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FIRST-TIME-FATHERS" PERCEPTIONS OF CHANGES IN DYADIC COHESION THREE TO FIVE MONTHS FOLLOWING THE BIRTH OF THEIR INFANTS

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By

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ABSTRACT

FIRST-TIME-FATHERS' PERCEPTIONS OF CHANGES IN DYADIC COHESION THREE TO FIVE MONTHS FOLLOWING THE BIRTH OF THEIR INFANTS

By

Judith Ann Kraska

A descriptive study of first-time-fathers was conducted to determine their perceptions of changes in dyadic cohesion three to five months following the birth of their infants. Perceived changes in dyadic cohesion were measured using a researcher-developed instrument based on the cohesion and affectional expression subscales of Spanier's (1976) Dyadic Adjustment Scale. A five-point Likert scale was used to identify the direction of perceived change.

Family Systems Theory, Family Developmental Theory, and King's (1981) nursing conceptual framework were used as theoretical bases from which to examine study variables and implications for nursing practice.

Data were collected from forty-four first-time-fathers between the ages of twenty-three and thirty-five. Data were analyzed using Pearson product moment correlations, multiple and oneway analyses of variance, and descriptive statistics.

There were no significant changes in overall dyadic cohesion three to five months following the birth of the infant. Separate analysis of the subscales revealed no significant changes in the integrative activities domain of cohesion and slight positive changes ($p < .05$) in the affectional domain.

In loving memory of my brother

ROBERT DOUGLAS SUTINEN

1949-1968

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CHAPTER I

INTRODUCTION TO THE STUDY

Background of the Problem

A system tends toward equilibrium or balance and will resist disturbance or change. The arrival of the first child is disruptive to the existing equilibrium in the family system, and constitutes a transition period in the family life cycle characterized by structural unpredictability and stress. The dominant theme in this transition is the change which occurs in response to the birth of the first child. The family life cycle framework developed by Duvall (1977) provides a means to assess the developmental stage and the developmental tasks of a family as a system moving through time. The childbearing family must accomplish the task of incorporating the child into the family system and adjusting the marital subsystem to make a place for the child. The degree of success in meeting this task will influence the total functioning of the system. The entire system is changed by the integration of the new member (Carter & McGoldrick, 1980; Miller & Janosik, 1980).

The transition to parenthood, and particularly to fatherhood, is viewed as problematic to the marital relationship because of the shift from dyad to triad that occurs (Wente & Crockenberg, 1976). Simmel's (1964) theory of dyadic relationships suggests that the critical consequence of this shift is a disruption of the affection and intimacy that is already present in the marital relationship. The infant interrupts such couple needs as talk, sharing, sex, and mutual nurturance (Levine, 1959). Sociologists agree that a two person combination is the most stable human relationship, a threesome the most volatile (Levine, 1959; Simmel, 1964). Thus, the arrival of the first child brings the nuclear family triangle into play, challenging the stability of the marital relationship. The trio may become a pair (mother and child) and an isolate (father). The father may suffer most from this disruption (Carter & McGoldrick, 1980; Lake, 1974; Levine, 1959; Wandersman, 1980; Wente & Crockenberg, 1976).

The traditional focus in health care has been on the mother/child dyad. Fathers have reported feeling shut out, anxious, unsupported, and alienated from their spouse (Cronenwett & Kunst-Wilson, 1981; Heise, 1975; Hott, 1976; Marquart, 1976; Obrzut, 1976). Arnstein (1972) stated that the very real anxieties of the father "...simply get lost in the shuffle" (p. 43).

The addition of the third member is labeled by some researchers as a "crisis", while others say it is more accurate to refer to it as a transition. While researchers indicate varying degrees and different directions of change in the marital relationship, they do agree that change takes place (Carter & McGoldrick, 1982; Ellis & Hewat, 1985; Dyer, 1963; Hobbs, 1968; LeMasters, 1957; Russell, 1974; Tomlinson, 1987). "It seems reasonable, then to assume that at least some of the difficulty associated with the transition to fatherhood will emanate from changes in the husband-wife relationship" (Wente & Crockenberg, 1976, p. 351).

