

THE EFFECT OF AN INSTRUCTIONAL  
PROGRAM ON FATHERING

by

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A THESIS

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## CHAPTER I

### INTRODUCTION

The recent refocus on the father's place in the family has renewed interest in the father's responsibility toward his children. In the past, research predicted success or failure of the family unit from studying the mother-child dyad. Bowlby (1974) questioned the ability of the infant to relate to anyone other than his mother. Since then, research has suggested that the father has an equally important role in the attachment period and in the infant's later development (Lamb, 1977). With the advent of women's liberation, many men have been asked to share the caretaker role, while their partners share the breadwinner role. However, fathers are still viewed by many health care professionals as providing merely a supportive environment for the mother and newborn. Direct interaction between fathers and their infants is regarded as supplementary to maternal behavior and responsibility (Babitz, 1979). Exclusion of fathers from caretaking instruction during the neonatal period may leave them uninformed about infant care (Sawin & Parke, 1979). This lack of information may lead to a decrease in the father's confidence in his fathering role in general and in his attitude toward participation in the care of his infant.



Nurses have assumed an important supportive teaching role for the mother and her infant during the postpartum period. Through the expansion of this established role, nurses could become influential in fostering positive fathering attitudes and encouraging increased involvement in infant care, which, in turn, should facilitate adaptation to fatherhood.

### Review of the Literature

The review of the literature is organized under the following headings: nature of father attachment, father's effect on the infant, the role of the father, fathering skills, fathering versus mothering behavior, factors affecting father involvement and teaching infant care skills to increase father involvement. These topics were chosen to clarify the relationship between the father and his infant, to describe his unique position as a parent and to explore those factors that have been found to influence his fathering attitude and behavior.

### Nature of Father Attachment

Through extensive observation, Bowlby (1974) concluded that the infant initially attaches only to the mother. However, Kiernan and Scoloveno (1977) point out that Bowlby acknowledged the fact that the infant principally attaches to the individual who cares for him. Since the traditional structure of American society places the primary responsibi-

lity for care of the infant with the mother, it follows that attachment to the mother will develop first. However, Shaffer and Emerson (1964) state that attachment depends more on the availability of a significant person, rather than on "mother need". Nevertheless, the mother remains the principal object of attachment.

More recently studies have disputed earlier conclusions regarding the primacy of the mother in attachment. Greenberg and Morris (1976) studied 30 American fathers who responded to a questionnaire dealing with their feelings toward their newborn infants. These investigators claimed that fathers who come in contact with their infants within the first few hours after the birth begin to develop a bond with their infant. They designated this potential for involvement as "engrossment". Lamb (1977), in an observational study of 20 infants interacting with both parents in their homes at 7, 8, 12 and 13 months of age, concluded that the infants showed no preference in attachment behaviors for either parent. He further argued that mother-infant and father-infant interactions differ only in quality of attachment.

The foregoing studies document early father-infant involvement. They lend support to the contention that health-care professionals should no longer focus solely on the mother-infant dyad, but should also consider the father-infant relationship as an important aspect of successful nurturance of the infant.

### Father's Effect on Infant and Child Development

Researchers generally agree that the father plays an important role in the development of the infant. Research evidence suggests that fathers influence infant development significantly. However, it should be noted that the data upon which these conclusions are drawn are often limited and fail to consider the multicausal nature of behavior.

Sex role development has been found to be strongly related to a positive father-son relationship, especially in the first two to three years of life (Biller, 1971; Mackey & Day, 1979). Biller claims that the development of masculinity is facilitated when the father is both masculine and nurturant. However, when Lynn (1976) utilized a series of imitation tasks in a study involving 90 boys, aged 8-11 years, he did not find masculinity to be related to the father's masculinity alone. He found that masculinity was related to a combination of the father's nurturance, dominance and participation in his son's care.

Social orientation seems to be affected by a son's perception of his father. Earls (1976) reviewed a series of studies which he acknowledged to be "methodologically poor and unreplicated". He attempted to identify observed traits of children whose fathers were absent from the home or who neglected to nurture the children at an early age. These children were less concerned about peer relationships, more aggressive and less socially adjusted than their siblings who

had received adequate paternal affection. Rutherford and Mussen (1968) in an experimental study of 63 nursery school boys, aged 4-11, found that generosity in young boys positively correlated with the perception of their fathers as warm and nurturant.

Parke (1978), summarizing data collected from a series of observational studies, reported that social adjustment and cognitive development in the child was affected by the degree of father involvement. He also found that the infants of fathers who were highly involved in child care achieved high scores on the Bayley Infant Scale. Eversoll (1976) administered an attitudinal questionnaire to 221 Nebraska college students and their parents. He found that paternal warmth, acceptance and support were positively related to favorable emotional, social and intellectual development of children. On the other hand, extreme restrictiveness, authoritarianism and punitiveness without paternal warmth and acceptance were negatively related to the childrens' positive self-image.

Studies linking deviant social behavior in children to paternal deprivation have not been well substantiated. However, Earls (1976) and Castledine (1979) reviewed the literature, and claim that possible deviant behaviors such as homosexuality, juvenile delinquency, aggressiveness, dependency and immaturity may be due to a lack of paternal nurturance. Kotelchuck (1976), on the other hand, claims that

the research relating father absence to deviant behavior in children is invalid because it fails to recognize that family structures change in other ways when the father leaves. Developmental deprivations may be due not to the father's absence, but rather to other concomitant changes, such as the mother working outside the home.

The literature thus suggests that the father's influence on his child's sex role identification and cognitive, social and emotional development is positively related to the father's ability to be nurturant, his masculine characteristics, and his involvement in child care.

#### The Role of the Father

The usual approach to defining fatherhood is to describe what the father does (Obrzut, 1976). The role of the father in the past has been to support the mother-child dyad by functioning as the economic provider and the figure of authority (O'Donohue, 1979; Berger, 1979; Eversoll, 1976). Benedek (1970) asserts that the father's essential role throughout all "significant cultures" has been that of chief protector and provider for the family. Mackey and Day (1979) point out that in our contemporary competitive society, the father has become so involved with providing that he spends little time with his family. Furthermore, they claim that society teaches boys to be workers and providers. Boys are neither expected nor encouraged to develop nurturant skills

(Parke & Sawin, 1976; Kechet, 1978). In fact, in the past men have been taught that being nurturant is unmanly (Berger, 1979).

There is evidence that men are changing their views of masculinity and assuming new roles. The role of modern man, according to Eversoll (1976), has little to do with being aggressive, strong and materially successful. This role requires men to respond to the nurturing needs of their families. In a comparative study of 221 young adult males and their parents, Eversoll found that young men in college today expect fathers to become more involved in the nurturing and recreational roles and less involved in the provider role. Brown (1979) questioned fathers attending prenatal classes and reported that 33 out of 38 men intended to share infant care responsibilities with their spouse. She found that men over 40 years of age were less involved in caring for their babies.

However, even though men intend to share the nurturant role, studies show that mothers still take primarily responsibility for nurturing. In interviews with 30 middle aged couples expecting their first child, Fein (1976) found that even though they had expected to share infant care responsibilities, the men reported that they performed less than half the baby care. Albrecht, Bahr and Chadwick (1979) surveyed 759 married couples through questionnaires and found that husbands prefer their wives to perform most of the child care tasks even when wives share the breadwinner role. In another

study where 34 parents were interviewed, the researchers reported that 72% of the couples favored equal sharing of all aspects of parenting. However, the mother was still regarded responsible for looking after the baby (Jeffcoate, Humphrey and Lloyd, 1979). Even though society and fathers have broadened their definition of fatherhood, there appears to be a lag between the fathers' intent to nurture and their actual performance of infant care activities.

### Fathering Skills

Several recent investigators have focused their attention on the type of activities performed by fathers. Rendina and Dickerscheid (1976) used observations and questionnaires to study 40 fathers enrolled at Ohio State University and their first-born infants. They found that these fathers spent 10.4% of the contact time in social involvement as eye-to-eye contact smiling, laughing, talking, playing and restricting, 9.2% of time in affective proximal skills as lifting, patting, holding and walking, and only 3.8% of the time in performing caretaking skills as feeding, diapering, bathing and dressing. Manion (1977) administered self-report questionnaires to 45 first time Mid-western fathers. She found that fathers were more likely to rock feed or bathe the baby. When Leonard (1977) used a Likert-type scale to study caretaking activities performed by fathers, she reported that all 42 fathers were involved in every care-taking activities except bathing. Parke and Sawin (1976) conducted a series of observational studies and noted

that fathers of both breast fed and bottle fed babies were significantly less involved in feeding their infants than were the mothers. In a self-report interview study of 20 first-time fathers visiting their wives in a large urban hospital, Boettcher (1979) found that the fathers ranked the most frequent baby care activities as holding, playing with, rocking, putting to bed, fixing equipment and feeding the baby.

In summary, infant care activities described by authors in the literature as being performed more frequently by fathers are social and affective behaviors such as holding, rocking, playing, talking and laughing. Fathering activities that were named by authors as being performed the least are infant caretaking skills such as bathing and feeding. It seems evident that fathers are involved in infant related activities. However, they are involved in caretaking skills the least.

