, 1970; Greenberg & Morris, 1974; Klaus & Kennell, 1970). This is significant because other studies have shown a correlation between the father's presence at the delivery and his later feelings of closeness to, and interaction with,

his infant (Earls, 1976; Greenberg & Morris, 1974; Gollob, 1976). The study by Greenberg and Morris (1974) also found that continued contact in the days following delivery appears to strengthen the parent-infant bond for fathers.

### Problem of Study

The problem investigated by this study was: Will fathers who are present in the delivery room and who have physical contact with their infants at that time, be more active in infant caretaking activities in the weeks following delivery than fathers not present at delivery?

### Justification of Problem

Present family related literature is weighted toward the maternal-child relationship. The literature is notably lacking in studies involving fathers. In addition, most of the studies related to fathers are focused on the effect a father's absence has on the family.

There is a need to better understand the father's role in today's family and how that role can be enhanced. If the father's involvement and relationship with his offspring can be altered by his presence or absence in the delivery room during delivery, this is vital information. An effort should be made to provide the nurses, midwives, and physicians with information that could possibly enhance



the relationship between each father and his child.

### Theoretical Framework

Maternal-infant bonding among animals is a theory generally accepted and is supported by various studies as seen in a literature review by de Chateau (1977). In many of these studies, mothers separated from their newborn immediately postpartum demonstrated deviant behavior when reunited with the newborns. Hersher, Moore, and Richmond (1958) noted that goat mothers in a control group would only feed their own kid and would repulse any other kid who tried to nurse. The mothers in the experimental group of this study were separated from their kids at birth. When the experimental group mothers and kids were reunited, the mothers fed and repulsed their own and other kids indiscriminately.

Another aspect of animal bonding is that sight and sounds are not enough stimuli to maintain a mother's interest in her offspring. Touch is an essential ingredient in developing and maintaining a parent-infant bond (Harlow & Zimmerman, 1959). In other studies cited in de Chateau's (1977) review, animals lacking maternal care as infants demonstrated maladaptive behavior in adulthood and as parents.

These same theories have been applied to human maternal-infant bonding. Some studies done with human mothers

indicate maternal-infant bonding begins before birth but the attachment is fragile and may be altered in the first few days of life (Klaus & Kennell, 1970). A theory that has been repeatedly tested is maternal-infant attachment as related to the amount of contact the mother has with the infant immediately postpartum and in the next few days past delivery.

A two group study done by de Chateau (1976) compared mothers whose infants were given routine care in delivery to those who had "extra contact" with the infant before routine care was performed. Routine care was defined as cleaning, footprinting, treating the eyes, and wrapping the infant. Extra contact consisted of skin to skin contact and suckling contact. The results showed a positive relationship between extra contact and an increase in holding, encompassing, and looking en face. A similar study done by Klaus et al. (1972) found that even disregarding extraneous variables such as background, relations with husband and family, family planning, and her own mothering as a child; an extra 16 hours contact in the first three days postpartum had a positive effect that was measurable 30 days later.

Most theories concerning fathers have been related to the effect a father's absence has on child development. Recently however, theories have been formulated and

hypotheses tested concerning father-infant attachment, engrossment, father-infant interaction, and the father's influence on child development. One theory, that infants biologically or genetically emit behavior that will cause an attachment to be formed, was supported by Greenberg and Morris (1974). This suggests that anyone present and sensitive to the cues given by the infant can form an attachment, not just the mother. Greenberg and Morris also theorized that early contact with the infant releases an innate potential for a father's involvement with the newborn.

Another theory proposes a father's presence in delivery, supported and encouraged by professionals, implies approval of the father's involvement and this involvement carried over into infancy (Manion, 1977). These findings also imply a consumer demand for involvement. These theories require further testing to provide validity and justify the need to educate professionals about father-infant bonding. Theory and hypotheses testing in the father-infant relationship is crucial during this time of change in family dynamics initiated by the intermingling of parent roles.

#### Assumptions

The assumptions of this study were:

1. Infants are helpless and require care.

2. Fathers may provide the infant's care as well as the mothers.

3. Infants emit cues immediately following birth and anyone present and sensitive to the cues may bond with the infant.

4. Fathers play a vital role in the social and cultural development of their children.

5. Fathers participating in the study can speak, read, and write in the English language.

6. There are other extraneous variables identified in the literature not tested by this study.

7. Fathers will answer the questionnaires and will answer truthfully.

### Hypotheses

The primary hypothesis of the study was: The father who is present at the birth of his firstborn and has early contact will show increased participation in infant caretaking activities at two week after delivery. The independent variable is the father's presence at the birth of his firstborn. The dependent variable is the father's participation in infant caretaking activities. It was expected that the fathers not present at delivery would be significantly less active in child care than fathers present at the delivery.

The following are hypotheses relating to the extraneous variables that were tested in the study. The dependent variable for each of the hypotheses is the father's participation in infant caretaking activities.

The father who has given early child care in his own personal life history will show increased participation in infant caretaking activities at two weeks after the birth of his firstborn.

Independent Variable: Early child care experience.

The father who is active in classes on preparation for childbirth will show increased participation in infant caretaking activities at two weeks after the birth of his firstborn.

Independent variable: Participation in classes on preparation for childbirth.

The more contact a father has with his firstborn in the hospital the more participation he will show in infant caretaking activities at two weeks after delivery.

Independent variable: Contact with infant in hospital.

Fathers who are included by hospital personnel in instructions in infant care will show increased participation in infant caretaking activities at two weeks after delivery.

Independent variable: Inclusion in infant care instructions.

### Definition of Terms

Bonding: Formation of a close relationship/attachment with a small number of other human beings that endures through time (Klaus & Kennell, 1976).

Caretaker: Person who provides the infant with essentials, or with physical care, emotional warmth, and sensory stimulation (Goldenson, 1970).

Caretaking activities: Functions which provide the infant with physical care, emotional warmth, and sensory stimulation.

Early physical contact: Father holding the infant in the delivery room prior to the infant's transfer to the nursery.

Encompassing: A position that places the infant next to the body of the person holding him/her with the infant enfolded in the arms of the person holding the infant.

En face: Position that places the face of the person holding the infant parallel to the infant's face enabling them to have eye to eye contact.

Engrossment: A sense of absorption, preoccupation, and interest in his infant displayed by a father (Greenberg & Morris, 1974).

Father: The male counterpart of the parents.

Father's presence at delivery: The physical presence of the father in the delivery room with the ability to view the delivery either directly or through a mirror.

Infant: Newborn from birth to three weeks of age free of any defect that would require special care.

Mother: The female counterpart of the parents.

Parents: Persons responsible for the biological act of reproduction that resulted in the infant.

#### Limitations

This study was limited as subjects were not selected according to information relating to the parenting the father received as a child or his background experience in child care. Neither were fathers selected according to the relationship the father has with his wife, the family planning methods employed by the couple, or whether the infant was wanted. The study was also limited due to the use of mailed questionnaires at two weeks following birth, which prohibited clarification of questions. The sample size was limited due to time available for completion of the study.

The instruments used in this study were developed by Manion (1975) and their validity was not fully known. That the instruments were revised following a pilot study was the only information available from Manion.

The study was to be limited to first time fathers whose infants were born by vaginal delivery at a private, nonprofit hospital following an uncomplicated pregnancy. However, due to the very limited number of fathers who did not go to the delivery room, fathers of infants born via cesarean section were included in the control group. Fathers of infants with any disease process or physical defect requiring isolation or special care were not included in the study.

#### Summary

The researchers in the field studying the effect fathers have on their infants are consistently asking for further studies involving fathers. If the theories discussed earlier are substantiated, an effort to educate fathers in parenting techniques is essential. This study will assist in the development of a means of assessing and predicting outcomes relating to the father's presence at delivery.



## CHAPTER 2

### REVIEW OF LITERATURE

There is a scarcity of literature concerning father-infant interaction and attachment. Much research has been devoted to the study of mothers and infants, while little has been done with fathers. Fathers were not considered a direct influence on infants, but mainly providers of financial and emotional support for the mothers.

The literature review focused on the father's role in the family unit while including some maternal-infant literature and nonhuman primate male-care studies. Father-participation and influencing variables and father-absent literature were also included.