In many studies on the transition to parenthood, perceptions of marital change has been assessed six to ten weeks after birth (Hames, 1980; Moore, 1983; Waldron & Routh, 1981). Researchers have suggested that a "baby honeymoon" period exists for three months following birth and that changes that occur in the marital relationship may have been masked by the novelty and excitement associated with parenthood (Feldman, 1971; Jacoby, 1969; Karber, 1985; Miller & Sollie, 1980). The focus of most of the research on changes in the marital relationship following the birth of an infant has been on mothers' perceptions of these changes. Some progress has been made as researchers have begun to focus more on husbands, their feelings, attitudes, perceptions of pregnancy, labor and delivery, and their involvement with their infants (Jones, 1984; May, 1982;

Tomlinson, 1987). However, research on change in the marital relationship after the birth of the first child, while suggestive, has been inconclusive. Investigation specifically regarding fathers' perceptions of changes three to five months after birth has been limited (Ellis & Hewat, 1985; Karber, 1985; Marquart, 1976; Obrzut, 1976; Wente & Crockenberg, 1976).

Significance of the Problem

It is essential that family clinical nurse specialists understand the changes that fathers may experience after the birth of the first child, and the effects those changes have on the stability of the marital relationship. A broader knowledge base of fathers' perceptions of the marital relationship is necessary in order for family clinical nurse specialists to deal more effectively with first-time fathers, to address their needs, and to anticipate potential difficulties. Guidance and support can be offered in order to enhance the couple's relationship as they experience change.

Becoming a parent is a major event in the family life cycle. This family life event has the potential to stimulate growth and strengthen the family system, or, to stimulate dysfunction within the system (Carter & McGoldrick, 1982). A broader knowledge base and understanding of fathers' perceptions can assist the family

clinical nurse specialist to encourage and stimulate growth in the family, thereby strengthening the family system. Furthermore, investigating fathers' perceptions of changes in the marital relationship without the potential effect of the "baby honeymoon" influencing research findings would contribute to more accurate understanding of fathers' perceptions.

This researcher intends to strengthen the knowledge base of fathers' perceptions of change in the marital relationship by conducting a study based on Karber's (1985) investigation of changes in four dimensions of the marital relationship. The present study is confined to measuring dyadic cohesion as one dimension of the marital relationship. The affectional component of cohesion is incorporated in the definition of cohesion in the present study. Perceived changes in marital cohesion, rather than levels of marital cohesion, are being measured.

Statement of the Problem

The purpose of this study is to describe first-time fathers' perceptions of changes in marital cohesion three to five months after the birth of a child. The time period selected for this study avoids the potential "baby honeymoon" effect on perceptions of changes in the marital relationship. The specific research questions are:

1. Does the first-time father perceive a change in dyadic cohesion three to five months after the birth of his child?

2. If the first-time father perceives a change in dyadic cohesion three to five months after the birth of his child, what is the direction of the change?

Definition of Terms

Based on definitions utilized in Karber's (1985) study, the concepts under investigation are defined as follows:

First-time Father is defined as a married man between and inclusive of the ages of 18 and 35 who has become a biological father for the first time. He is the socially defined guardian, caretaker, nurturer, and protector of an infant between the ages of three to five months. There are no other children living in the household. He maintains an ongoing, intimate relationship with the infant's biological mother.

Perception is defined as the subjective, uniquely personal manner in which a first-time father views experiences. Perceptions are based on the individual's background of past experiences and present needs and

values, and represent the first-time father's image of reality (King, 1981).

Family Life Event is defined as a normative family developmental experience which creates changes in the marital relationship. For the purposes of this investigation, the birth of an infant is considered a normative family life event.