#### Fathering versus Mothering Behavior

Studies have been conducted to compare mothering and fathering behaviors. Sawin and Parke (1976) in their observational study compared the responsiveness of fathers and mothers to their newborn infants. They found that fathers demonstrate a frequency of nurturing behaviors that is at least equal to that of mothers. The fathers touched, rocked, held and vocalized more than the mothers, while mothers smiled and fed more often than the fathers. Feldman and Nash (1978) observed



the behavior of 120 young men and women toward babies. They found that among cohabiting-childless, married-childless and expectant subjects, men and women did not differ in their responsiveness to babies. However, among parents, women surpassed men in their responsiveness to infants. The investigators concluded that responsiveness and care giving are to a large extent determined by the quantity and quality of contact fathers have with their babies.

Several authors have postulated that there is a difference in the type of care given by the mother and father and that the parent roles are complementary. Paternal care has been described as more active, exciting and stimulating, while maternal care is more gentle, soothing and comforting (Earls, 1979). In contrast, Lamb (1977), in an observational study of the interactions of 10 male and 10 female infants with their parents, reported that fathers soothed their infants as often as mothers. However, mothers held their infants to perform caretaking functions, while fathers held their infants to play with them. In their studies, Parke (1978) and Jones (1981) agreed that fathers spend most of their time playing with their infants and added that their play is qualitatively different from the mothers' play with the infants. Sawin and Parke (1979) suggested that the father's support of the mother through social and caretaking activities may have a positive influence on the mother's attitude toward her infant. On the other hand, the mother may influence the type of behavior a

father engages in with his infant. In an observational study of 10 fathers with their newborn infants, Roberts (1979) found that fathers bounced their infants more while they were alone but rocked their infants more when the mother was present. Dodson (1970) asserts that the father's participation in child care is not intended to replace the mother's caretaking; rather it is intended to foster paternal closeness to their infant.

Thus, a father's nurturing ability seems to be equal to that of the mother. However, fathering behaviors are viewed as unique, positively influenced by early infant contact and maternal approval and are thought to facilitate a closer mother-infant relationship.

#### Factors Affecting Father Involvement With Their Infant

Many factors have been identified that seem to affect a father's perception of his role and hence his involvement in infant care activities. One of the factors which is frequently mentioned is early infant contact. Greenberg and Morris (1976) stressed the importance of early contact in promoting "engrossment". Other authors described the effect of early contact on the behavior of the father toward his infant. Bowen and Miller (1980) observed 48 fathers interacting with their newly born infants at 12 and 72 hours after birth. They concluded that the fathers who were present at the birth demonstrated more social attachment behavior than fathers who were not present. Jones's (1981) research of 51 father-infant dyads found that fathers with early contact

interacted more nonverbally with their 1-month old infants than fathers without early contact. Early infant contact is predictive of future interest in the baby (Feldman & Nash, 1978) and correlates positively to later infant care activities performed by the father. Fein (1976), Manion (1977) and Wandersman (1980) explain that participation in child-birth increases the father's feeling of inclusion in the family. Manion (1977) believes that this early contact correlates positively to later infant care activities.

Literature documents the fact that the relationship between the marital dyad plays a significant role in a man's adjustment to parenthood. Wandersman (1980) in a self-report questionnaire study of 47 first-time fathers, and Parke (1978) in a series of observational studies, found that a positive marital relationship correlated with a father's sense of well-being and feeling of confidence in performing infant care. Father involvement in child care-taking activities was influenced by whether a wife felt threatened by the father's involvement (Greenberg & Morris, 1976). Jones (1981), contrary to Fein, Manion and Wandersman, suggested that fathers participate in child care as much as mothers allow, that their attitude toward involvement in infant care may be formed well before the birth of the infant and that the experience of holding the infant may have little influence in the care-taking behaviors of first-time fathers. Fein (1976) proposed that role agreement regarding shared tasks also influences a

father's involvement with the infant. Indeed, Jeffcoate et al. (1979) speculated that a father's role reversal might have an adverse effect on the marital relationship if the mother did not agree with the father's new role.

There is a lack of agreement regarding the influence of the infant's sex and temperament on father involvement. In separate studies, Manion (1977) and Boettcher (1979) reported that fathers were more involved in infant care with their daughters than with their sons. On the other hand, Parke (1978) observed that fathers touched and vocalized more with first born sons than daughters. Wandersman (1980), studying the effect of fathers' perception of their infants' temperament upon the fathers' feeling toward their infants, found that fathers were more involved with babies who were fussy and needed more care. However, the fussy babies also decreased the fathers' feeling of confidence in fathering. Rendina & Dickerscheid (1976) used measures on the Carey Infant Temperament Scale to study the relationship between infant temperament and the length of time fathers engaged in infant care activities. They reported that infant temperament alone had no significant effect on the amount of time the father spent in infant care activities. When they combined temperament and sex, they found that fathers vocalized more to female babies rated as "easy" and to male babies rated as "difficult". Jones (1981) found that fathers were more involved with "highly irritable" male infants and "low-irritable"

girls, however, her findings were based on Broussard Neonatal Perception inventory scores.

Support at work and type of occupation have been reported to influence the father's perception of his role. Abrahams, Feldman and Nash (1978) found that fathers possess ambivalent feelings between greater involvement in the family versus involvement in their occupation. Berger (1979) claimed that fathers meet resistance from their colleagues and from employers when they increase their family involvement. In a 10-year longitudinal study of 1193 married men, Keith, Dobson and Powers (1981) reported that self-employed professionals, farmers and small businessmen were less involved in household tasks than factory workers and salaried professionals. They concluded that time demands, assigned working hours, and self-employment intrude on the time fathers spend with their families and that the life style of salaried individuals may permit greater involvement in the home. Fein (1976) asserted that there is a need for greater flexibility in working hours, so fathers can become involved with their families.

A father's relationship with his own father seems to be an important determinant of his later involvement in infant care. In Fein's (1976) study, fathers expressed fear of their ability to perform infant care. They blamed this on the lack of male role models. A father's perception of his own father as nurturant positively correlated with his desire to be nurturant to his child (Manion, 1977). Babitz, (1979)

explained that a father's identification with his father provides socially acceptable norms for fathering behavior.

Several studies have claimed that formal preparation for childbirth has no effect on the relationship between the father and the infant (Cronenwett & Newmark, 1974; Fein, 1976; Brown, 1979; Babitz, 1979). Wandersman (1980) selected a sample of 47 first-time fathers from Lamaze childbirth classes. She found no difference in the feelings of adjustment to fatherhood between those fathers who attended parenthood classes postnatally and those fathers who only attended Lamaze classes. She found that a positive marital relationship was the most significant factor which positively affected feelings of adjustment to fatherhood.

Many parenting classes fail to provide fathers with the knowledge and confidence that they feel they need to be competent in infant care. Leonard (1977), in a review of literature, claimed that fathers desired instruction on diapering, feeding, bathing, and in the general care of their infant.

Several additional factors have been identified in the literature as affecting father involvement. Fein (1976) mentioned adequate financing, health of the infant and support from both parental families. Cronenwett and Newmark (1974) claimed education is a factor, with less well educated fathers reacting more positively. Katsh (1981) reported that fathers whose wives worked during pregnancy were more involved in child care. Finally, the influence of breast feeding upon

father involvement has remained unsettled. Manion (1977) and Katsh (1981) suggested that breast feeding increases the father's feelings of being excluded, whereas Boettcher (1979) stated they are more involved.

In summary, the factors that have been identified as positively affecting a father's involvement in child care activities are early infant contact, a positive marital relationship in which the spouse supports father involvement, the type of occupation and support from work, whether the father perceives his own father as nurturant, adequate financing, and support from parents. Those factors whose influence remains unresolved are the sex and temperament of the infant, formal preparation for childbirth, education, and whether the mother is breastfeeding or had worked during her pregnancy.

#### Teaching Infant-Care Skills to Increase Involvement

Few studies have explored the relationship of infant care instruction in the immediate postpartum period to future father involvement. Parke and Sawin (1976) cited a paper delivered by R. Lind at the International Congress of Pediatrics in 1974. Lind reported that a group of fathers from Sweden who were provided the opportunity to practice basic caretaking skills during the postpartum period were more involved with their infants at six months. However, in a later article (1979), they stated that the hypothesis that teaching infant care skills in the newborn period will increase future

father involvement has not been tested.

Four authors have suggested the need for including fathers in infant care instruction classes prior to discharge from the hospital. These writers believed that infant care classes will increase future father involvement (Manion, 1977; Parke, 1978; Hutchins, 1979; Wilson & Cronenwett, 1981). No studies were found that reported on the use and/or effectiveness of this type of in-hospital program.

Some authors alluded to the fact that it is the responsibility of health care professionals to provide infant care instructions for fathers (Manion, 1977; McKeever, 1981; Fein, 1976; Wilson & Cronenwett, 1981). Manion (1977) hypothesized that instruction for parents will modify parenting practices and can help a father adapt to his new role. McKeever, (1981) and Manion (1977) reported that even though many fathers had early contact with their infants, few were included in the instructions given by nurses or medical staff. Fein (1976) and Wilson & Cronenwett (1981) expressed the need for programs which present child care as a legitimate activity for men.

Even though there has been minimal research on the effect of infant care instruction on future father involvement in child care activities, authors agree that this hypothesis needs to be tested. They also point out that nurses and medical staff have been negligent in including fathers in infant care instruction.