#### Literature Emphasizing Maternal-Child Dyad

Many theorists maintained the infant's most important relationship in his early years is with his mother. Almost without exception, they dismissed any other relationship, including the one with the father, as unimportant (Bowlby, 1969; Freud, 1962; Maccoby & Masters, 1970; Parsons, 1958). An excerpt from Bowlby (1966) was representative of the prevailing attitude:

In the young child's eyes father plays second fiddle and his value increases only as the child's vulnerability to deprivation decreases. Nevertheless, . . . fathers do have their uses even in infancy. Not only do they provide for the wives to enable them to devote themselves unrestrictedly to the care of the infant and toddler, but, by providing love and companionship, they support her emotionally and help her maintain that harmonious and contented mood in the aura of which the infant thrives . . . his value as the economic and emotional support of the mother will be assumed. (p. 13)

The implication in this passage was that the father's role did not include active participation with the child.

Many articles authored by de Chateau (1976); Greenburg, Rosenburg, and Lind (1973); Klaus, Jerauld, Kleger, McAlpine, Steffa, and Kennell (1972); and Klaus and Kennell (1970) concerned maternal-infant bonding as related to a critical period following delivery, extended contact following delivery, and skin to skin contact at delivery. Other studies have examined topics such as left-sided holding preference (Weiland & Sperber, 1970), maternal parity as related to maternal-infant interaction (Thomas, Barnett, & Leiderman, 1971), the influence of the child's sex on the mother's interaction with the infant (Leiderman, Leifer, Seashore, Barnett, & Grobstein, 1973), and the infant's reactive capacity (Bowlby, 1969; Miranda, 1970). Selected authors have argued for and against the necessity of naked contact at birth between the mother and infant (Curry, 1979;

de Chateau, 1976), and rooming-in and single person care of the neonate (Burns, Sander, Stechler, & Julia, 1972; Greenburg et al., 1973) all of which dismiss the importance of active father participation.

MacFarlane (1975) presented a flagrant illustration of fathers being ignored in the literature. He presented a detailed description of the mother's behavior with the neonate but omitted any description of the father's behavior while holding the infant. It appears that he did not see the need to describe the father's behavior. Researchers are now becoming aware of the father's contribution to infant care.

#### Nonhuman Primate Fathering

In animal parent studies as well as human parent studies, research emphasized the maternal role. The non-human primates most often studied demonstrated very little male care of infants (Redican, 1976). However, other non-human primates did demonstrate male-care, most notably, male marmosets. Marmosets have been observed assisting at masticating food for the infant during the first week, and carrying the infant throughout the day, even past weaning. Redican (1976) stated:

In general there is a striking association between monogamous social organization, an extensive investment of parental care by the male, and territoriality.

In every genus of New World monkey in which there is pronounced male care . . . the social group consists of a monogamous pair (or pairs) and offspring of one or more years. In every other genus the social group is polygamous. (p. 350)

Kinship explained the phenomenon. In a monogamous relationship the father knows the neonate is his offspring and will devote the time to protect and provide care. In the polygamous groups, the father care little for the infant. Humans usually have monogamous relationships. Perhaps in humans as well as animals, this social organization ensures male involvement, at least in provision of economic, protective involvement with the infant, through kinship (West & Konner, 1976).

In another study Redican (1976) reported that filial attachments occurred between adult males and infants when mothers, who actively restricted contact between infants and other animals, were removed.

#### Father-Absent Studies

Early father studies focused on the father-absent effects on child development. The investigators indicated that father absence was detrimental, and this lent support to the idea that fathers fill an important function in the family unit (Bach, 1946; Biller, 1970, 1976; Lynn & Sawrey, 1959). These authors identified problems in such areas as appropriate sex-role adoption, inhibition of aggression and

academic performance, and probability of subsequent psychopathology and delinquency.

The major problem with the majority of the studies was the weak methodology used by the investigators (Lamb, 1975). As Lamb noted, many variables were not considered in the study results. These variables included the child's age at the time of separation from the father, reason for the separation, father-child relationship at the time of separation, socioeconomic effect of father leaving, and the mother's response to his leaving. All of these variables could have strongly affected the child's adaptation to the departure.

#### Possible Father-Participation Variables

Many variables may influence a father's active participation in infant caretaking activities. The selection of variables discussed was restricted to the variables tested in Manion's (1975) study.

#### Early Child Care Experience

Both Manion (1975) and Leonard (1976) identified early child care experience as a variable in their studies. Manion based her inclusion of this variable on the fact that it was "apparent that one's past experience will influence behavior" (p. 17). She believed that parental skills were

not instinctual but learned which she supported by citing Pryor's (1973) observation that animal mothers often do not do a perfect job the first time.

Enjoying taking care of young children, experience with children, and enjoying being around young children were characteristics that Leonard (1976) identified in fathers who had high attitude scores toward their infants. She explained:

If he had had experience with children, being around and caring for them when he was growing up, he probably felt more comfortable with this baby and thus responded more positively to him. (p. 364)

#### Past Parental Relationships

The importance of the adult's past parental relationship was generally accepted in the literature. Hurd (1975) proposed assessment of maternal attachment in the neonatal period as a means of identifying potential abusers. Literature on child abuse pointed out that abused children often became abusing parents.

Kempe's (1971) study of parents of battered children showed that only 10% had either a psychosis or psychotic problem. The other 90% seemed to have serious problems in "mothering." This term, mothering, was defined by Kempe as the sensitive, generous, and individualistic approach to the young child by either the mother or father.

If abused children do become abusive parents, then the reverse could be true. Adults who remembered their parents as nurturing could in turn nurture their own children. Montagu (1971) supported this by implying that the mother's early experiences as an infant or child herself would strongly influence her response to her newborn. Manion (1975), after reviewing the literature on past parental relationships, stated: "It is questionable whether it would directly affect a father's participating in the caretaking of his infant" (p. 21). When the analysis of data was completed, she found that the past parental relationships were positively related to the father's involvement in infant caretaking (Manion, 1975).

#### Educational Level and Social Class

The literature reviewed indicated that child-rearing practices did vary with educational level and social class. Ericson (1946), Kohn (1959), and White (1957) reported differences in child-rearing practices and parental values indifferent to the social classes.

Of two studies in England, data from one (Newson & Newson, 1963), supported the idea that father participation in child care did not vary much between professional (57%), white collar (61%), skilled manual workers (51%), and semi-skilled workers (55%). Active father participation in the

unskilled workers group dropped to 36%. In the other study middle class British mothers reported 44% of fathers participated in infant care in comparison to 52% participation in working class families (Gavon, 1966).

### Desire for Child

Leonard (1976), in a study of fathers' attitudes toward their infants, found that the more children the fathers desired prior to and during marriage, the higher their scores for attitude toward the neonate. Studies of fathers and mothers of unplanned or unwanted pregnancies showed a change in attitude once the child was delivered. The same studies also showed active participation in child care by the fathers of the unplanned or unwanted pregnancies (Bernstein & Cyr, 1957; Stene & Scott, 1974).

### Preparation for Childbirth

Numerous and varied childbirth education classes are available to expected parents. Literature comparing the responses to labor and delivery of mothers and fathers who attended different types of prenatal classes was not reviewed.

Mothers who attended prenatal classes were found to have experienced a more positive labor and delivery than mothers who had not attended classes (Nunnally & Aguiar,



1974). These study results implied a positive effect of preparation for childbirth classes. Gordon and Gordon (1960) demonstrated that "social psychological preparation for the motherhood role" (p. 433) helped mothers perform their new role successfully.

With regard to inclusion of the father in prenatal classes, Biller (1972) stated:

If the expectant father's needs and concerns receive adequate attention during the process of pregnancy, he probably will be more motivated and prepared to positively accept fatherhood. (p. 47)

An unexpected finding of Gordon, Kapostins, and Gordon (1965) was that one-half the women, whose husbands were present and received instructions with them, experienced problems less often than did the women who participated alone.

#### Participation in the Birth Event

With consumers demanding a more home-like atmosphere for delivery, more hospitals have opened the labor and delivery units to fathers. More and more fathers, and in some cases siblings, are participating in the birth event. The father pacing in the waiting room while the mother labors alone is becoming an occurrence of the past.

Cronenwatt and Newmark (1974) studied the responses of 52 fathers to childbirth. The participating fathers

responded to a 28-item Likert-style questionnaire and were grouped as prepared attenders, unprepared attenders, and nonattenders. The prepared and unprepared attenders rated their overall experiences during childbirth significantly more positively than nonattenders. However, there was no measurable difference between the groups concerning paternal child relationships.

Newson and Newson (1963) and Tanzer and Block (1972) both reported that the husband's presence in the delivery room contributed to a more positive attitude of the wife toward delivery. Tanzer and Block's (1972) five year study further reported that the mother's feelings about her husband and the father's feelings about himself were more positive if he had been present at the delivery.