Marital Relationship is defined as a dynamic affiliation characterized by feelings and/or interactions between individuals who are legally married and living together.

Researchers have not agreed on a common definition of the term marital relationship, and have identified a number of dimensions to that relationship. Spanier and Cole (1976) documented at least twelve different definitions of the term among the most prominent studies reviewed. Orthner (1981) maintains that because interpersonal relationships are so complex, researchers have developed a number of different frameworks to call attention to the many components of these relationships. The concept marital relationship is widely acknowledged to be multi-dimensional.

Some of the dimensions of the marital relationship identified in the literature included affective and problem-solving communication, leisure time together, agreement about finances, and sexual satisfaction (Snyder, 1979). Broderick (1981) identified love, understanding,

trust, commitment, and respect as important components in the affectional domain. Another component identified by Broderick (1981) was the sharing of activities, experiences, and humor.

Lamanna and Reidman (1985) described the marital relationship in terms of lasting mutual affection, intimacy, sharing, and emotional commitment to the partner and to the relationship. Waring, McElrath, Lefcoe, and Weisz (1981) identified eight components of marital relationships including conflict resolution, affection, cohesion, sexuality, identity, compatibility, autonomy, and expressiveness. Role competence, effective communication, respect, and esteem have also been found to be components of the marital relationship (Arrindell & Schaap, 1985; Chadwick & Albrecht, 1976; Jorgensen, 1979; Lamanna & Reidman, 1985; Lewis & Spanier, 1979). Ammons and Stinnet (1980), Arrindell and Schaap (1985), and Lewis and Spanier (1979) also identified sexual intimacy and emotional support as important factors in the marital relationship. Karber (1985) examined the four dimensions of the marital relationship which were identified by Spanier (1976); cohesion, satisfaction, consensus, and affection.

Although the multi-dimensionality of the marital relationship conceptually exists, it is empirically difficult to define. Many of the identified dimensions overlap, and researchers have difficulty empirically separating the various interrelated components or

constructs (Karber, 1985; Lewis & Spanier, 1979; Sharpley & Cross, 1982; Wilson & Filsinger, 1986). Due to the difficulty in empirically separating the interrelated components of a marital relationship, only one dimension, dyadic cohesion, is being addressed in this study.

Dyadic Cohesion is defined as integrative, bonding experiences, including the mutual engagement in activities, such as talking, problem-solving, joint leisure, working together on a project, laughing together, confiding in spouse, and affectional bonds, such as the engagement in satisfying sexual relations, and the mutual expression of appreciation, love, and support.

Modifying Variables

Modifying variables which may affect the outcome of the study and for which data will be collected include the following sociodemographic variables: age of father, age of infant, education, occupation, income, race, and number of years married. Other variables include complications of labor and/or delivery, father's absence or presence in delivery room, infant temperament, employment of wife, and father participation in childbirth education classes.

Assumptions

The researcher is making the following assumptions:

1. The birth of an infant causes changes in the equilibrium of the family system.

2. The component of the marital relationship which has been selected to study represents an area in which change may be perceived. This component is only part of the overall transition to parenthood.

3. The researcher has no prior knowledge of the father's perception of dyadic cohesion prior to the birth of the baby.

4. Some of the difficulty associated with the transition to parenthood may emanate from changes in the husband-wife relationship.

5. The changes in the marital relationship expressed by each respondent on the questionnaire will reflect honest answers.

6. Each respondent will be able to read and respond to items on the questionnaire.

7. Each respondent will be able to recall his perceptions of changes in the marital relationship.

8. After the birth of a baby, the family has moved into Stage II of the Family Developmental Life Cycle and is dealing with the developmental tasks of that stage.

Limitations

The researcher acknowledges the following limitations of this investigation:

1. The full range of the first-time-father's perception of changes in the marital relationship may not be reflected in responses to closed-ended questions.

2. Data will be collected at one point in time; first-time-father's expressed changes in the marital relationship could occur prior to or subsequent to the time period in which data were collected.