### Conceptual Framework

From the review of the literature it may be concluded that fathers can attach to their infants, that the father-infant relationship may differ qualitatively from that of the mother-infant relationship, that the father-infant relationship has a significant effect on the development of the infant and perhaps on the mother's relationship to the infant. Although there is confusion regarding the definition of the father's role, there is agreement regarding the importance of a father's involvement with his infant. This involvement is influenced by many factors, the most significant factors being early infant contact and marital satisfaction. The ability of the father to participate in infant care is viewed as compatible with father role and encouragement in infant care is seen as a means of increasing early involvement. Lack of involvement in their infants' care has been attributed to failure to include fathers in infant care instruction before the mother and infant are discharged from the hospital.

Nursing is concerned with the biopsychosocial aspects of men along the health-illness continuum (Roy, 1970). Learning a new role can be stressful. Part of a successful role change is developing the ability to perform the new role (Johnson, 1979). Roy views the focus of nursing as promoting adaptation in four areas: physiological needs, self-concept, role function and interdependence (Roy & Roberts, 1981). The present investigator views the function of nursing to be the facilitation of the father's adaptation to the paternal role

and the fostering of a positive self-concept in the new father.

Bloom (1976) states that there is a relation between a learner's perception of his adequacy in a particular subject and his attitude toward that subject. Success helps develop a self-concept which reflects his perception of his adequacy in performing the task. Offering a program of instruction for fathers that focuses on the cognitive and affective domains through practicing psychomotor skills should facilitate a more positive attitude toward infant care.

#### Purpose of the Study

It is the purpose of this study to determine if fathers who are taught infant care skills within the first three days after the birth of their infant will spend more time caring for their infant during the first 5 weeks after leaving the hospital and will have a more positive attitude toward involvement in infant care than fathers who are not taught infant care skills.

#### Hypotheses

1. Fathers receiving infant care instruction within the first three days after the birth of their first infant will have a more positive attitude toward their involvement in infant care after 5 weeks than fathers not receiving infant care instruction.
2. Fathers receiving infant care instruction within the first three days after the birth of their first infant will be-

become more involved in the care of their infant during the next 5 weeks than fathers not receiving infant care instruction.

## CHAPTER II

### METHODS

#### Setting

The settings for this study were the postpartum units of the two largest hospitals in a major metropolitan area of Eastern Washington with a population of about 200,000. Both hospitals are located centrally. Hospital A has a total capacity of 315 beds, a postpartum unit of 34 beds, a mean monthly delivery rate of 225 infants and a 26-bed nursery unit. Hospital B, the largest hospital in the area, has a total bed capacity of 518, a 36-bed postpartum unit, a 34-bed nursery unit and an average monthly delivery rate of 250 births. Both hospitals allow fathers in the delivery or birthing room. They allow rooming-in and fathers are not restricted to visiting hours. Babies are fed on demand or on schedule, whichever the parents prefer.

#### Subjects

The subjects of this study were 27 first-time fathers of infants born to primiparous mothers at either hospital A or B. A convenience sample of 7 control group and 7 experimental group subjects were chosen at hospital A and 6 control and 7 experimental subjects were drawn from hospital B. In order to control for the effects of age, education, economic or cultural factors on motivation for parenting, parents had to be 21-40 years of age, married, Caucasian, with an annual

family income of \$10,000 or more and have completed at least a tenth grade education. To control for variations in involvement because of maternal illness or because of feeding method, the mother must have had an uncomplicated delivery of a full-term, healthy infant as evaluated by the attending physician and she must breastfeed.

### Design and Procedure

The aim of this study was to explore the relationships between infant care instruction and each of two variables: attitude toward father involvement and the amount of time fathers perform infant-care skills. A pretest-posttest, quasi-experimental design with non-equivalent groups was used.

From those couples entering Hospital A or B from 8/28/81 to 10/14/81 for the birth of their child, the first 15 subjects who met the intake criteria plus 1 alternate subject were chosen from each site. The goal was to obtain a total of 30 fathers and 2 alternates.

The following procedure was used to select sample subjects. Each day the investigator used the patients' charts to compile a list of first-time fathers who appeared to meet the intake criteria. Potential subjects were approached within the first 24 hours after the birth of their infant during the time they were visiting on the maternity unit. The purpose of the study and time commitment required were explained to the father and his consent to participate in the study was sought. After the fathers signed the consent form

(Appendix A) giving permission to participate they completed the demographic questionnaire (Appendix B) which was used to determine those fathers who qualified for the study. Those who met the criteria were assigned to either the experimental or control group. This was done by randomly assigning the first father either to the experimental group or the control, the second father to the opposite group, and so on.

All subjects were asked to complete the pre-test questionnaires shown in Appendices C & D. Those assigned to the experimental group then received a one-to-one instruction program (see Appendix F), lasting no longer than twenty minutes. This instruction took place in the mother's room with the father, mother and the baby present. The nurses on each unit were instructed not to change their nursing care routines or their manner of approach when interacting with the control group. The instruction program was administered by the investigator in both hospitals.

A self-administered posttest questionnaire was mailed 5 weeks following the instruction (Appendices D & E). Those fathers who failed to respond in one week were contacted via telephone and encouraged to return the posttest. In total each subject responded to four questionnaires (see Design Outline page 24). The first questionnaire (Appendix B) gathered identifying demographic information and data to determine father eligibility for the study. The second questionnaire ("Factors Affecting Father Involvement", Appendix C) collected information on factors which are believed to

Study Design

	Time 1	Time 2
Experimental Group	1) "Demographic Questionnaire" (Appendix B) 2) "Factors Affecting Father Involvement" (Appendix C) 3) "Attitudinal Scale: Activities Which a Father Might Perform" (Appendix D)	3) "Attitudinal Scale: Activities Which a Father Might Perform" (Appendix D, repeated) X - Teaching Program 4) "Activities Performed" (Appendix E)
Control Group	1) "Demographic Questionnaire" (Appendix B) 2) "Factors Affecting Father Involvement" (Appendix C) 3) "Attitudinal Scale: Activities Which a Father Might Perform" (Appendix D)	3) "Attitudinal Scale: Activities Which a Father Might Perform" (Appendix D, repeated) No Teaching Program 4) "Activities Performed" (Appendix E)

Time 1 - Within first 3 days after delivery. Administered in postpartum units of hospitals A & B.

X - Basic Infant Care Instruction Program (Appendix F). Administered in postpartum units of Hospitals A & B after the questionnaires were filled out.

Time 2 - 5 weeks after X

influence a father's attitude toward involvement and performance of infant care. A Likert scale attitudinal questionnaire ("Activities which a Father Might Perform", Appendix D) assessed the father's attitude toward various infant care activities. The final questionnaire ("Activities Performed", Appendix E) gathered information on the father's actual performance in infant care. This questionnaire, designed to quantify the amount of father involvement, restated items from the questionnaire measuring attitude toward involvement (Appendix D) in such a way as to ask the fathers for the amount of time they spent doing specific infant care activities during the past 5 weeks. The first three questionnaires made up the pretest (Appendices B, C, & D), while Appendix D (repeated) and Appendix E comprised the posttest.

These questionnaires were devised by the investigator because no other suitable tools which measure father attitude toward involvement and father involvement were found in the literature at the beginning of this study. Since then, a reliable tool designed to measure the father's attitude toward involvement in parenting activities was reported in the literature (Boyd, 1981). The items for Appendix D were modified from a questionnaire designed to help fathers identify their attitude toward fathering behavior prior to participating in a parenting class in Vancouver, Washington (Goodlet, 1976).

#### Measurement of Dependent Variables

The first dependent variable in this study is the attitude



of the father to involvement in infant care. Obrzut (1976) states that a father is defined by what he does. For this study involvement is defined as participating in those activities identified in the literature that a father performs in relation to his infant. The term "attitude", according to Thurston, is defined as the degree of positive or negative affect associated with some psychological object (Curran & Mattis, 1978). The psychological object is infant care activities. Measures on this variable were collected using the questionnaire titled "Activities Which a Father Might Perform (Appendix D).

This questionnaire contains 20 questions regarding attitudes of the subjects to fathering behaviors identified in the literature. These include: caretaking involvement, operationalized as feeding, diapering, bathing, and dressing, items 3, 4, 7, 13, 18 (Rendina & Dickerscheid, 1976); affective proximal involvement, operationalized as holding, rocking, cuddling and kissing, items 2, 6, 9, 16, 17 (Rendina & Dickerscheid, 1976; Sawin & Parke, 1979); social involvement, operationalized as playing, singing, reading, disciplining and taking the baby out, items 5, 11, 12, 14, 15, 17 (Rendina & Dickerscheid, 1976). Other items included in this section are: The provider role, operationalized as earning money, item 1 (Obrzut, 1976), instrumental role, operationalized as putting the infant to bed, item 20 and fixing broken crib, item 10 (Boettcher, 1979). The last item on this questionnaire asked the father to estimate the time he believes he should

spend each day caring for his baby. His response to this item served to quantify his expectations for future involvement and was compared to his response on the posttest.

Each item in this instrument measuring the father's attitude to involvement in infant care is measured on a 5-point Likert scale. The 5 possible responses vary from "agree strongly" to "disagree strongly". The positively stated questions, "strongly agree", were assigned a score of 5 and "strongly disagree" a score of 1. These scores were added to give a total ranging from 20 (least favorable to involvement) to 100 (most favorable). Scores on this instrument were used to measure the outcomes of the instruction program in changing the father's attitude toward infant care activities.

The second dependent variable, the amount of time fathers spend in infant care activities was measured by means of a self-administered questionnaire titled "Activities Performed" (Appendix E) 5 weeks after the father left the hospital with his infant. There are also twenty 5-point Likert scale responses on this questionnaire. The scores on this section were used to compare the responses of the fathers to determine if there were significant differences in the amount of time fathers in the experimental and control group spent performing infant care activities, and to determine the effect of the instructional program on father involvement.