Petersen, Mehl, and Leiderman (1979) noted in their study that the most significant predictor variable of father attachment was the emotional quality of the birth experience. Other variables found significant in descending order were labor length, the birth environment, the disappointment factor, and parity.

### Sex of Child

At least two studies reviewed in relationship to this variable indicated that both parents interacted more with male infants in the first three months of life. These

investigators also reported male infants were awake more and appeared to be more irritable which could explain why they were held more (Moss, 1967; Rebelsky & Hanks, 1971).

Rebelsky and Hanks (1974) placed microphones on infants for periods of 24 hours every two weeks from two weeks of age to three months of age. They found that mothers increased their verbal interaction over the three month period while fathers decreased their verbalization in the same time period. The father's decrease in verbalization was more marked with female infants than with male infants.

Rubin, Provenzano, and Luria (1974) and Tasch (1952) found that sex stereotyping began at birth. Tasch (1952) reported fathers participated more in routine care and were more concerned about the safety factors for daughters than for sons. Tasch suggested that this finding might indicate a stereotyping of girls as dainty, fragile persons who need constant supervision. This finding was repeated some 22 years later by the Rubin et al. (1974) study. They found that daughters were significantly more likely to be described as little, beautiful, pretty, and cute and as resembling their mothers than were the sons. This occurred even though the birth length, weight, and Apgar scores of the males and females were similar. Again, sex role typing was implied.

Manion (1975), in her study concerning father participation, found that fathers of daughters participated significantly more than did fathers of sons. Boeltcher (1979) reported the same finding in her study of father participation in child care.

#### Contact with Infant in the Hospital

Numerous studies in the literature were concerned with the effect of maternal-child contact in the hospital on maternal-child attachment (de Chateau, 1976; de Chateau & Andersson, 1976; Klaus, Jerauld, Kreger, McAlpine, Steffa, & Kennell, 1972; Klaus & Kennell, 1970). These studies concluded that the earlier the contact and the more contact a mother had with her neonate, the stronger her attachment to the infant.

Findings from studies on maternal-child separation supported the idea that separation adversely affected the bonding process (Barnette, Leiderman, Grobstein, & Klaus, 1970; Dubois, 1975; Klaus & Kennell, 1970; Hersher, Moore, & Richmond, 1958). Klaus et al. (1972) indicated there might be a sensitive period in adult women when maternal attachment to a neonate occurred.

Few studies concerned fathers, their sensitive attachment period and the effect a separation at the time of

birth might have on them. This scarcity might be due to the assumption that "the mother-infant relationship is unique and vastly more important than any contemporaneous, or indeed any subsequent, relationship" (Lamb, 1976, p. 2).

Other studies, reviewed by Rutter (1979), disregarded the concept of infants being "matropically matricentric in orientation" (Kotelchuck, 1976, p. 329) and focused on infant attachment to fathers, peers, siblings, adult caretakers, and inanimate objects. Greenberg and Morris (1974), Sawin and Parke (1979), and Wolff and Ferber (1979) all suggested that the infant emits cues which could promote attachment and that anyone who was present and sensitive to these cues could form an attachment to the infant. Greenberg and Morris (1974) hypothesized that the potential for engrossment (see definition of terms) was an innate potential which might be released by early contact with the infant.

#### Inclusion of Father in Care Instruction

Perhaps the most poignant plea in the literature for involving fathers in infant care instructions came from a father (Heise, 1975):

Involved fatherhood begins with good instruction at the prenatal stages. It trains the father for meaningful participation in the labor and delivery room,

but it does not end when he walks out of the hospital. An involved father cannot become uninvolved with his wife and child simply because his training only goes so far. You've got him. He's hooked. (p. 35)

Heise (1975) has pointed out a weakness, lack of inclusion of fathers in infant care instructions, that might affect fathers' involvement with their newborns.

Fathers of firstborn must adapt to a new role, fatherhood, and learning is the major means by which man adapts. Manion (1975) stated: "It would seem that learning is especially important in the early postpartal period when both the father and the mother are attempting to adapt to new roles" (p. 36). Leonard (1976) found that the higher a husband rated his own knowledge of baby care, the higher his attitude toward his infant. Literature supported inclusion of the father in infant care classes for enhancement of the father-infant attachment.

#### Father Participation Literature

The limited literature on father-infant participation indicated that fathers were active in child care (Greenberg & Morris, 1974; Manion, 1975; Pedersen & Robson, 1969; Sawin & Parke, 1979).

Since Pedersen and Robson (1969) collected their data by interviewing mothers, the accuracy of their findings could be questioned. However, they found that the majority

of fathers were highly involved with their firstborn infants. They also found a high degree of variability of father-participation scores in a relatively homogeneous sample of 45 fathers. Tasch (1952) studied fathers directly and also reported a high degree of father-participation in child-care. The 85 fathers in Tasch's study considered participation in child rearing as a part of their role as fathers.

Boeltcher (1979) found that fathers who attended expectant parent classes, had female infants or breast-fed infants, whose wives worked during pregnancy, and who did not have other caregivers in the home were more involved with infant care than the other fathers in her study. Manion (1977) reported that all 45 fathers in her study participated in one or more of the child care activities she had identified. Manion tested participation in rocking/walking, feeding, diapering, and bathing the infant. Participation in the activities decreased as the complexity of the task increased. For example, fathers were more likely to change a diaper than bathe an infant.

### Summary

The review of the literature revealed that even with the numerous variables that could affect father-involvement,

fathers were active participants in child care. The review also indicated that fathers and infants formed attachment bonds as did mothers and infants. The literature called for additional research pertaining to father participation in child care.



## CHAPTER 3

### PROCEDURE FOR COLLECTION AND TREATMENT OF DATA

The study was explanatory as described by Polit and Hungler (1978), and a nonexperimental two group design was used. The first group was used as a control, the fathers were not present in the delivery room. The second group was the experimental group and the fathers were present in the delivery room. There was no effort made by the investigator to influence the father's decision to be present or absent from the delivery.

#### Setting

Fathers were assigned to the study and to the appropriate group during the postpartum hospitalization of their wives and infants. Permission to include the potential subjects in the study was obtained at this time. Prior to discharge, a quiet, unoccupied room was provided for the father to complete the first questionnaire. The second questionnaire was completed in the home.

### Population and Sample

The total study sample consisted of 12 first time fathers of healthy infants born following an uncomplicated pregnancy. Six fathers were assigned to each group. Accidental sampling (Polit & Hungler, 1978) was the technique used as subjects were taken from the available population. The control group consisted of fathers who were not present in the delivery room. The fathers in the experimental group were present in the delivery room and held the infant in the delivery room. The fathers in the control group viewed the infant for the first time after he had been cleaned, dried, and wrapped.

At the first meeting of potential subjects and the nurse investigator, the study was explained and the father's willingness to participate assessed. If any reluctance was voiced, the father was not included in the study. The necessary permission forms were signed at the first meeting.

### Protection of Human Subjects

Possible public embarrassment due to revealing identity was the only potential risk identified for the study participants. To eliminate this risk, names appeared only on file cards and the questionnaires and demographic data sheets were coded. Names were used only for mailing of the second

questionnaire and to send study results to the participants. The file cards were then destroyed.

An oral description of the study was given to the father at the first meeting during the postpartum period in the hospital. The father was told the purpose of the study, how the data was to be collected, his responsibility to the study, the investigator's responsibility to him, and was given the opportunity to ask questions. If he then agreed to participate in the study, Consent Form B was signed and witnessed.

#### Instruments

Both the experimental and control groups received identical questionnaires at two time periods following delivery, at about 48 hours and at 2 weeks postpartum. The questionnaires were the tools used by Manion in her study (1975). Copies of the questionnaires appear in the Appendixes. Manion established face validity through use of a panel of three graduate students in pediatric nursing and by parents involved in the pilot study.

Content validity was established through use of the literature and conference with members of other professions knowledgeable in the area of early family relationships. The second questionnaire dealt with a specified, limited

time in an effort to increase the reliability. This reduced the amount of time the subjects had to recall from memory.

The responses on both questionnaires were strictly coded, eliminating the need for establishment of scorer reliability. Statistical reliability tests could not be used on the second questionnaire due to the internal stability of the tool. The instrument was designed to determine both the possible father participation score and actual father participation score. Because the two scores did not have to move in the same direction, a coefficient Alpha test could not be used. If future researchers use this tool, a method of test-retest using a short time period to reduce the infant aging variable, should be utilized for reliability testing.