3. The subjects who agree to participate in the study could be different from subjects who refuse. Thus the findings may not be representative of all first-time-fathers' perceptions of changes in the marital relationship.

4. Measurement of the marital relationship is limited to only one dimension, dyadic cohesion. Furthermore, it may be difficult for fathers to separate that dimension from other dimensions of the marital relationship.

5. Due to the complexity of family relationships, the 18-item questionnaire may not adequately tap the concept under study.

6. The researcher-developed questionnaire is an untested instrument of unknown reliabilty and validity.

7. A small convenience sample limits the generalizability of the findings.

Overview of Chapters

This study is presented in six chapters. The background, significance, and statement of the problem, along with the purpose of the study, the research questions, definition of terms, and assumptions and limitations of the study are presented in Chapter I. In Chapter II, the conceptual framework and its relationship to nursing theory and nursing practice is discussed. In Chapter III, a review of literature and research pertaining to the problem is presented. Research design, methodology, and techniques

for analyzing data are described in Chapter IV. The research data are presented and discussed in relation to the research questions in Chapter V. In Chapter VI, a summary of research findings, conclusions, and implications for nursing practice is presented.

CHAPTER II

CONCEPTUAL FRAMEWORK

Introduction

In this chapter a conceptual framework which integrates principles of Family Systems Theory, Family Developmental Theory, and nursing theory in relation to marital and childbearing families is presented. First-time fathers' perceptions of changes in marital cohesion three to five months after the birth of an infant will be examined within this framework. An introduction and overview of Family Systems and Family Developmental Theory is followed by a description of the first two stages of the Family Life Cycle, the Marital Family, and the Childbearing Family. Included is a discussion of the manner in which cohesion in the marital relationship is affected by and affects each stage. Finally, a nursing theory and nursing process model are presented, followed by an explanation of the model for nursing practice as it applies to this investigation.

Family Systems Theory

A system is defined as an interacting whole, or a set of interrelated, interdependent parts. Each part interacts with the other within a boundary that filters the flow of input and output to and from the system. The family is a dynamic social system. It is a semi-open, goal directed system of interacting personalities that is organized to meet functional needs through the accomplishment of individual and family developmental tasks (Hall & Weaver, 1977).

The structure of the family system refers to the organization and pattern of its relationships; the function of the family system refers to the processes by which the system operates. All living systems are semi-open in that they are open to exchanges of energy, matter, and information across their boundaries. Family systems are characterized by nonsummativity, or the interrelatedness among the system parts. In other words, the whole is more than just the sum of its parts. Every possible interaction pattern within the family has significance to the whole (Miller & Janosik, 1980). Thus the degree and quality of the bonding and integrative activities of cohesion within the marital relationship has a significant effect on the entire family system.