Item number 20 on this questionnaire asked for the average

amount of time in minutes or hours per day the father spent taking care of his infant. This quantified the fathers' amount of involvement and was used to compare the two groups using time involved.

### Extraneous Variables

The literature identifies many variables which have been found to influence a father's attitude toward child care and his actual involvement. The items for collecting data on these variables are found in Appendices B & C.

The tool shown in Appendix B, which also contains items related to demographic information, was used to control for extraneous variables, to describe the sample and enable comparison of the sample and results to other studies. Data were collected regarding the age of both parents since age has been reported as a variable which influences involvement in parenting. Eversoll (1976) found that older males seem to have more reluctance for involvement with their infants, while those fathers under 21 years of age may be so involved in completing their adolescent task development, that they may not be involved in infant care. Marital status and length of marriage may influence the strength of the relationship between parents. Wandersman (1980) reported that the strength of the marital relationship influences father involvement. Financial stress can influence paternal involvement negatively, while education may influence involvement positively (Fein, 1976). Race was kept constant because of the possible influence

of cultural differences on father role. The tool in Appendix B was used by the investigator to collect data on the infant's gestational age and health status. McKeever (1981) found that father involvement increased when the child had health problems. Fein (1976) and Wandersman (1980) found that sex of the infant also influences father involvement. This variable was not used as criterion for inclusion in the study, nor was occupation. However, a minimum combined income of \$10,000 was required for inclusion. A parent who works long hours, five days a week or a mother who works full time may affect the father's involvement either positively or negatively (Berger, 1979). No attempt was made to control for the influence which working hours might have upon the father's involvement in infant care activities.

The tool shown in Appendix C contains items which some authors believe affect father involvement. These items were not used to qualify fathers for this study or to select a culturally homogeneous population. These items include attendance at prenatal classes, items 2-5 (Cronenwett & Newmark, 1974; Brown, 1979), support of wife during labor and delivery, items 6-8 (Babitz, 1979; Wandersman, 1980), contact with infant, items 9-11 (Greenberg & Morris, 1979; Manion, 1977), support from parents, items 12-16, 19-20 (Fein, 1976; Manion, 1977; Babitz, 1979), relationship and support from wife, items 17, 23, 28 (Wandersman, 1980; Jones, 1981; Manion, 1977), feeling confident in fathering, items 18, 27, 30, 31 (Fein, 1976;

1976), father's feeling of participation in the birth process, item 22 (Fein, 1976; Manion, 1977) and support from work, item 32 (Abrahams et al, 1977; Berger, 1979). The responses of the control and experimental group on these items were compared to determine if these extraneous variables might account for a change in attitude to or actual involvement in infant care along with the influence of the independent variable.

The questionnaire items that have more than one choice for a response, and are scaled, items 7, 8 and 14 - 32 were given a numerical value for each response, either 1 - 3 or 1 - 5 depending on the possible number of responses. The scores on the negatively stated questions, items 20, 23, 24 and 27 were reversed, with "strongly disagree" receiving a score of 5. Group means and totals were determined and correlated with the scores on the attitude toward involvement and the amount of involvement questionnaires. The experimental and control group means were compared to determine the equivalence of the two groups.

#### Reliability and Validity

There is no established reliability or validity regarding the questionnaires. These questionnaires were devised because no suitable tools could be found in the literature which measured the father's attitude toward involvement in infant care or the amount of time spent performing infant care activities. Because the measures as developed contain items

which the literature describes as constituting fathering behavior, content validity is claimed.

To help determine reliability, these questionnaires were pretested by two faculty members at the Intercollegiate Center for Nursing Education, and by 5 fathers of newly born infants. This pretesting was performed to examine the clarity of instructions, understanding of terminology and degree of response. Necessary modifications were made and the final forms as shown in the appendices were prepared before collecting the data.

#### Independent Variable

An instructional program was the independent variable in this study. It was administered to first-time fathers who were selected for the experimental group from fathers in the postpartum units of the two hospitals and required approximately 20 minutes of contact time. This program consisted of teaching psychomotor skills which focused on infant care (Appendix D).

These skills have been used by investigators to evaluate father involvement in physical care. The skills include: feeding, bathing, dressing, changing diapers and holding, (Fein, 1976; Rendina & Dickerscheid, 1976; Manion, 1977; Jones, 1981). The skills were selected for an instruction program because they involve the father in the care of his infant and increase father-infant contact. Furthermore, all activities can be accomplished along with the bath demonstration

with the exception of content related to bottle feeding. Subjects in the experimental group performed the above skills in their hospital room with the instructor guiding them and the mother observing.

The teaching program and the questionnaires do not contain the same content because they have different purposes. The purpose of the instruction was to encourage involvement with the infant by providing an opportunity for learning psychomotor skills. The questionnaires were designed to measure knowledge of the child care.

## CHAPTER III

### RESULTS AND DISCUSSION

Based on the review of the literature it was hypothesized that fathers receiving infant care instruction in the first three days after the birth of their first infant would: 1) have a more positive attitude toward their involvement in infant care than fathers not receiving infant care instruction, 2) become more involved in the care of their infant during the five week period following delivery than those fathers not receiving infant care instruction.

The results of this study are organized in the following manner: first, the sample is described, next, the data related to those extraneous variables which are thought to affect a father's attitude and involvement in infant care are described, and finally, the findings related to the hypotheses are presented.

#### Description of the Sample

The subjects for this study were recruited over a 6-week period from first-time parents using the 2 major hospitals in Spokane for the birth of their infant. A total of 32 fathers, equally distributed between the two hospitals, met the criteria and agreed to participate in this study. Sixteen were assigned to the experimental group, and sixteen to the control group. Of these, 27 fathers, 14 in the experimental group and 13 in the control group, returned the completed self-administered



posttest, which was mailed to them 5 weeks after discharge from the maternity unit. The response rate was 84%.

The characteristics of the sample are presented in Table 1. Fathers and mothers in the experimental group had completed more years of college than the parents in the control group, although the difference was not statistically significant. The two groups were almost identical with respect to the mean number of months married. There was no significant difference between fathers in the experimental group and fathers in the control group regarding occupational status of income. All fathers reported full time employment. A greater number of wives of men in the experimental group reported working than wives of men in the control group, however, the difference was not significant. Finally, there was no significant difference between the two groups with respect to the ratio of male to female infants born. There were 10 males born to the experimental group as opposed to 5 males born to the control group.

The control and experimental groups differed significantly with respect to both paternal and maternal age ( $t = 2.41$ , and  $2.46$  respectively,  $p < .05$ ). It might be claimed that the significant age difference between the two groups could result in differences in fathers' involvement. However, even though the mean age of the fathers and mothers in the control group was significantly lower than that of the fathers and mothers in the experimental group, the means for both groups fall within the age range which Eversoll (1976) and Albrecht & Chadwick

TABLE I

Characteristics of Parents and Infants in  
Control and Experimental Groups

Characteristics	Experimental Group (N=14)	Control Group (N=13)	Significance of Difference*
Father's age (years)	28.0	24.7	t=2.41*
Mean	4.3	2.3	
S.D.			
Mother's age (years)	26.0	22.8	t=2.46*
Time Married (months)	35	33	ns
Father's Education			
High School and/or some college	6	9	$\chi^2=ns$
4-year college and/or post grad.	8	4	
Mother's Education			
High School and/or some college	9	9	$\chi^2=ns$
4-year college and/or post grad.	9	9	$\chi^2=ns$
Father's Occupation			
Professional - Technical	3	3	
Manager	5	4	
Sales-Clerical	0	0	$\chi^2=ns$
Craftsman	2	4	
Operatives	2	0	
Laborers	1	2	
Mother's Occupation			
Professional - Technical	6	3	
Managers	0	0	
Sales-Clerical	2	1	
Homemaker	5	9	

Characteristics	Experimental Group (N=14)	Control Group (N=13)	Significance of Difference*
Working Status of of Mother			
Employed	9	4	$\chi^2=ns$
Unemployed	5	9	
Family Income			
Medial	26,071	19,423	$\chi^2=ns$
Sex of the Infant			
Male	10	5	$\chi^2=ns$
Female	4	8	

ns = not significant

\*  $p < .05$

(1979) described as having similar attitudes toward fathering.

In summary, the two groups appeared to be basically similar in all respects except age. The age difference although statistically significant, was not large (4 years).

It is difficult to judge the representativeness of the sample as a whole because of lack of specific local, state and national, demographic, census data regarding first-time fathers. However, the following general comparisons can be made between the sample and the larger population. The median incomes for families in Washington State and the U.S. in 1979 were \$20,696 and \$21,503 respectively (Washington State Department of Social and Health Services, 1979; Household and Family Characteristics, 1979). The median income for the fathers in this study was \$21,500. The U.S. Department of the Commerce (1979) reported that 83% of husbands 45 years old and under in three person families in 1979 had completed high school. The intake criteria for this study required completion of at least a tenth grade education. All the fathers in this study reported a high school education. The absence of exact data regarding first-time fathers makes it impossible to conclude that this study's sample is similar to the larger population. Finally, Washington State Department of Social and Health Services (1979) reported that males comprised 51% of the live births in Spokane County and 52% of live births in the state. For this sample, the percentage was quite similar,

namely 56%.