The first questionnaire elicited information concerning extraneous variables. Figure 1 is a diagram developed by Manion for her study (1975) (see Appendix A). The variables tested in the current study are identified with asterisks (\*). This study focused on the father's participation in the birth event or presence in the delivery room. The other variables listed above with asterisks were tested as extraneous variables. The remaining variables were not included in this study.

The second questionnaire collected information concerning the father's participation in caretaking activities, i.e., comforting, feeding, changing, and bathing (see Appendix B).

#### Data Collection

The first questionnaire was hand delivered, directions given verbally, privacy and anonymity assured. Unlimited time was given for completion of the questionnaire. The second questionnaire was mailed to the fathers two weeks after delivery. A cover letter was included reminding the fathers of their participation in the study and giving directions for completion of the questionnaire. A stamped, self-addressed envelope was included for the return of the questionnaire. One follow-up letter was sent to those who had not returned the questionnaire in a two week period.

#### Treatment of Data

Once the responses were collected they were tabulated and prepared for statistical analysis (see Appendix F). All variables were tested at the ordinal level. The variables of the primary hypothesis was analyzed using the Mann-Whitney U method (Mendenhall, 1975). This method was chosen because it is a nonparametric test statistic for the comparison of two population distributions. The

significance level was set at .05 but due to the small sample and similarity of subjects the hypothesis was accepted with a significance level of .07.

The extraneous variables were evaluated by correlating the independent variables of each subhypothesis to all the fathers' infant caretaking participation scores. This correlation was achieved through use of the Spearman-Rho method of analysis (Mendenhall, 1975).

## CHAPTER 4

### ANALYSIS OF DATA

Analysis of data was accomplished through tabulation of responses on the questionnaires in the same manner as described by Manion (1975) (see Appendix F). Once the scores were obtained, the analysis was done by computer using Statistical Program for Social Science. A description of the study sample and the significance levels of the study findings follows.

#### Description of Sample

The study sample was nonrandom and consisted of 12 first-time fathers of full term, healthy infants. Six fathers were in the control group and six fathers were in the experimental group. The control group consisted of fathers who were not present in the delivery room. They first saw their newborns after the infants were cleaned, dried, and wrapped. The experimental group consisted of fathers who were present in the delivery room and had held their infants before they were taken to the nursery.

Control Group

From the demographic data obtained, it was learned that the father's average age was 30 years and the wife's average age was 26.7 years. All the fathers in this group had attended preparation for childbirth classes with their wives and one father had studied child development in college. All fathers had planned to be present in the delivery room but were unable to attend for various reasons. These reasons included complications which required cesarean births (four mothers had cesarean births), the father's decision not to be present due to his discomfort with the procedure and the physician's preference that the father not be present in the delivery room.

Four of the men became fathers of sons and two had daughters. Three of the wives received a general anesthetic, two received regional (epidural) anesthetics, and one received a local anesthetic for the delivery. All of the mothers breast-fed their infants but four of the infants were given supplemental formula during the first weeks of life.

All of the fathers in the control group had attended college and five had received degrees. The group consisted of an industrial arts teacher, an accountant, a business manager, and one employee of a newspaper and one employee



of an airline. Five fathers stated that their job kept them away from home more than 40 hours per week (see Table 1).

#### Experimental Group

The experimental group consisted of an attorney, a college professor, a geologist, an engineer, a chef, and a salesman. One father was a high school graduate, the others had college degrees. Three fathers stated that their jobs kept them away from home for more than 40 hours per week.

The father's average age was 28.5 years and the wife's average age was 21.6 years. Four of the men became fathers of daughters and two became fathers of sons. All of the fathers had attended preparation for childbirth classes with their wives. Only one father had attended college classes on child development.

All of the wives of this group delivered vaginally, five received local anesthetics and one received an epidural. All of the infants were breast-fed; one received supplemental formula in the first weeks of life (see Table 1).

#### Findings

The findings of the study will be discussed as they related to the primary hypothesis and to the subhypotheses.

Table 1  
Demographic Characteristics of Sample

	<u>Average Age</u>		<u>Sex of Infants</u>		<u>Anesthetic</u>		
	Father	Mother	Females	Males	Loc.	Reg.	Gen.
Control	30	26.7	2	4	1	2	3
Experimental	28.5	21.6	4	2	5	1	0

Each extraneous variable tested by the study was found to be positively related to the father's participation in infant caretaking activities.

#### Presence in the Delivery Room

The primary hypothesis of this study was: The father who is present at the birth of his firstborn and has early contact at that time will show increased participation in infant caretaking activities at two weeks after the delivery. The Mann-Whitney U and a two-tailed paired difference test (corrected for ties), were the methods of analysis used to obtain the significance level. The hypothesis was accepted because the independent variable (father's presence at delivery) and dependent variable (participation in caretaking activities) were related at the 0.07 level.

#### Testing Extraneous Variables for Members of Both Groups

The Spearman Correlation Coefficient test was the method used to determine the relationship between all 12 fathers' participation scores and the 4 extraneous variables that were tested. The correlation findings follow (see Table 2).

Table 2

Extraneous Variable Findings (N = 12)\*

Variable	<u>Father's Responses</u>		<u>Correlation</u>
	Control	Experimental	Score (r = )**
Early Child Care Experience			
Responsibility for Siblings			0.168
Never	5	2	
Seldom		1	
Sometimes		1	
Frequently	1	2	
Baby-Sitting of Infants			
Never	3	4	
Seldom			
Sometimes	2	1	
Frequently	1	1	
Preparation for Childbirth			0.420
Child Development Classes			
No	5	5	
Yes	1	1	
"Lamaze". Classes			
No	0	0	
Yes	6	6	
Contact with Infant in Hospital			0.123
Infant Held After Birth			
Within 1 hour	3	6	
Within 6 hours	1		
Within 24 hours	1		
Later than 24 hours	1		

Table 2 (continued)

Variable	Father's Responses		Correlation Score (r = )**
	Control	Experimental	
Contact with Infant in Hospital (Continued)			
Times Infant Held After Birth			
None			
Once or Twice			
Three Times or More	6	6	
Instructions in Infant Care			0.411
Feeding			
No	3	4	
Yes	3	2	
Bathing			
No	4	3	
Yes	2	3	
General			
No	4	5	
Yes	2	1	

\*Control Group N = 6; Experimental Group N = 6

\*\*Spearman-Rho correlation value between each variable and all fathers' participation scores

### Early Child Care Experience

Subhypothesis I, that a father who had given young child care in his own personal life history would show increased participation at two weeks after the birth of his firstborn, was accepted. A positive relationship between the variables was found,  $r_1 = 0.168$ .

### Preparation for Childbirth

Subhypothesis II, that a father who participated in preparation for childbirth class would show increased participation at two weeks after the birth of his firstborn, was accepted. A positive relationship was found between the variables was found,  $r = 0.420$ .

### Contact with Infant in the Hospital

Subhypothesis III, that the more contact the father had with his firstborn in the hospital the more he would show an increase in infant caretaking activities at two weeks after delivery, was accepted. The father's participation in infant caretaking activities was positively related to his contact with the infant in the hospital,  $r_3 = 0.123$ .

### Inclusion in Care Instructions

Subhypothesis IV, that a father who was included in infant care instructions in the hospital would show an

increase in infant caretaking activities at two weeks after delivery, was accepted. A positive correlation was found between the variables,  $r = 0.411$ .

#### Summary

The primary hypothesis of the study was supported by the results of the analysis of data. Fathers who were present in the delivery room were found to be significantly more active in infant caretaking activities at two weeks after delivery than fathers who were not present at the time of birth.

Each of the extraneous variables tested (early child care experience, preparation for childbirth, contact with infant in the hospital, and inclusion in infant care instructions) was found to be significantly related to the father's participation in infant caretaking activities at two weeks after the delivery.

## CHAPTER 5

### SUMMARY OF THE STUDY

The primary hypothesis that fathers who were present in the delivery room and who had physical contact with their infants at that time would be more active in infant caretaking activities in the weeks following delivery than fathers not present at delivery was supported by the results of the study. The subhypotheses of the study were related to four extraneous variables measured in both the control group and experimental group of fathers through use of a questionnaire (see Appendix A). The independent variable in the primary hypothesis was the father's presence in the delivery room at the birth of his firstborn. The dependent variable in the primary hypothesis was the father's participation in infant caretaking.

The independent variables of the four subhypotheses for both groups of fathers were: (a) early child care experience, (b) participation in classes on preparation for childbirth, (c) contact with the infant in the hospital, and (d) inclusion in infant care instructions in the hospital. The dependent variable in each of these four instances was also the father's participation in infant caretaking.