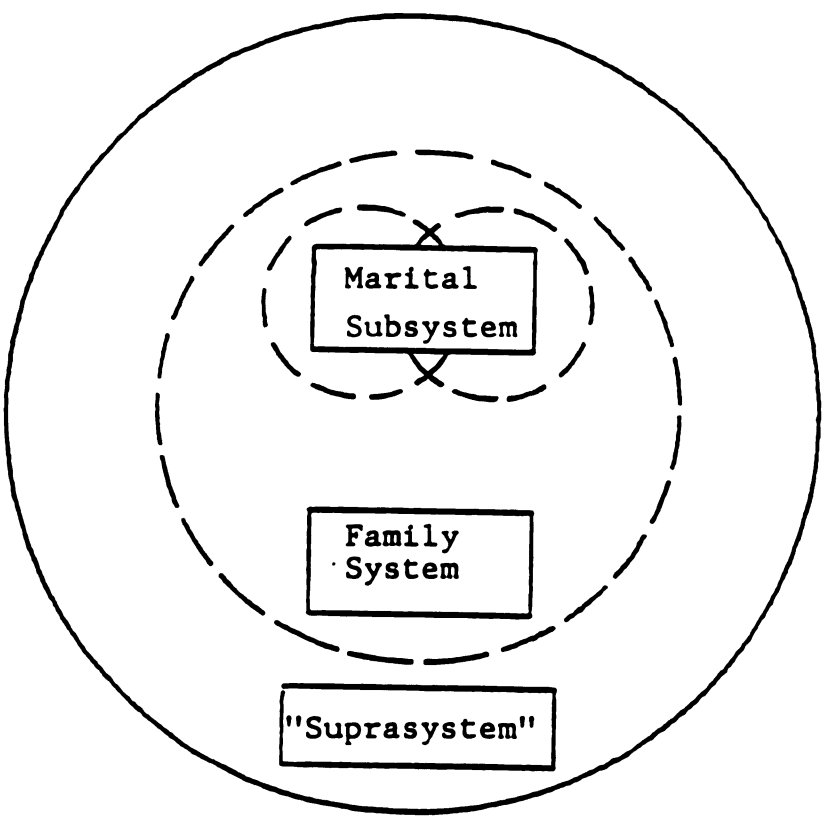
Systems are self-regulating. They must be able to detect variation between a disturbed state and a normal

state. Feedback is the process whereby the family system gathers information in regard to its usual level of functioning or normal state. In the process of feedback, the system provides output to the environment in the form of information, behavior, or energy. Input is received by the family system in the form of information, supports, and demands. Negative feedback facilitates adjustments by the system in order to bring the family functioning back to its usual level or steady state. Negative feedback can initiate system changes, or adjustments in activity that decrease the deviation from the ideal (Hazzard, 1971; Miller & Janosik 1980). For example, the first-time-father may provide output or information to a health care provider indicating changes or concerns about the marital relationship following the birth of the first child. In turn, the health care provider may provide input into the family system in terms of information or supports, input which may help restore equilibrium.

Social systems are hierarchical; that is, each system has a subsystem and a suprasystem. The family is composed of dyadic and triadic subsystems that interact with each other and with the suprasystem, which includes the health care system. The marital sybsystem within a family contributes significantly to effective family functioning (Hall & Weaver, 1977).

How well the family system adapts to stress due to changes that occur during the family life cycle will in part depend on the characteristics, quality and functioning of the marital subsystem. Most family crises are normative and involve changes in family structure and interaction, changes which enable the family system to cope with developmental tasks (McCubbin & Thompson, 1987). In the face of normative change, two of the most prominent family resources are (1) adaptability, and (2) cohesion, or bonds of unity running through family life (Hall & Weaver, 1977; McCubbin & Thompson, 1987; McCubbin, Thompson, & Pirner, 1986). Cohesion in the marital subsystem, then, is a critical variable. According to researchers, achieving a "balanced" level of cohesion by being both independent and connected is most desirable in terms of optimal systems function (Olson & McCubbin, 1982).

In summary, the family is a dynamic social system consisting of dyadic and triadic subsystems which interact with each other and with the suprasystem or the surrounding environment. (See Figure 1). Marital cohesion is one dimension of the marital subsystem which contributes significantly to effective family functioning. The marital subsystem may undergo changes and adaptations as the family moves through the family developmental life cycle. In the following section, the family developmental life cycle is addressed.



-Figure 1-
The Family System

The Family Developmental Life Cycle

The nuclear family system, established at marriage and lasting as long as the couple remains married, goes through various developmental stages. In the context of a developmental framework, the emphasis is on the sequential changes the family system experiences in relation to family life events, such as the addition of new members. The emphasis is on how families change based on the first child's developmental level (Duvall, 1977). The examination of family change in relation to first-child development provides an appropriate framework for this study. The focus of the study is on potential change following a specific family life event, the birth of a child, or, a first-time-father's perceptions of changes in the marriage following the birth of a infant.