#### Additional Factors Thought to Influence Father Involvement

Data were collected for several attitudinal and non-attitudinal factors which have been documented in the literature as influencing a father's attitude toward involvement in infant care and his actual performance of these activities. Data on the non-attitudinal factors are shown in Table 2. The two groups were roughly equivalent with respect to all these factors.

Several authors in the literature agreed that early infant contact positively influenced fathers' later involvement in infant care (Feldman & Nash, 1978; Manion, 1977; Wandersman, 1981). In this study the fathers in both the experimental and control groups reported that they had held their infant over 80 minutes from the time of delivery until they completed the pretest questionnaire in the hospital. This may explain why the fathers in both groups became involved in their infants' care.

Data on the attitudinal factors are displayed in Table 3. The values assigned to each item range from "excellent" (5) to "poor" (1) for items 1 - 2, and "agree strongly" (5) to "disagree strongly" (1) on items 3 - 18. Mean scores were computed for each item. The lack of statistically significant differences in those mean scores indicate that the two groups were similar with respect to the attitudinal factors sampled. These extraneous variables may be eliminated as factors

TABLE 2

Factors Thought to Influence Fathering  
Behavior: Frequencies and Mean Values

Item	Responses of Experimental Group (N=14)	Control Group (N=13)	Significance of Difference*
Planned Pregnancy			
Yes	12	10 <sup>a</sup>	$\chi^2 = ns$
No	2	2	
Father Attending Prenatal Class			
Yes	12	11	$\chi^2 = ns$
No	2	2	
Mother Attending Prenatal Classes			
Yes	13	12	$\chi^2 = ns$
No	1	1	
Father Attended Labor			
Yes	14	12	$\chi^2 = ns$
No	0	1	
Father Attended Birth			
Yes	11	12	$\chi^2 = ns$
No	3	1	
Held Infant in Delivery Room (mean minutes)	5.6	8.8	t = ns
Held since delivery (mean minutes)	86.07	83.84	t = ns
Cesarean Births	4	4	t = ns

TABLE 2 cont'd

Item	Experimental Group (N=14)	Responses of Control Group (N=13)	Significance of Difference*
Terminated breastfeeding			
1-2 weeks	1	2	$\chi^2 = ns$
3-4 weeks	3	4	
Still breast- feeding	10	7	

ns = not significant

\*  $p < .05$

<sup>a</sup> 1 father did not respond

TABLE 3

Selected Attitudinal Factors Presumed to Affect Father  
Involvement in Infant Care: Mean Scores of Fathers

Factor	Mean values of Experimental Group (N=14)	of Control Group (N=14)
1. Feeling about time spent with father <sub>a</sub>	4.30	4.30
2. Feeling about time spent with mother <sub>b</sub>	4.36	4.69
3. Feel closer to my wife <sub>b</sub>	4.64	4.54
4. Confidence in ability to father <sub>b</sub>	4.50	4.62
5. Thinking more of my parents <sub>b</sub>	3.54	3.39
6. Our families support us <sub>b</sub>	4.77	4.64
7. My father took interest in his children <sub>b</sub>	4.36	4.46
8. Played a significant part in the birth <sub>b</sub>	4.69	4.64
9. Do <u>not</u> feel rejected by my wife <sub>b</sub>	4.69	4.64
10. Comfort with knowledge of child development <sub>b</sub>	3.85	3.50
11. Am <u>not</u> worried when infant sneezes, spits up or hiccups <sub>b</sub>	3.42	3.79
12. Tolerate infant's fussiness <sub>b</sub>	3.57	3.77
13. Feel like a father <sub>b</sub>	3.54	3.50
14. Wife supports involvement in child care <sub>b</sub>	4.67	4.64



TABLE 3 cont'd

Factor	Mean values of Experimental Group (N=14)	of Control Group (N=14)
15. Feel experienced in child care <sub>b</sub>	3.92	3.29
16. Will take active part in child care <sub>b</sub>	4.62	4.71
17. Feel close to infant	4.54	4.50
18. Job supports involvement in child care <sub>b</sub>	4.0	3.71

Observed differences not significant by t-test ( $p < .05$ )

Note: a = 5 = excellent, 1 = poor  
b = 5 = agree strongly, 1 = disagree strongly

affecting the results of this study. This finding lends support to the internal validity of the study.

The fathers in both the experimental and control groups scored lowest on those items which pertain to knowledge of child care. These items include: comfortable with their knowledge of child development, feeling experienced in child care, ability to tolerate their infants' fussiness and not being worried when their infant sneezes, spits up or hiccups. These findings agree with those studies that reported fathers were deficient in their knowledge of child care (Leonard, 1977; Fein, 1976; Wilson & Cronenwett, 1981). These findings suggest a need to include fathers in infant care instruction during the intrapartal period.

#### The Effect of Instruction on Father Attitudes and Involvement

In order to test the hypothesis that fathers receiving infant care instruction would have a more positive attitude toward their involvement in infant care than fathers not receiving instruction, mean scores were computed for the fathers' responses to these same items 5 weeks after the birth of their infant (Appendix D). These results are displayed in Table 5.

There were no significant differences between the responses of the fathers in the experimental and control groups on the pretest indicating the initial equivalence of the two groups. There was no measurable change in attitudes in either group over the 5 week period and there was no attitudinal

TABLE 4  
 Mean Scores of Fathers on  
 Attitudinal Test (pretest)

Item	Mean Scores of	
	Experimental Group (N=14)	Control Group (N=13)
1. Earn money	4.6	4.8
2. Rock infant	4.4	4.6
3. Dress infant	4.4	4.5
4. Change diaper (soiled)	4.3	4.1
5. Read to infant	4.4	4.5
6. Hold infant	4.6	3.9
7. Feed infant	4.6	3.9
8. Babysit	4.5	4.7
9. Kiss infant	4.7	4.8
10. Fix things	4.6	4.8
11. Discipline	4.4	4.4
12. Change diaper (wet)	4.4	4.4
13. Play with infant	4.7	4.7
14. Take to doctor	4.6	4.4
15. Sing to infant	3.7	4.0
16. Comfort infant	4.4	4.5
17. Cuddle infant	4.6	4.6
18. Bathe infant	4.6	4.2
19. Spank infant	3.4	3.2

TABLE 4 (cont.)

Item	Mean Scores of	
	Experimental Group (N=14)	Control Group (N=13)
20. Take care when sick	4.4	4.7
Grand Mean	4.42	4.43

Observed differences not significant by t-test ( $p < .05$ )

Score values: 5 = agree strongly, 4 = agree, 3 = uncertain  
2 = disagree, 1 = disagree strongly.

TABLE 5  
 Mean Scores of Fathers on  
 Attitudinal Test (Posttest)

Item	Mean Scores of	
	Experimental Group (N=14)	Control Group (N=13)
1. Earn money	4.7	4.7
2. Rock infant	4.3	4.5
3. Dress infant	4.4	4.4
4. Change diaper (soiled)	4.4	4.2
5. Read to infant	4.6	4.3
6. Hold infant	4.8	4.7
7. Feed infant	4.5	4.5
8. Babysit	4.4	4.6
9. Kiss infant	4.7	4.7
10. Fix things	4.5	4.7
11. Discipline	4.2	3.8
12. Play with infant	4.7	4.7
13. Change diaper (wet)	4.5	4.4
14. Take to doctor	4.4	4.3
15. Sing to infant	4.0	4.1
16. Comfort infant	4.3	4.5
17. Cuddle infant	4.8	4.6
18. Bathe infant	4.5	4.1
19. Spank infant	3.4	3.3

TABLE 5 (cont.)

Item	Mean Scores of Experimental Group (N=14)	Control Group (N=13)
20. Take care when sick	4.4	4.4
Grand Mean	4.43	4.37

Observed differences not significant by t-test ( $p < .05$ )

Score values: 5 = agree strongly, 4 = agree, 3 = uncertain  
2 = disagree, 1 = disagree strongly.

differences between the two groups as demonstrated by the responses on the posttest. Thus hypothesis 1 was not supported.

The responses of both groups on the pretest and posttest were strongly skewed toward favorability, indicating their similar attitudes to involvement. Both groups scored uncertain toward spanking the infant. It might be argued that this is not an appropriate activity with respect to a newborn.

Failure to demonstrate a change in attitude may possibly be attributable to the insensitivity of the self-report instrument. However, this finding of no change in attitude corresponds with a finding by Jones (1981). She reported that fathers who became more involved in infant care in the first month after the birth of their infant were not any more positive in their attitude toward their infants than those fathers who did not become as involved. Jones theorized that attitudes formed earlier in the father's life may exert a stronger influence over his perceptions and behaviors than early infant contact.

Other explanations for the lack of attitude change as measured by attitudinal questionnaires have been identified in the literature. Henderson, Morris & Fitz-Gibbon (1978) stated that attitudes are blurred by peer group pressure, the desire to please, ambivalence, inconsistency and lack of self awareness. Adair (1973) emphasizing the "social desirability" bias asserts that someone who agrees to be in a

scientific study probably feels eager to perform well; and Shaw & Wright (1967) point out that central attitudes are interrelated and are very resistant to change. Therefore, the absence of significant attitude change may be explained by the fact that attitudes are formed early in life, that they are blurred by social pressure and the desire to perform well and are resistant to change.

In summary, fathers in both groups attained similar scores on the pretest and posttest attitudinal questionnaires measuring their feelings toward performing various infant care activities. There also was no measurable change in attitude from the pretest to the posttest. Hypothesis 1 must be rejected.