### Summary of Study Methodology

A two-group, nonexperimental design was necessary for this study because all variables could not be controlled while working with human subjects.

In an effort to lessen bias from confounding variables, only first-time fathers whose wives had had an uneventful pregnancy and whose infants were free of problems necessitating special care, were included. Once the study had begun, it became apparent that one of the original stipulations for father participation, vaginal delivery of the infants, had to be removed. It became necessary to include fathers of infants born by cesarean birth to obtain fathers for the control group. The final total sample was smaller than stated in the thesis proposal. This was due to the lack of first-time fathers who met the study criteria, poor response return from the subjects, and the time limitation for conducting the study within the institution selected for the study setting.

Fathers who met the study criteria and who agreed to participate were assigned to the appropriate group at the first meeting with the nurse investigator at the hospital, at 48 hours past delivery. Fathers who were present at the birth were assigned to the experimental group. The control group consisted of fathers who were not present in the

delivery room at the time of birth.

Information concerning extraneous variables was elicited from the responses on the first questionnaire, from both the control group and the experimental group. It was expected that the higher the scores pertaining to the extraneous variables tested (see Appendix F), the more active the fathers would be in infant care participation. The score for father participation in infant care was obtained from the responses made by all fathers on the second questionnaire (see Appendix F).

#### Discussion of the Findings

Fathers in the study who were present in the delivery room were more active in infant care than fathers who were not present at the time of birth. This supports the findings in studies by Boeltcher (1979) and Manion (1975). Findings may also be explained by the maternal-infant bonding literature which indicates that there is a sensitive period immediately following delivery when parent-infant bonding begins (de Chateau, 1977; Klaus & Kennell, 1970). Greenberg and Morris (1974) also indicated that early father-infant contact released an innate potential in the father for involvement with the newborn.

The two groups in this study were relatively homogeneous, and all subjects had attended preparation for

childbirth classes. This indicated that all of the fathers intended to be present at the delivery, and that they were probably equally motivated to participate in child care activities. Even with the similarity of the groups, there was a significant difference in participation between the two groups. The researcher had thought prior to the data analysis, that the fathers whose wives had cesarean births would score higher on infant care participation as a response to helping with infant care while the mother recovered from surgery. The fact that this did not show in the study may be explained by the disappointment factor discussed by Peterson, Mehl, and Leiderman (1979). They found that when deliveries did not occur as planned, fathers tended to remove themselves from active participation with their infants.

Manion (1975) found that fathers were more likely to participate in the less complex infant care activities such as walking/rocking and bottlefeeding. The present study supports this finding. All of the fathers had high scores on the walking/rocking activity but only 6 of the 12 responded that they had bathed the infant, and only 2 of the 6 had bathed the infant more than once in the past week (see Table 3).

Table 3

Fathers' Participation in Infant Care Activities (N = 12)\*

Activities	<u>None</u>		<u>Once or Twice</u>		<u>Three or More</u>	
	C	E	C	E	C	E
Rocking/Walking						
To put to sleep	1	0	3	6	2	0
To comfort	0	1	6	1	0	4
To hold--no direct physical care needed	0	0	1	0	5	6
Feeding**	4	4	2	1	0	1
Diapering	3	1	3	2	0	3
Bathing	3	3	3	3	0	0

\*Control Group = 6; Experimental Group = 6

\*\*Control Group--2 infants were completely breast-fed; Experimental Group--4 infants were completely breast-fed

Only 2 fathers out of 12 had child development or infant care classes and both of them had the classes in college. One-half of the fathers in the study took their infants home without being given infant care instructions by the hospital staff. Manion (1975) also found that fathers did not attend classes on infant care even though they were available in the community.

Leonard (1976) concluded that experience with small children develops confidence which may make new fathers more comfortable with their newborn. The present study found that early child care experience significantly affected the father's participation in infant care activities. This again supported the results of studies by Leonard (1976) and Manion (1975).

The relationship found in this study between participation in preparation for childbirth classes and infant caretaking is supported by Biller's (1972) suggestion that including the father during the pregnancy can lead to a positive attitude toward fatherhood. This may also explain the low significance level found in the Mann-Whitney U (0.07) test comparing the two groups, since all the fathers in the study attended prenatal classes.

The study finding related to the contact in the hospital variable is supported by maternal-infant literature. A

study by Klaus, Jerauld, Kleger, McAlpine, Steffa, and Kennell (1972) found that extended contact between mother and infant had a positive effect that was measurable 30 days later. While Klaus and Kennell (1970, 1976) and de Chateau (1976, 1977) did not include the father in their studies, further research with fathers might allow the reader to substitute "parent" for "mother" in some mother-infant literature.

A high correlation was found between all fathers' inclusion in care instructions in the hospital and later participation in infant care. Since a person adapts through learning, including the father in care instructions would help him adjust to the fatherhood role. Important too, is the need to include the father in the hospital instructions because he receives little to no other instruction in infant care.

An incidental finding of this study was the high manner of fathers who participated in the delivery process. At St. Luke's Episcopal Hospital (SLEH) in Houston where the subjects were selected, even the fathers who did not plan to be present during the delivery, often made the decision to accompany their wives to the delivery room rather than go to the waiting room after staying with them through labor. This may be explained by the effort made by the nurses at

SLEH to involve the fathers in the labor and delivery process. If Manion's (1977) position that implied professional approval through encouragement and support of the father in the delivery room leads to further father-infant involvement is true, then this encouragement should be continued by nurses.

Possible confounding variables in this study were identified during tabulation of demographic data. The high average age of the fathers in the study (see Table 1) and the high education level of the fathers (all but one had attended college), might have affected the study results. The effect of vaginal birth versus cesarean birth is unknown because the study instruments were not designed to elicit this information.

#### Conclusions and Implications

A generalization to the study sample was that a first-time father's involvement in active caretaking could be influenced by his presence or absence from the delivery room at the infant's time of birth. This was demonstrated by a small, relatively homogeneous sample of fathers, all of whom planned to be present at the birth of their firstborn. The fathers who were able to attend the delivery were found to be more active two weeks after the delivery in infant care activities, measured at a statistically low positive

level (0.07). If other studies continue to support this finding, fathers should be encouraged to be present at this critical time.

The implication to be derived from the finding that early child care experience is positively related to father participation may be to encourage boys and men to baby-sit with infants and small children, and to attend births of siblings and animals, in the years prior to parenthood. Baby-sitting has traditionally been a female role but it can be expanded to allow males to obtain child care experience to prepare them for fatherhood.

Since the father's participation in childbirth classes was positively correlated with their participation in infant care, perhaps these classes should include one session on infant care information. Incorporating childbirth classes and infant care classes would decrease the number of first-time fathers who did not receive child care information prior to taking their newborn home.

If extended contact with the infant correlates positively with a father-infant bond as suggested by this study, hospitals should encourage father visitation. An open visitation policy, rooming-in for both the infant and father, and perhaps making meals available for fathers could encourage extended father-infant contact in the hospital.



Recommendations for Further Study

Further research could be done through replication of the present study design. The research could be extended to study fathers over a period of time, limited only by father cooperation and researcher time and resources. The extended study would establish whether the father's initial response to the infant continues, whether it was a high level of involvement or low level. Other studies could focus on other variables identified in the literature which may affect the father-infant involvement. Still other studies could focus on the effect nurses' and/or other professionals' attitudes have on father-infant involvement.

## APPENDIXES

**APPENDIX A: Father's First Questionnaire**

FATHER'S FIRST QUESTIONNAIRE

No. \_\_\_\_\_

Father: Please complete the following questionnaire.