A longitudinal view of the family system as it evolves provides a perspective from which to examine sequential and cyclical patterns of growth, development, and decline. Duvall (1977) states that the family life cycle consists of eight successive stages, beginning with marriage and ending with the death of a spouse (See Table 1). The family system progresses through the stages in a unique but predictable manner. Within each stage there are specific family developmental tasks that must be accomplished within a critical period of time. Successful passage from one

stage to the next promotes individual and family growth (Duvall & Miller, 1985).

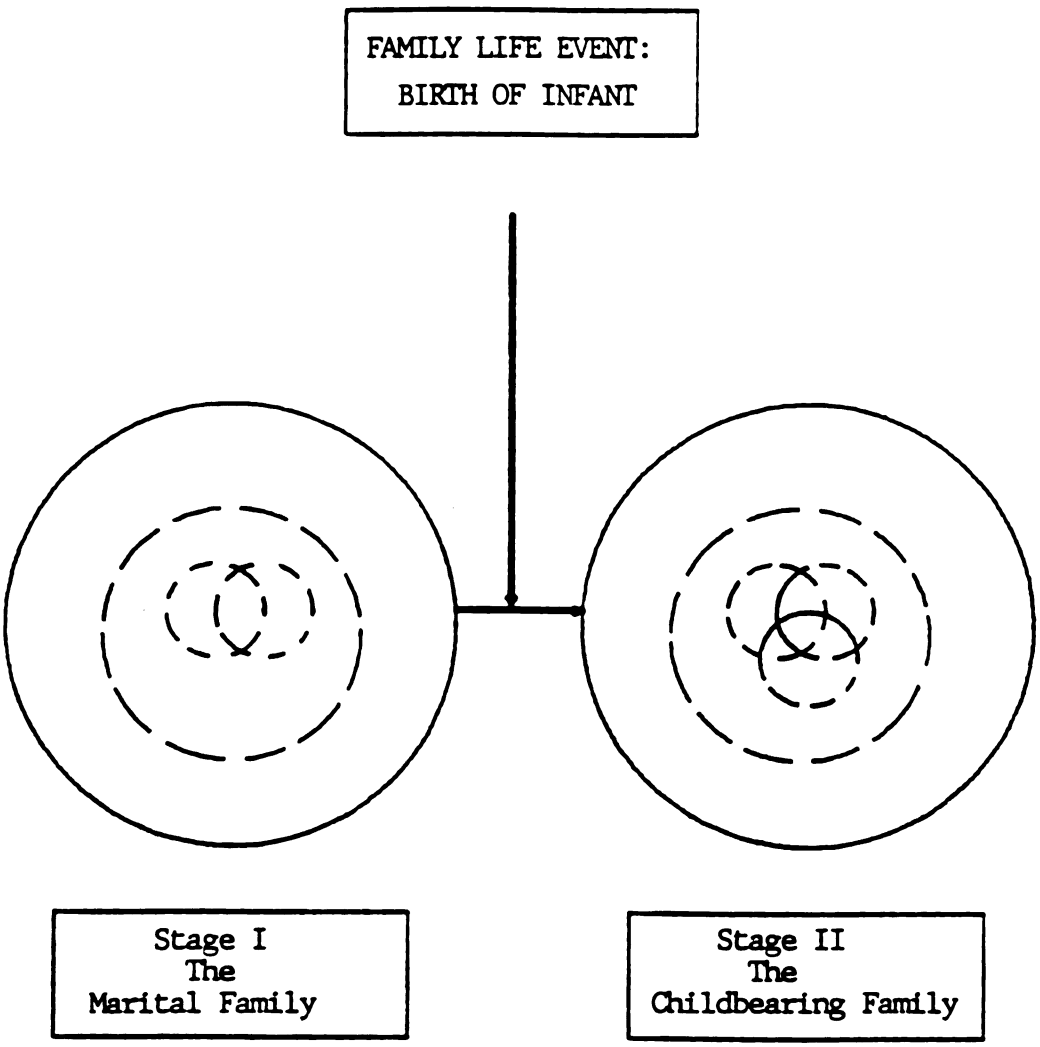
Table 1.