Hypothesis 2 states that fathers receiving infant care instruction within the first three days after the birth of their first infant will become more involved in the care of their infant than fathers not receiving infant care instruction. To test this hypothesis, mean scores were computed for the responses by the fathers in the control and experimental groups to the items on the posttest questionnaire entitled "Activities Performed", (Appendix E). These items measured the number of times the father performed infant care activities and indicated the quantity of involvement with the infant.

Mean scores for the fathers' reported amount of time spent in infant care activities are displayed in Table 6. These scores represent the average number of times the fathers



TABLE 6  
 Mean Scores of Fathers on Amount of Involvement  
 in Child Care Activities Since Birth

Behavior	Amount of Involvement		Significance of Difference by t-test*
	Experimental Group (N=14)	Control Group (N=13)	
1. Rock <sup>a</sup>	3.36	2.62	n.s.
2. Dress <sup>a</sup>	3.36	2.62	n.s.
3. Held <sup>b</sup>	4.00	4.00	n.s.
4. Fed <sup>b</sup>	2.50	2.53	n.s.
5. Comfort <sup>b</sup>	3.64	3.08	n.s.
6. Bathed by self <sup>c</sup>	2.29	2.15	n.s.
7. Bathed with help <sup>c</sup>	2.79	2.15	n.s.
8. Babysat <sup>d</sup>	4.50	3.85	n.s.
9. Talked <sup>b</sup>	4.72	4.23	n.s.
10. Sang <sup>b</sup>	2.29	2.62	n.s.
11. Changed diaper (wet) <sup>b</sup>	3.64	3.15	n.s.
12. Changed diaper (soiled) <sup>b</sup>	3.36	2.15	t=2.08*
13. Read <sup>c</sup>	1.50	1.39	n.s.
14. Earned money <sup>e</sup>	4.00	4.07	n.s.
15. Disciplined <sup>c</sup>	1.57	0.92	n.s.
16. Kissed <sup>b</sup>	4.57	4.00	n.s.
17. Fixed equipment <sup>d</sup>	3.29	3.46	n.s.

TABLE 6 (cont.)

Behavior	Amount of Involvement Experimental Group (N=14)	Control Group (N=13)	Significance of Difference by t-test*
18. Played <sup>b</sup>	4.14	3.46	n.s.
19. Take to doctor <sup>f</sup>	2.50	2.230	n.s.
20. Minutes spent in care/day	61.93	54.77	n.s.

\* =  $p < .05$ 

n.s. = not significant

<sup>a</sup>Items scored from 1 (once a week) to 5 (once a day)<sup>b</sup>Items scored from 1 (never) to 5 (4 times a day)<sup>c</sup>Items scored from 1 (never) to 5 (1 or more a day)<sup>d</sup>Items scored from 1 (never) to 5 (1 or more a week)<sup>e</sup>Items scored from 1 (never) to 5 (40 hours a week)<sup>f</sup>Items scored from 1 (never) to 5 (4 or more hours a week)

performed the activities since their infants left the hospital. A "5" response indicates that the fathers performed the activity several times per day, week or month depending on the activity questioned. A "1" response indicates the father never or seldom performed the activity (see Appendix E).

Fathers in the experimental group scored higher on all activities on the posttest questionnaire with the exception of holding, singing, fixing and earning money. However, the difference between the scores was statistically significant only with respect to the activity of changing the diaper if soiled ( $t = 2.08, p < .05$ ). There are no studies in the literature to which this significant finding can be compared. Therefore, Hypothesis 2 was not supported.

In order to examine the findings further, the data were grouped into "caretaking", "affective proximal" and "social" activities. These categories were established by Rendina & Dickerscheid (1976) who believed that these groupings indicated the quality of the father relationship. Caretaking activities include dressing, feeding, bathing and changing the diapers, (items 2, 4, 6, 7, 11, 12,). Affective proximal activities include rocking, holding, comforting and kissing, (items 1, 3, 5, and 15). Social activities include talking, singing, reading, playing and taking to the doctor, (items 9, 10, 13, 18, and 19). Mean scores for the fathers' reported involvement in each of these categories are shown in Table 7. The

TABLE 7  
 Categories of Infant Care Taking Behaviors:  
 Mean Scores of Fathers

Category	Mean Scores of Experimental Group (N=14)	Control Group (N=13)	Significance of difference by t-test*
Caretaking <sup>a</sup>	3.08	2.44	ns
Affective Proximal <sup>b</sup>	3.89	3.44	ns
Social <sup>c</sup>	3.03	2.28	ns

\*  $p < .05$

ns = not significant

a = Caretaking includes: dress, feed, bathe and diapering

b = Affective Proximal includes: rock, hold, comfort and kiss

c = Social includes: talk, sing, read, play and take to the doctor

fathers in the experimental group scored slightly higher in each of the caretaking, affective proximal and social categories. However, the differences were not statistically significant.

Fathers in both the control and experimental groups scored highest on the affective proximal activities. Second highest on caretaking activities and the lowest on social activities. In contrast, Rendina & Dickerscheid (1976), Parke (1978) and Jones (1981), reported that fathers in their studies related more to their infants through performing social rather than caretaking skills. This might indicate that fathers are becoming more involved in the physical care of their infant.

In summary, both the experimental and control groups were involved in infant care. Both groups scored higher on caretaking items rather than social items. But, since there was no significant difference in the amount of involvement between the two groups, Hypothesis 2 cannot be supported.

## CHAPTER IV

### Summary, Conclusions and Recommendations

The renewed interest in the father's place in the family has brought a refocus on the father's responsibility toward his infant. In the past decade reported researchers have expanded their interest from mother-infant interactions and nurturance to include the father's role in infant care. Fathers are still viewed by many health-care professionals as holding only a supportive position to the mother and her newborn. Thus, the main focus of care during the intrapartal period continues to center on the mother-infant dyad. This exclusion of the father may leave him uninformed about infant care and may lead to a decrease in his confidence in performing infant care. Because of their supportive and teaching role in the postpartum period, nurses could be instrumental in increasing the father's involvement in infant care, which, in turn, could facilitate adaptation to fatherhood.

This quasi-experimental study was conducted on 27 first-time Caucasian fathers of infants born to primiparous mothers. These fathers were randomly selected from two major hospitals in the Spokane area. The subjects of both experimental and control groups were pretested with questionnaires designed by the author. The fathers in the experimental group participated in a 20 minute instruction program designed to increase their knowledge of infant care skills (diapering,

bathing, feeding, dressing and holding, cord care and use of bulb syringe) and to encourage the amount of intimate contact with their infant. Five weeks later, both groups received a posttest questionnaire measuring the change in attitude toward involvement and the amount of time spent performing infant care activities.

The purpose of this study was to determine if fathers who were taught infant care skills within the first three days after the birth of their infant would spend more time caring for their infant during the next 5 weeks, and if they would have a more positive attitude toward involvement in infant care than fathers who were not instructed.

It was hypothesized that fathers receiving infant care instruction during the first three days of the birth of their infant would first, have a more positive attitude toward their involvement in infant care skills than those fathers not receiving infant care instruction and secondly, that they would spend more time in infant care than those fathers not receiving infant care instruction. There were no significant differences between the experimental and control group in the posttest scores measuring attitude toward involvement. Therefore neither of the hypotheses was supported.

There were certain design and methodologic limitations in this study that prevented adequate testing of the hypotheses and suggest areas for further research. The fact that there were no available tools measuring attitudes toward father involvement and time spent in infant care activities

that had established reliability and validity places limitations on the outcomes of the study and reduces the generalizability of the results. Certain refinements became apparent through use of the tools developed by this investigator. These refinements relate to the sensitivity of the tools and need to be addressed prior to establishing reliability and validity.

The sensitivity of the attitudinal scale needs to be refined to assure measurement of changes in the fathers' attitude toward involvement in infant care. Since attitudes are obscured by lack of self-awareness, ambivalence and social desirability (Adair, 1973; Henderson et al., 1978), the skewed responses on the attitudinal questionnaire may be avoided by more careful construction of statements that are likely to be agreeable to everyone and which cover the entire range of the affective scale (Curran & Mattis, 1973). For example, instead of asking if "a father could perform the following activities" such as "bathe the infant" (Appendix D), a stronger statement such as "the father should bathe the infant as often as the mother," may produce both positive and negative responses that would be more reflective of the father's attitudes.

The increments selected for measures of time spent performing infant care activities need to be reduced in size in order to allow better discrimination between the experimental and control groups. For instance, if rocking had been measured in minutes per day rather than times per day, the tool may



have identified differences in mean values between the two groups of fathers that may have been statistically significant.

There are factors related to the content, timing and duration of the instructional program that need to be revised and tested in order to determine the most favorable times for teaching fathers of newly born infant. For example, a combination of both content regarding psychomotor and affective learning might prove to be more effective in enhancing change of attitude and involvement in infant care than the concentration upon psychomotor skills alone. A series of instructional presentations might provide for more effective teaching-learning than the single presentation used in this study. Further research needs to be undertaken to assess the effectiveness of the teaching environment. The home might provide a more efficient learning environment compared to the hospital. The effectiveness of prenatal versus postnatal teaching needs to be tested.

Posttesting at 5 weeks postnatally may not be the optimum time for data collection. A longitudinal study which collects repeated measures needs to be undertaken to determine the effect of time on posttesting.