Answer the questions by circling the number next to your response. For example:

My new baby is a

- ①. boy
- 2. girl

1. During your childhood did you have any responsibility for the care of younger brothers and/or sisters?

- 0. never
- 1. very seldom
- 2. seldom
- 3. sometimes
- 4. frequently
- 5. very frequently

2. Have you ever baby-sat for young infants (less than six months old)?

- 0. never
  - 1. very seldom
  - 2. seldom
  - 3. sometimes
  - 4. frequently
  - 5. very frequently
-

For each of the following items, circle a response to the statement which best describes your mother as you remember her:

3. "Believed in showing her love for me."
  0. never
  1. very seldom
  2. seldom
  3. sometimes
  4. frequently
  5. very frequently
4. "Understood my problems and worries and helped me with them."
  0. never
  1. very seldom
  2. seldom
  3. sometimes
  4. frequently
  5. very frequently
5. "Hugged or kissed me goodnight when I was small."
  0. never
  1. very seldom
  2. seldom
  3. sometimes
  4. frequently
  5. very frequently
6. "Was able to make me feel better when I was upset."
  0. never
  1. very seldom
  2. seldom
  3. sometimes
  4. frequently
  5. very frequently
7. "Gave me a lot of care and attention."
  0. never
  1. very seldom
  2. seldom
  3. sometimes
  4. frequently
  5. very frequently

For each of the following items, circle a response to the statement which best describes your father as you remember him:

8. "Believed in showing his love for me."
- 0. never
  - 1. very seldom
  - 2. seldom
  - 3. sometimes
  - 4. frequently
  - 5. very frequently
9. "Understood my problems and worries and helped me with them."
- 0. never
  - 1. very seldom
  - 2. seldom
  - 3. sometimes
  - 4. frequently
  - 5. very frequently
10. "Hugged or kissed me goodnight when I was small."
- 0. never
  - 1. very seldom
  - 2. seldom
  - 3. sometimes
  - 4. frequently
  - 5. very frequently
11. "Was able to make me feel better when I was upset."
- 0. never
  - 1. very seldom
  - 2. seldom
  - 3. sometimes
  - 4. frequently
  - 5. very frequently
12. "Gave me a lot of care and attention."
- 0. never
  - 1. very seldom
  - 2. seldom
  - 3. sometimes
  - 4. frequently
  - 5. very frequently

- 
13. What is your occupation?
14. Does your work require you to be away from home more than the "average" forty-hour work week?
15. If yes, how much time would you say you spend away from home during the week?
16. Please indicate your level of education:
1. less than 9 grades completed
  2. some high school completed
  3. high school graduate
  4. some college work completed
  5. college graduate
17. Have you had any courses in child development or child care in junior high, high school, or college (other than at prenatal classes)?
0. no
  2. yes
18. If yes, please describe briefly:
19. Did you attend the prenatal classes offered at St. Luke's Hospital?
0. no
  1. yes, one of the classes
  2. yes, two of the classes
  3. yes, all of the classes
20. Did you attend Lamaze or "natural childbirth" classes?
0. no
  4. yes
-

21. How long have you and your wife been married?

1. one year or less
2. one to three years
3. three to five years
4. over five years

22. Would you say this pregnancy was:

1. not planned; had hoped to delay family for a while
2. not planned; but pleased with a child at this time
3. planned; but didn't realize all that was involved
4. planned; greatly anticipated

23. During this pregnancy did you hope the baby would be a:

1. boy
2. girl
3. either

---

24. Which of the following would you say best describes the discomfort your wife felt during labor and delivery?

1. she had little or no discomfort
2. she was uncomfortable but it was manageable
3. the labor was difficult and painful
4. the pain was unbearable

25. Which of the following would you say best describes your presence in the labor room with your wife?

1. was not present
2. visited wife frequently but also spent time in father's waiting room ( $\frac{1}{2}$  to 1 hour at a time)
3. was present in the labor room except for short periods of time (10-15 minutes at a time)



26. If you were in the labor room with your wife, please circle any of the following things you did to help her:

1. gave her water to drink or ice chips to suck on
2. rubbed her back
3. talked to her during contractions (labor pains) to keep her distracted
4. timed the contractions (labor pains)
5. sat in a chair nearby, to assure her of presence
6. helped her change her position in bed
7. checked her for relaxation during and between contractions (labor pains)
8. held her hand during the contractions (labor pains) and let her squeeze
9. helped her with her breathing techniques

27. Were you in the delivery room with your wife when your baby was born?

0. no
2. yes

---

28. How soon after birth did you get to hold your baby?

1. no opportunity
2. within seventy-two hours
3. within twenty-four hours
4. within six hours
5. within one hour

29. How many times have you been able to hold your baby since birth?

0. none, no time or opportunity
1. once or twice
2. three times or more

30. During this hospital stay, did you get to feed your baby?

0. no, no time or opportunity
  1. no, my wife is breastfeeding
  2. yes
-

31. During this hospital stay, were you given any help by nurses or other staff members in feeding your baby?  
  
0. no  
2. yes
  32. During this hospital stay, were you shown how to bathe your baby?  
  
0. no  
2. yes
  33. During this hospital stay, have any of the nurses or other staff members talked with you about caring for your baby when you are at home?  
  
0. no  
2. yes
-

APPENDIX B: Father's Second Questionnaire

## FATHER'S SECOND QUESTIONNAIRE

No. \_\_\_\_\_

Father: Please complete the following questionnaire.

Answer the questions by circling the number next to your response. For example:

My new baby is a

- 1. boy
- 2. girl

Baby's Sleeping: Sleeping habits of new babies vary not only from infant to infant, but they may also vary from week to week in the same baby.

1. Babies sleep several times a day for differing lengths of time. About how many hours over a 24-hour period would you say your baby sleeps?
  - 0. don't know
  - 1. 10-12 hours
  - 2. 12-16 hours
  - 3. 16-20 hours
  - 4. more than 20 hours
  - 5. I'm not sure because of my hours away from home
2. Some babies sleep through the night (between 10 PM and 6 AM) at a very early age while others seem to wake often and sleep little. What is the longest period of time that your baby usually sleeps through the night?
  - 0. don't know
  - 1. 2-3 hours
  - 2. 4-6 hours
  - 3. 7-8 hours
  - 4. more than 8 hours

3. Do you ever need to rock (in a rocking chair or in your arms) or walk your baby before he/she will settle down and go to sleep?

- 0. don't know
- 1. no
- 2. occasionally
- 3. couple of times a week
- 4. every day

4. If you do, how many times have you (father) rocked or walked your baby (to get him/her to sleep) in the past three days?

- 1. none
- 2. once
- 3. twice
- 4. three times or more

Baby's Crying: Although crying is your baby's way of communicating, a fussy and irritable baby can be frustrating for new parents as well as experienced parents.

5. How often does it seem to you that your baby cries?

- 1. whenever in need of attention (feeding, changing, etc.), but then quiets immediately
- 2. whenever in need of attention (feeding, changing, etc.), and then cries for several minutes
- 3. occasionally cries for no apparent reason
- 4. frequently cries for no apparent reason

6. How many times in the past three days has the baby been fussy and irritable and needed to be walked, or actively comforted?

- 0. don't know
- 1. none
- 2. one to two times
- 3. three to four times
- 4. five times or more

7. How many times in the past three days have you (father) walked, rocked, or actively comforted the baby when he/she was fussy and irritable?

1. none
2. one to two times
3. three to four times
4. five times or more

8. How many times in the past three days have you (father) held the baby (for five minutes or so) when the baby needed NO direct physical attention (such as feeding, changing, comforting, etc.)?

1. none
2. once
3. twice
4. three times or more

Baby's Feeding: New babies are sometimes fussy and hard to feed. It may take several weeks before the baby develops a schedule of any kind.

9. What method of infant feeding are you now using?

1. bottlefeeding
2. breastfeeding with occasional bottles
3. complete breastfeeding

10. How often would you say your baby usually eats?

1. every two hours
2. every three hours
3. every four hours

11. How often would you say your baby is fussy and hard to feed?

1. hardly ever
2. at occasional feedings
3. several times a week
4. several times a day

12. How many times in the past three days have you (father) bottle fed the baby?

- 1. none
- 2. once
- 3. twice
- 4. three times or more

13. Has your baby started any solid foods (cereal, vegetables, fruits, etc.) yet?

- 0. don't know
- 1. yes
- 2. no

14. If yes, how many times in the past three days have you (father) fed the baby solids?

- 1. none
- 2. once
- 3. twice
- 4. three times or more

Changing Baby's Diapers: It seems like some babies need changing all of the time. Babies soon develop a schedule in this area, too!

15. What kind of diapers do you use?

- 0. don't know
- 1. cloth
- 2. disposable
- 3. combination of cloth and disposable

16. About how many times a day would you say your baby needs a change of diapers?

- 0. don't know
- 1. four to six times
- 2. seven to ten times
- 3. eleven to thirteen times
- 4. fourteen times or more

17. There are many differences between bowel habits of adults and those of babies. About how often would you say your baby moves his/her bowels?

- 0. don't know
- 1. with every feeding
- 2. two to three times a day
- 3. once a day
- 4. once every two or three days

18. How many times in the last two days have you (father) changed your baby's diapers?

- 1. none
- 2. one to two times
- 3. three to four times
- 4. five times or more

Bathing Baby: In this area also, each individual baby differs. Some babies need bathing more often than others, some babies like bath time and others don't, and so on.