Stages of The Family Life Cycle

(Adapted from Duvall, 1977)

Stage I:	The Marital Family
Stage II:	The Childbearing Family
Stage III:	The Pre-School Family
Stage IV:	The Family with Teenagers
Stage V:	The Launching Family
Stage VI:	The Middle-aged Family
Stage VIII:	The Aging Family

Family life events, such as parenthood and launching young adults, impose new rights and responsibilities on members, and have the potential to alter interpersonal relationships and interaction between and within subsystems. With the birth of a child, the marital dyad becomes a triad, and there is potential for change (See Figure 2). Such events may challenge the family's available resources and alter stability in the family system. According to Hill (1963) a family life event may be interpreted as a "family crisis" depending on the



-Figure 2-
The Family Life Cycle:
Potential for Change in the
Marital Subsystem

hardships of the event, the family's perceptions of the event, and the family's resources. If the first-time father perceives particular hardship or crisis as a result of the birth of an infant, his perceptions of the marital relationship may be affected.

The birth of a child moves the family system from one stage of the family life cycle to the next. In the following section, a brief examination of the first two stages, The Marital Family and The Childbearing Family, are addressed. A brief overview of each stage is given. The manner in which cohesion in the marital subsystem relates to each stage, and the manner in which the birth of an infant may affect marital cohesion, are also addressed.

The Marital Family

The first stage of the family life cycle heralds the beginning of a couple's new life together. As the couple becomes a family and begins to accomplish the tasks of Stage I, the marital relationship develops. Researchers have not agreed on a definition of the marital relationship, and have identified a variety of dimensions to that relationship. Orthner (1981) maintains that because interpersonal relationships are so complex, researchers have developed a number of different frameworks to call attention to the many components of these relationships. By examining marital relationships from

different perspectives, each researcher contributes important concepts that help us to better understand the facets of a complex phenomenon. This researcher examines the marital relationship from the perspective of marital cohesion, or integrative, bonding experiences.

Both Duvall and Miller (1985) and Orthner (1981) define the marital relationship in terms of its interactive aspects. For the purposes of this study, the marital relationship is defined as a dynamic affiliation characterized by feelings and/or interactions between individuals who are legally married and living together. Through the process of meeting family developmental tasks throughout the family life cycle, the marital couple interacts. The partners develop positive or negative feelings regarding the marital relationship within the context of these interactions.

There are several developmental tasks that the marital couple is expected to accomplish, including settling into a new home, establishing a mutually satisfying means of support, and allocating responsibilities. The couple must also build the foundations for a satisfying marital relationship, control fertility and/or plan a family, and maintain couple motivation and morale (Duvall & Miller, 1985). It is assumed that the successful accomplishment of these tasks provides a means to evaluate the working effectiveness of the marital relationship.

One dimension of the marital relationship is dyadic cohesion. For the purposes of this study, dyadic cohesion is defined as integrative, bonding experiences, including the mutual engagement in activities such as talking, problem-solving, joint leisure, working together on a project, laughing together, confiding in spouse, and, affectional bonds, such as the engagement in satisfying sexual relations and the mutual expression of appreciation, love, and support.

In examining the nature of Duvall's (1977) defined family developmental tasks of Stage I, the assumption can be made that the accomplishment of these tasks is achieved through mutual interaction and affectional bonds. Establishing a home and the foundations of a satisfactory relationship, starting a family, and maintaining couple morale are all integrative, bonding experiences. Thus the marital couple, in accomplishing these tasks, establishes a marital relationship characterized by some degree of dyadic cohesion. Such integrative, companionship experiences, or dyadic cohesion, enhance the couple's abilities to accomplish the family developmental tasks of the first stage of the family life cycle.