There are factors related to the sample that limit the generalizability of findings from this study. These include sample size, intake criteria and geographic restrictions. This study should be redesigned and conducted with a larger group.

of fathers representing various ethnic groups throughout the United States.

The method of delivery may affect the father's involvement with his infant. A mother who has had a cesarean section may not be able to perform as much of the infant care as a mother who has had a normal delivery. A study which compares father involvement with infants born by cesarean section versus normal delivery is needed.

The sex of the instructor may influence learning outcomes. The father may respond more positively to his infant because he could identify more to a male instructor. A study which includes both male and female instructors would help determine if there is a difference in outcomes.

In spite of the methodologic weakness of this study, it is apparent that these fathers were spending time caring for their infants. This, along with the fact that they sought knowledge of infant care and growth and development, indicates that there is a need for further research in this area. Refinement of the tools used in this study and establishment of testing for reliability and validity, need to be undertaken. Until that time, the nurses should include fathers in infant care instruction.

This study included an homogeneous group of fathers who all reported spending time each day with their infants and who were involved in infant care activities. This may suggest that the desire to be involved in infant care is becoming a norm for contemporary American fathers. This study,

then, suggests that health care professionals, particularly nurses, should include the father in intrapartal nursing care plans, particularly with respect to infant care instruction. Including the father in postnatal activities should not only facilitate his adaptation to parenthood, but should enable him to provide increased support to the mother in her roles of mothering, homemaking and working.

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**APPENDICES**



Appendix A

Area Code 503 225-7893

UNIVERSITY OF OREGON  
HEALTH SCIENCES CENTER

Portland, Oregon 97201

INFORMED CONSENT

I, \_\_\_\_\_, herewith agree to be  
(first name)(middle name)(last name)

a subject on the study named, "The Effect of an Instructional Program on Fathering", conducted by John Weller, RN, BSN, under the supervision of Wilma Peterson, RN, PhD, advisor.

The purpose of this study is to investigate factors which effect father-infant involvement. In consenting to be a participant, I will agree to the following: I will complete questionnaires to the best of my knowledge; I will take part in an infant instruction if asked to; after six weeks I will fill out questionnaires sent to me and send them back to John Weller. The total time required of me to complete the three questionnaires will be approximately one and one-half hours.

Even though I may not benefit directly by participating in this study, the results may help nurses gain increased knowledge regarding how they may assist fathers in learning how to be involved with their newborn child/ren.

The information obtained by the investigator will be kept confidential. My name will not appear on the records and my anonymity will be assured by the use of code numbers. John Weller or his assistant have offered to answer any questions that I might have about my participation in this study. I understand that I am free to refuse to participate or withdraw from this study at any time without affecting my relationship with, or treatment at, Deaconess Hospital or Sacred Heart Medical Center.

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

\_\_\_\_\_  
(date)

\_\_\_\_\_  
(subject's signature)

\_\_\_\_\_  
(witness' signature)

Appendix B  
Demographic Questionnaire

Today's  
Date \_\_\_\_\_

1. Hospital \_\_\_\_\_
2. Your name \_\_\_\_\_  
Address \_\_\_\_\_  
Phone \_\_\_\_\_
3. If you plan to move in next six months, how will I  
contact you? New address \_\_\_\_\_  
\_\_\_\_\_

A. Father Data

4. Your age \_\_\_\_\_ 5. Occupation \_\_\_\_\_  
\_\_\_\_\_ Full or part-  
time (circle  
one)
6. How long married? \_\_\_\_\_
7. Education: (circle highest completed) Under 10th grade;  
High school; Some college; Four year college degree;  
Post college education.
8. Race: (circle one) Caucasian; Black; American Indian;  
Mexican American; Other (specify) \_\_\_\_\_
9. Is this your first child? (circle one) yes            no
10. Estimated 1981 family income: (circle one)  
Under 10,000; 10,000 - 14,999; 15,000 - 19,999;  
20,000 - 24,999; 25,000 - 29,999; 30,000 - 34,999;  
35,000 or over.

## Appendix B (cont.)

## B. Mother Data

11. Your wife's age \_\_\_\_\_ 12. Occupation \_\_\_\_\_  
 \_\_\_\_\_ Full or part-  
 time (circle  
 one)
13. Education (circle the highest completed) Under 10th  
 grade; High school; Some college; Four year college  
 degree; Post college education.
14. Race: (circle one) Caucasian; Black; American Indian;  
 Mexican American; Other (specify) \_\_\_\_\_
15. Is this your first child? (circle one) yes no
16. Was your infant delivered vaginally? (circle one)  
 yes no
17. Is your wife breast feeding? (circle one) yes no
18. When was your child born? (Date/Hour) \_\_\_\_\_
19. What is the sex of your infant? \_\_\_\_\_
20. Is your infant healthy? (circle one) yes no
21. Infant's birth weight \_\_\_\_\_. How long was  
 your wife's pregnancy? (circle one)  $8\frac{1}{2}$  months;  
 9 months;  $9\frac{1}{2}$  months.

## Appendix C

## Factors Affecting Father Involvement

1. Were you planning on having a child when your wife became pregnant? (circle one)    yes        no
2. Did you attend prenatal classes? (circle one)    yes        no
3. How long did you attend them? (Hours per week and for how many weeks) \_\_\_\_\_
4. Did your wife attend prenatal classes? (circle one)  
yes        no
5. How long did she attend them? (hours per week and for how many weeks) \_\_\_\_\_
6. Were you present at the childbirth? (circle one)    yes        no
7. Did you stay with your wife during labor? (circle one)  
yes        no
8. Did you stay with your wife during the birth of your child?  
(circle one)    yes        no
9. Did you hold the baby in the delivery room? (circle one)  
yes        no
10. If yes, how long (minutes) \_\_\_\_\_
11. Have you held your baby since the delivery room? (circle one)    yes        no
12. If yes, how long (minutes/hours) \_\_\_\_\_
13. Were either your mother \_\_\_\_\_ or father \_\_\_\_\_ absent during any of your childhood? (circle one)    yes        no (Place an X after parent(s) absent).



## Appendix C (cont.)

22. I feel that I played a significant part in the birth of our child.
- |                 |              |                  |                 |                 |
|-----------------|--------------|------------------|-----------------|-----------------|
| <u>Agree</u>    | <u>Agree</u> | <u>Uncertain</u> | <u>Disagree</u> | <u>Disagree</u> |
| <u>Strongly</u> |              |                  |                 | <u>Strongly</u> |
23. Since the birth of our child I feel neglected by my wife.
- |                 |              |                  |                 |                 |
|-----------------|--------------|------------------|-----------------|-----------------|
| <u>Agree</u>    | <u>Agree</u> | <u>Uncertain</u> | <u>Disagree</u> | <u>Disagree</u> |
| <u>Strongly</u> |              |                  |                 | <u>Strongly</u> |
24. I feel comfortable with my present knowledge of child development.
- |                 |              |                  |                 |                 |
|-----------------|--------------|------------------|-----------------|-----------------|
| <u>Agree</u>    | <u>Agree</u> | <u>Uncertain</u> | <u>Disagree</u> | <u>Disagree</u> |
| <u>Strongly</u> |              |                  |                 | <u>Strongly</u> |
25. I am worried when my infant sneezes, spits up or hiccups.
- |                 |              |                  |                 |                 |
|-----------------|--------------|------------------|-----------------|-----------------|
| <u>Agree</u>    | <u>Agree</u> | <u>Uncertain</u> | <u>Disagree</u> | <u>Disagree</u> |
| <u>Strongly</u> |              |                  |                 | <u>Strongly</u> |
26. I can tolerate my infant's fussiness when there is no apparent reason.
- |                 |              |                  |                 |                 |
|-----------------|--------------|------------------|-----------------|-----------------|
| <u>Agree</u>    | <u>Agree</u> | <u>Uncertain</u> | <u>Disagree</u> | <u>Disagree</u> |
| <u>Strongly</u> |              |                  |                 | <u>Strongly</u> |
27. I don't feel like a father yet.
- |                 |              |                  |                 |                 |
|-----------------|--------------|------------------|-----------------|-----------------|
| <u>Agree</u>    | <u>Agree</u> | <u>Uncertain</u> | <u>Disagree</u> | <u>Disagree</u> |
| <u>Strongly</u> |              |                  |                 | <u>Strongly</u> |
28. I feel my wife supports my involvement in child care.
- |                 |              |                  |                 |                 |
|-----------------|--------------|------------------|-----------------|-----------------|
| <u>Agree</u>    | <u>Agree</u> | <u>Uncertain</u> | <u>Disagree</u> | <u>Disagree</u> |
| <u>Strongly</u> |              |                  |                 | <u>Strongly</u> |
29. I feel I am experienced enough in caring for a child.
- |                 |              |                  |                 |                 |
|-----------------|--------------|------------------|-----------------|-----------------|
| <u>Agree</u>    | <u>Agree</u> | <u>Uncertain</u> | <u>Disagree</u> | <u>Disagree</u> |
| <u>Strongly</u> |              |                  |                 | <u>Strongly</u> |