19. About how often does your baby get a bath?

- 0. don't know
- 1. more than once a day
- 2. once a day
- 3. every two or three days
- 4. once a week

20. At what time of the day is your baby usually bathed?

- 0. don't know
- 1. morning
- 2. afternoon
- 3. evening
- 4. varies, whenever convenient or needed

21. Where is baby usually bathed?

- 0. don't know
- 1. in the kitchen
- 2. in the bedroom
- 3. in the bathroom
- 4. other



22. How many times in the last week have you (father) bathed your baby?

1. none
2. once
3. twice
4. three times or more

\* \* \* \* \*

(Use back of paper if necessary.)

23. What do you feel is your role as a father in raising your child?

24. What do you feel is your wife's role in raising your child?

THANK YOU FOR YOUR TIME AND HELP!!!!

When you filled out the first questionnaire, many of you indicated that the questions regarding instructions in infant care were somewhat misleading, as you were expecting that those instructions would be given at a later time during your hospital stay. So that the answers are more accurate, I would appreciate your answering the questions again. Thank you.

25. During your hospital stay, were you given any help by nurses or other staff members in feeding your baby?

- 0. no
- 2. yes

26. During your hospital stay, were you shown how to bathe your baby?

- 0. no
- 2. yes

27. During your hospital stay, did any of the nurses or other staff members talk with you about caring for your baby when you are at home?

- 0. no
- 2. yes

APPENDIX C: Demographic and Delivery Data

DEMOGRAPHIC AND DELIVERY DATA

Date of Interview \_\_\_\_\_

Baby's Name \_\_\_\_\_

Birth Date of Baby \_\_\_\_\_ Birth Weight \_\_\_\_\_

Type of Infant Feeding \_\_\_\_\_

Rooming-in \_\_\_\_\_

Medication of Mother during labor and delivery \_\_\_\_\_

Age of Father \_\_\_\_\_ Age of Mother \_\_\_\_\_

Gravida \_\_\_\_\_ Para \_\_\_\_\_

Father: How many older brothers do you have? \_\_\_\_\_

How many older sisters do you have? \_\_\_\_\_

How many younger brothers do you have? \_\_\_\_\_

How many younger sisters do you have? \_\_\_\_\_

Mother: How many older brothers do you have? \_\_\_\_\_

How many older sisters do you have? \_\_\_\_\_

How many younger brothers do you have? \_\_\_\_\_

How many younger sisters do you have? \_\_\_\_\_

APPENDIX D: First Cover Letter

Dear Mr. .

It has been two weeks since you and your wife left the hospital with your new baby. I know the three of you have been making adjustments and are beginning to settle into a routine.

I met with you in the hospital and you agreed to participate in a study I am conducting for my thesis. If you remember, I am a graduate student at Texas Woman's University in Maternal-Child Health nursing. The study concerns father's involvement with their newborn.

The study requires that participating fathers answer two questionnaires. I appreciate your taking the time to answer the first questionnaire in the hospital. Knowing that your time is limited, this second questionnaire is as short as possible. It will take approximately 20 minutes to answer. Please feel free to add any comments you wish at the end of the questionnaire.

I have enclosed a stamped, self-addressed envelope for your convenience in returning the questionnaire. A prompt response will be greatly appreciated.

Please answer the questionnaire on your own, without assistance from your wife. It is important that I have your perception of the newborn's activities and routine.

Thank you for your time and your participation in the study.

Sincerely,

APPENDIX E: Second Cover Letter

Dear Mr.

It has been several weeks since you and your wife left the hospital with your new infant. I'm sure you are adjusting to a new person in the house.

I met with you in the hospital and you answered the first of two questionnaires for a study I am conducting for my thesis. I am a graduate student at Texas Woman's University in Maternal-Child Health nursing. The study concerns father's involvement with their newborn.

The study requires that participating fathers answer two questionnaires. I appreciate your answering the first and now need your responses from the second questionnaire.

In the event that the other questionnaire I mailed to you was lost in the mail, I am sending you a second questionnaire. Time is becoming limited and a prompt response will be appreciated. I am enclosing a stamped, self-addressed envelope for your convenience in returning the questionnaire.

Thank you very much for your time and participation in the study.

Sincerely,



## APPENDIX F: Variable Scoring

## VARIABLE SCORING

Father Participation Score: This score was tabulated from the father's responses to items on the second questionnaire. A total possible score was established for each father based on his responses to the questions concerning the amount of rocking, comforting, feeding, changing, and bathing needed by his infant. The points assigned for each response is shown below. The points for the responses were totaled and a possible score obtained.

Number	Response	Points Assigned
3.	1. no	0
	2. occasionally	3
	3. couple of times a week	4
	4. every day	4
6.	1. none	0
	2. one to two times	2
	3. three to four times	3
	4. five times or more	4
9.	1. bottlefeeding	4
	2. breastfeeding with occasional bottles	4
	3. complete breastfeeding	0
16.	1. four to six times	1
	2. seven to ten times	2
	3. eleven to thirteen times	3
	4. fourteen times or more	4
19.	1. more than once a day	4
	2. once a day	4
	3. every 2-3 days	3
	4. once a week	2

A numerical figure representing the father's actual participation was obtained by summing the responses to the questions regarding his actual participation (#s 4, 7, 8, 12, 18, 22). The answer none was scored a 0. The figure representing his actual involvement was

then divided by the figure representing his possible involvement resulting in a score reflecting the amount of the father's participation in the caretaking of the infant.

**Child Care Experience Score:** This score was obtained by summing the responses to questions #1 and #2 on the first questionnaire. The questions referred to the frequency of responsibility for younger siblings and the father's baby-sitting experience with your infants.

**Preparation for Childbirth Score:** This score was obtained by summing the responses to questions concerning the father's attendance of courses on child care and pre-natal classes (#17 and #20).

**Contact with Baby Score:** This score was obtained by summing the responses to question numbers 28, 29, and 30. Respectively, these questions concern how soon after delivery the father held the infant, how many times he held the infant, and how many times he fed the infant.

**Inclusion in Instructions Score:** This value was obtained by summing the responses to questions concerning the instructions given the father by nursing or other personnel on feeding, bathing, and general care of an infant (#31, #32, and #33).

## REFERENCES

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- Bach, G. Father fantasies and father typing in father separated children. Child Development, 1946, 17, 63-80.
- Barnette, C. R., Leiderman, P. H., Grobstein, R., & Klaus, M. Neonatal separation: The maternal side of interactional deprivation. Pediatrics, 1970, 45(2), 197-205.
- Bernstein, R., & Cyr, F. E. Study of interviews with husbands in a prenatal and child health program. Social Casework, 1957, 38(9), 473-480.
- Biller, H. B. Father absence and the personality development of the male child. Developmental Psychology, 1970, 2, 181-201.
- Biller, H. B. Include the father in the pregnancy . . . , Sexual Behavior, 1972, 4, 47.
- Biller, H. B. The father and personality development: Paternal deprivation and sex-role development. In M. E. Lamb (Ed.), The role of the father in child development. New York: John Wiley & Sons, 1976.
- Boeltcher, J. H. Father's part in newborn care. American Journal of Nursing, 1979, 79(5), 917.
- Bowlby, J. Maternal care and mental health and deprivation of maternal care. New York: Schocken Books, 1966.
- Bowlby, J. Attachment and loss (Vol. 1). London: Hogarth Press, 1969.
- Brofenbrenner, U. The psychological costs of quality and inequality in education. Child Development, 1967, 38, 909-925.
- Burns, P., Sander, L. W., Stechler, G., & Julia, H. Short-term effects of caretaker environment of the first 10 days. Journal of American Academy of Child Psychiatry, 1972, 11(3), 427-439.

- Clark-Stewart, A. Childcare in the family: A review of research and some propositions for policy. New York: Academy Press, 1977.
- Cohen, L., & Campos, J. Father, mother and stranger as elicitors of attachment behaviors in infancy. Developmental Psychology, 1974, 8, 146-154.
- Cronenwatt, L. R., & Newmark, L. L. Fathers' responses to childbirth. Nursing Research, 1974, 23(3), 210-217.
- Curry, M. A. H. Contact during the first hour with the wrapped or naked newborn: Effect on maternal attachment behaviors at 36 hours and three months. Birth and the Family Journal, 1979, 6(4), 227-235.
- de Chateau, P. The influence of early contact on maternal and infant behavior in primipara. Birth and the Family Journal, 1976, 4(1), 149-155.
- de Chateau, P. The importance of the neonatal period for the development of synchrony in the mother-infant dyad: A review. Birth and the Family Journal, 1977, 4(1), 10-22.
- de Chateau, P., & Andersson, Y. Left-side preference for holding and carrying newborn infants. II. Doll-holding and carrying from 2-16 years. Developmental Medicine and Child Neurology, 1976, 18(6), 738-744.
- Dubois, D. R. Indications of an unhealthy relationship between parents and premature infant. Journal of Obstetric, Gynecologic and Neonatal Nursing, 1975, 4(3), 21-24.
- Earls, F. The fathers (not the mothers): Their importance and influence with infants and young children. Psychiatry, 1976, 39(8), 209-226.
- Erickson, M. C. Child-rearing and social status. American Journal of Sociology, 1946, 52(3), 190-192.
- Freud, S. The ego and the id (1923). New York: Norton, 1962.
- Gavon, H. The captive wife: Conflicts of housebound mothers. London: Routledge & Kegan Paul, 1966.

- Goldenson, R. M. The encyclopedia of human behavior (Vol. 2). Garden City, N.Y.: Doubleday, 1970.
- Gollobar, M. A comment on the need for father-infant postpartum interaction. Journal of Obstetric, Gynecologic, and Neonatal Nursing, 1976, 6(5), 17-20.
- Gordon, R. E., & Gordon, K. K. Social factors in the prevention of postpartum emotional difficulties. Obstetrics and Gynecology, 1960, 15(4), 433-438.
- Gordon, R. E., Kapostins, E. E., & Gordon, K. K. Factors in postpartum emotional adjustment. Obstetrics and Gynecology, 1965, 25(2), 158-166.
- Greenberg, M., & Morris, N. Engrossment: The newborn's impact on the father. American Journal of Orthopsychiatry, 1974, 44(8), 520-531.
- Greenburg, M., Rosenberg, I., & Lind, J. First mothers rooming-in with their newborns: Its impact upon the mother. American Journal of Orthopsychiatry, 1973, 42(5), 783-788.
- Harlow, H. F., & Zimmerman, R. R. Affectional responses in the infant monkey. Science, 1959, 130, 421.
- Heise, J. Toward better preparation for involved fatherhood. Journal of Obstetric, Gynecologic, and Neonatal Nursing, 1975, 4(5), 32-35.
- Helfer, R. M. The etiology of child abuse. Pediatrics, 1973, 51(4), 777-779.
- Hersher, L., Moore, A. U., & Richmond, J. R. Effect of separation of mother and kid on maternal care in the domestic goat. Science, 1958, 128, 1342-1343.
- Hurd, J. M. Assessing maternal attachment: First step toward the prevention of child abuse. Journal of Obstetric, Gynecologic, and Neonatal Nursing, 1975, 4(4), 25-30.
- Kempe, C. H. Paediatric implications of the battered baby syndrome. Archives of Disease in Childhood, 1971, 46, 28-37.

- Klaus, M. H., Jerauld, R., Kleger, N. C., McAlpine, W., Steffa, M., & Kennell, J. H. Maternal attachment: Importance of the first post-partum days. New England Journal of Medicine, 1972, 286(9), 460-463.
- Klaus, M. H., & Kennell, J. Mothers separated from their newborn infants. Pediatric Clinics of North America, 1970, 17(4), 1015-1037.
- Klaus, M. H., Kennell, J. H., Plumb, N., & Zuehlke, S. Human maternal behavior at the first contact with her young. Pediatrics, 1970, 46(2), 187-192.
- Kohn, M. Social class and parental values. American Journal of Sociology, 1959, 64(4), 337-351.
- Kotelchuck, M. The infant's relationship to the father: Experimental evidence. In M. Lamb (Ed.), The role of the father in child development. New York: John Wiley & Sons, 1976.
- Lamb, M. The role of the father in child development (Ed.). New York: John Wiley & Sons, 1976.
- Lamb, M. E. Fathers: Forgotten contributors to child development. Human Development, 1975, 18(4), 245-266.
- Lamb, M. E. The role of the father: An overview. In M. Lamb (Ed.), The role of the father in child development. New York: John Wiley & Sons, 1976.
- Leiderman, P. H., Leifer, A., Seashore, M., Barnett, C., & Grobstein, R. Mother-infant interaction: Effects of early deprivation, prior experience and sex of infant. Early Development, 1973, 51, 154.
- Leonard, S. W. How first-time fathers feel toward their newborns. The American Journal of Maternal-Child Nursing, 1976, 1(6), 361-365.
- Lynn, D., & Sawrey, W. The effects of father absence on Norwegian boys and girls. Journal of Abnormal Social Psychology, 1959, 59, 258-262.
- Maccoby, E. E., & Masters, J. C. Attachment and dependency. In P. H. Mussen (Ed.), Carmichael's manual of child psychology (3rd ed.; Vol. 2). New York: Wiley, 1970.



- MacFarlane, A. The first hours and the smile. In R. Levin (Ed.), Child alive! New York: Anchor-Doubleday, 1975.
- Manion, J. Identification of factors related to father's participation in caretaking of their infants. Unpublished Master's thesis, University of Iowa, 1975.
- Manion, J. A study of fathers and infant caretaking. Birth and the Family Journal, 1977, 4(4), 174-179.
- Mendenhall, W. Introduction to probability and statistics. Boston: Duxbury Press, 1975.
- Miranda, S. B. Visual abilities and pattern preferences of premature infants and full-term neonate. Journal of Experimental Child Psychology, 1970, 10, 189-205.
- Montagu, A. Touching. New York: Harper & Row, Publishers, 1971.
- Moss, H. A. Sex, age and state as determinates of mother-infant interaction. Merrill-Palmer Quarterly, 1967, 13(1), 19-36.
- Newson, J., & Newson, E. Infant care in an urban community. London: Allen & Unwin, 1963.
- Nunnally, D. M., & Aguiar, M. B. Patient's evaluation of their prenatal and delivery care. Nursing Research, 1974, 23(6), 469-474.
- Parsons, T. Social structure and the development of personality: Freud's contribution to the integration of psychology and sociology. Psychiatry, 1958, 21, 321-340.
- Pedersen, F. A., & Robson, K. S. Father participation in infancy. American Journal of Orthopsychiatry, 1969, 39(3), 466-472.
- Peterson, G. H., Mehl, L. E., & Leiderman, P. H. The role of some birth-related variables in father attachment. American Journal of Orthopsychiatry, 1979, 49(2), 330-338.
- Polit, D., & Hungler, B. Nursing research: Principles and methods. Philadelphia: J. B. Lippincott Co., 1978.

- Rebelsky, F., & Hooks, C. Father's verbal interaction with infants in the first three months of life. Child Development, 1971, 42(1), 62-68.
- Redican, W. H. Adult male-infant interactions in non-human primates. In M. Lamb (Ed.), The role of the father in child development. New York: John Wiley & Sons, 1976.
- Rubin, J. Z., Provenzano, F. J., & Luria, Z. The eye of the beholder: Parent's views on sex of newborns. American Journal of Orthopsychiatry, 1974, 44(4), 512-519.
- Rutter, M. Maternal deprivation, 1972-1978: New findings, new concepts, new approaches. Child Development, 1979, 50, 283-305.
- Sawin, D. B., & Parke, R. D. Father's affectionate stimulation and caregiving behaviors with newborn infants. The Family Coordinator, 1979, 28(4), 509.
- Stene, S. H., & Scott, K. E. The unwanted pregnancy. Canadian Medical Journal, 1974, 111(10), 1093-1097.
- Tanzer, D., & Block, J. L. Why natural childbirth? New York: Doubleday & Company, 1972.
- Tasch, R. J. The role of the father in the family. Journal of Experimental Education, 1952, 4, 343-353.
- Thomas, E. B., Barnett, C. R., & Leiderman, P. H. Feeding behavior of newborn infants as a function of parity of the mothers. Child Development, 1971, 42, 1471-1483.
- Weiland, H. J., & Sperber, Z. Patterns of mother-infant contact: The significance of lateral preference. Journal of Genetic Psychology, 1970, 117, 157-165.
- West, M. M., & Konner, M. J. The role of the father: An anthropological perspective. In M. Lamb (Ed.), The role of the father in child development. New York: John Wiley & Sons, 1976.
- White, M. S. Social class, child-rearing practices and child behavior. American Sociological Review, 1957, 22(6), 704-712.

Wolff, P. H., & Ferber, R. The development of behavior in human infants, premature and newborn. Annual Review of Neuroscience, 1979, 2, 291-307.