## Appendix D (cont.)

9. Kiss the infant.
- |                 |              |                  |                 |                 |
|-----------------|--------------|------------------|-----------------|-----------------|
| <u>Agree</u>    | <u>Agree</u> | <u>Uncertain</u> | <u>Disagree</u> | <u>Disagree</u> |
| <u>Strongly</u> |              |                  |                 | <u>Strongly</u> |
10. Do things that the infant will need, such as fix a broken crib or paint the walls.
- |                 |              |                  |                 |                 |
|-----------------|--------------|------------------|-----------------|-----------------|
| <u>Agree</u>    | <u>Agree</u> | <u>Uncertain</u> | <u>Disagree</u> | <u>Disagree</u> |
| <u>Strongly</u> |              |                  |                 | <u>Strongly</u> |
11. Discipline the infant.
- |                 |              |                  |                 |                 |
|-----------------|--------------|------------------|-----------------|-----------------|
| <u>Agree</u>    | <u>Agree</u> | <u>Uncertain</u> | <u>Disagree</u> | <u>Disagree</u> |
| <u>Strongly</u> |              |                  |                 | <u>Strongly</u> |
12. Play with the infant.
- |                 |              |                  |                 |                 |
|-----------------|--------------|------------------|-----------------|-----------------|
| <u>Agree</u>    | <u>Agree</u> | <u>Uncertain</u> | <u>Disagree</u> | <u>Disagree</u> |
| <u>Strongly</u> |              |                  |                 | <u>Strongly</u> |
13. Change the infant's diaper, if wet.
- |                 |              |                  |                 |                 |
|-----------------|--------------|------------------|-----------------|-----------------|
| <u>Agree</u>    | <u>Agree</u> | <u>Uncertain</u> | <u>Disagree</u> | <u>Disagree</u> |
| <u>Strongly</u> |              |                  |                 | <u>Strongly</u> |
14. Go to the doctor with the infant.
- |                 |              |                  |                 |                 |
|-----------------|--------------|------------------|-----------------|-----------------|
| <u>Agree</u>    | <u>Agree</u> | <u>Uncertain</u> | <u>Disagree</u> | <u>Disagree</u> |
| <u>Strongly</u> |              |                  |                 | <u>Strongly</u> |
15. Sing to the infant.
- |                 |              |                  |                 |                 |
|-----------------|--------------|------------------|-----------------|-----------------|
| <u>Agree</u>    | <u>Agree</u> | <u>Uncertain</u> | <u>Disagree</u> | <u>Disagree</u> |
| <u>Strongly</u> |              |                  |                 | <u>Strongly</u> |
16. Comfort the infant when he/she is crying.
- |                 |              |                  |                 |                 |
|-----------------|--------------|------------------|-----------------|-----------------|
| <u>Agree</u>    | <u>Agree</u> | <u>Uncertain</u> | <u>Disagree</u> | <u>Disagree</u> |
| <u>Strongly</u> |              |                  |                 | <u>Strongly</u> |
17. Cuddle or fondle the infant.
- |                 |              |                  |                 |                 |
|-----------------|--------------|------------------|-----------------|-----------------|
| <u>Agree</u>    | <u>Agree</u> | <u>Uncertain</u> | <u>Disagree</u> | <u>Disagree</u> |
| <u>Strongly</u> |              |                  |                 | <u>Strongly</u> |



Appendix E  
Activities Performed

Since your infant was born, how often did you usually perform the following tasks: (circle the letter that best describes your response).

- 1) Rocked your infant to sleep either for a nap or for going to sleep at night.
  - a) less than once a week
  - b) once to twice a week
  - c) four to six times a week
  - d) once a day
  - e) more than once a day
- 2) Dressed your infant (putting on any clothes besides the diaper).
  - a) less than once a week
  - b) once to twice a week
  - c) four to six times a week
  - d) once a day
  - e) more than once a day
- 3) Hold your infant for longer than five minutes.
  - a) never
  - b) less than once a day
  - c) once a day
  - d) two to three times a day
  - e) more than four times a day

- 4) Feed your infant a bottle.
- a) never
  - b) less than once a day
  - c) once a day
  - d) two to three times a day
  - e) more than four times a day
- 5) Comforted your infant when crying or fussing during the day or night.
- a) never
  - b) less than once a day
  - c) once a day
  - d) two to three times a day
  - e) more than four times a day
- 6) Bathed your infant by yourself.
- a) never
  - b) less than once a week
  - c) once to twice a week
  - d) three to four times a week
  - e) once or more a day
- 7) Bathed your infant (helping someone else).
- a) never
  - b) less than once a week
  - c) once to twice a week
  - d) three to four times a week
  - e) once or more a day

- 8) Babysat your infant so your wife could have time off from the infant.
- a) never
  - b) less than once a month
  - c) once a month
  - d) two to three times a month
  - e) once or more a week
- 9) Talked to the infant.
- a) never
  - b) less than once a day
  - c) once a day
  - d) two to three times a day
  - e) more than four times a day
- 10) Sang to the infant.
- a) never
  - b) less than once a day
  - c) once a day
  - d) two to three times a day
  - e) more than four times a day
- 11) Changed your infant's diaper if wet.
- a) never
  - b) less than once a day
  - c) once a day
  - d) two to three times a day
  - e) more than four times a day

- 12) Changed the infant's diaper if coiled (bowel movement).
- a) never
  - b) less than once a day
  - c) once a day
  - d) two to three times a day
  - e) more than four times a day
- 13) Read to the infant.
- a) never
  - b) less than once a week
  - c) once to twice a week
  - d) three to four times a week
  - e) once or more a day
- 14) Earned money for financial security, time spent at job.
- a) none
  - b) less than twnty hours per week
  - c) twenty to thirty hours per week
  - d) forty hours per week
  - e) more than forty hours per week
- 15) Disciplined your infant (either verbally or nonverbally attempted to restrict your infant's behavior).
- a) never
  - b) less than once a week
  - c) once to twice a week
  - d) three to four times a week
  - e) once or more a day



- 16) How often do you kiss your infant?
- a) never
  - b) less than once a day
  - c) once a day
  - d) two to three times a day
  - e) more than four times a day
- 17) Do things that the infant will need, such as fix a broken crib or paint the walls.
- a) never
  - b) less than once a month
  - c) once a month
  - d) two to three times a month
  - e) four or more a month
- 18) Played with your infant, playful activities may include tickling, bouncing on knee, making faces at, etc.
- a) never
  - b) less than once a day
  - c) once a day
  - d) two to three times a day
  - e) more than four times a day
- 19) Gone to the doctor with the infant.
- a) never
  - b) once
  - c) twice
  - d) three times
  - e) four or more times

- 20) I have spent approximately \_\_\_\_\_ minutes/hours each day taking care of my baby.
- 21) If your wife is not breast feeding, when did she stop breastfeeding after leaving the hospital.
- a ) less than once week after leaving the hospital
  - b) 1 to 2 weeks after leaving the hospital
  - c) 3 to 4 weeks after leaving the hospital
  - d) 5 to 6 weeks after leaving the hospital

## Appendix F

Basic Infant Care Instruction Program

1. Feeding - formula and bottle feeding  
Instructor will discuss formula feeding, will demonstrate bottle feeding, and will discuss substituting bottle feeding periodically for breast feeding.
2. Bathing - demonstrate for parents and have father participate.  
Instructor will use a doll to demonstrate, since newborns should not be in a tub of water until cord drops off (sponge their own infant).
3. Dressing - demonstrate and have father participate  
Instructor will demonstrate then have fathers demonstrate on their own child after bathing demonstration.
4. Changing diapers - have fathers change diaper of their own infant with supervision from instructor.
5. Holding - encourage fathers to hold their infant as much as possible during the instruction program.  
Instructor will demonstrate proper method of picking up and holding infant and discuss the benefits of holding their child.
6. Care of cord and circumcision - Instructor will explain verbally to both parents and have fathers perform.

7. Use of bulb syringe - Instructor will explain use and demonstrate on their infant.
8. Any questions about care of infants will be freely discussed.

AN ABSTRACT OF THE THESIS OF  
JOHN WELLER

For the MASTER OF NURSING

Date Receiving this Degree: June 11, 1982

Title: The Effect of an Instructional Program on Fathering

Approved: \_\_\_\_\_

Wilma E. Peterson, R.N., Ph.D., Thesis Advisor

The recent refocus on the father's place in the family has renewed interest in the father's responsibility toward his infant. Research reported during the past decade has expanded its interest to include the father's role in infant care. However, the main focus of care during the intrapartal period continues to be centered on the mother-infant dyad. This exclusion of the father may leave him uninformed about infant care. Health care providers, especially nurses, could be instrumental in increasing the father's involvement in infant care, by including the father in infant care instruction.

The purpose of the study was to measure the effect of an in-hospital instructional program on father's attitude toward infant involvement and on the amount of time spent caring for his infant.

The sample was drawn from fathers of infants born at either of two major hospitals in Spokane, Washington. The subjects included 27 first-time fathers of infants born to primiparous mothers. A pretest-posttest, quasi-experimental

design with non-equivalent groups was used. The subjects of both groups were pretested with questionnaires devised by the investigator. Members of the experimental group participated in a 20-minute instruction program designed to increase their knowledge of infant care skills (diapering, bathing, feeding holding, cord care, and using a bulb syringe) and to encourage an increase in the amount of intimate contact with their infant. Five weeks later, both groups received a posttest questionnaire measuring change in attitude toward involvement and the amount involvement with infant care.

It was hypothesized that fathers receiving infant care instruction during the first three days of the birth of their infant would: 1) have a more positive attitude toward their involvement in infant-care skills than those fathers not receiving infant care instruction, 2) that they would spend more time in infant care than those fathers not receiving infant care instruction. Neither of these hypotheses were supported. Limitations were discussed and suggestions for further research were proposed.