In summary, the family developmental life cycle provides a related framework for examining the family system as it progresses through various stages. Researchers have not come to a common definition of the

concept marital relationship, although a variety of dimensions of that relationship have been identified. One dimension, dyadic cohesion, was addressed in terms of its relationship to the first stage of the family life cycle. The relationship was drawn between the accomplishment of family developmental tasks and the facilitating role dyadic cohesion plays in those accomplishments. In the following section, the manner in which the birth of an infant constitutes a family life event is addressed.

Family Life Event

A family life event is a critical period occuring in the family developmental life cycle during which new demands and required changes are expected of family members. Becoming parents, launching children, and retirement, for example, are all critical periods. The birth of the first child is a family life event which launches the family system into a new developmental stage (Duvall, 1977; Hill & Rodgers, 1964). This family life event precipitates a family developmental process which requires inherent change or adaptation. Thus the event is a significant turning point for the marital couple which may be experienced as a crisis depending on the individual's and family's ability to adapt to the event (Miller & Janosik, 1980; Spanier, Sauer, & Larzelere, 1979). McCubbin et al., (1986) state that the birth of the

first child constitutes a normative family life event which affects individual member functioning as well as family dynamics. These authors imply that stress and strain in family relationships are common in the face of normative family life events. Karber (1985) defines a family life event as a "normative family developmental experience which creates changes in the marital relationship" p.24).

Researchers, then, have referred to the birth of an infant as a critical transition, a crisis, and a developmental event (Duvall, 1977; LeMasters, 1957; McCubbin et al., 1986). Despite different terminology used to describe the birth of an infant, researchers agree that this family life event creates changes in the marital relationship (Cowan, Cowan, Coie, & Coie, 1978; Duvall, 1977; Karber, 1985; LeMasters, 1957; Nock, 1979; Russell, 1974; Tomlinson, 1987). For purposes of this study, a family life event is defined as a normative family developmental experience which creates changes in the marital relationship. The family life event is operationalized as the birth of the first child.

Nock (1979) maintains that the reason the birth of a first child is a significant turning point for the family is because this event significantly alters relationships among family members and requires adaptation on the part of both husband and wife. The new parents must redefine their own roles and adapt to each other's new roles. The birth

of an infant brings about changes in the marital couples' behavior and interactions. The couple may have to alter their lifestyle to adjust to the infant's demands. New challenges, decisions, and patterns of marital interaction may alter dimensions of the marital relationship, including dyadic cohesion.

To sum, the birth of an infant has been viewed by many investigators as a challenge and even a potential crisis in the marital subsystem. The first-time-father may perceive changes in the marital relationship depending on how he personally experiences the family life event. In the following section, the second stage in the family life cycle, The Childbearing Family, is addressed in terms of how the birth of the first child may influence changes in one component of the marital relationship, dyadic cohesion.

The Childbearing Family

The birth of the first child, then, heralds the onset of the second stage in the family life cycle and may result in changes in the marital relationship. The movement from family dyad to triad requires sudden alterations in the family's organization and relationships. The couple must adopt new parental roles and must accomplish the family developmental tasks of the childbearing stage. These tasks include (1) adapting housing arrangements for the infant; (2) meeting costs of childbearing/child rearing;

(3) sharing responsibilities for care of the home and child; (4) developing skills in parenting; (5) maintaining a satisfactory marital relationship in the presence of children; (6) planning for future children; (7) relating to in-laws; (8) maintaining morale, motivation, routines, and family rituals (Duvall & Miller, 1985).

The relationship between dyadic cohesion and the successful accomplishment of family developmental tasks in the childbearing family is clear. Interaction and integrative experiences, such as sharing of tasks, ideas and decisions help the couple to develop a system of home and child-care responsibilities, of meeting added costs of childbearing, and of supporting each other in new parental roles. Exchanging thoughts, preferences and experiences assist the couple to establish new family rituals and to maintain couple morale and motivation.

The arrival of the infant may also result in changes in dyadic cohesion. Finding time for conversation and joint leisure may become more difficult due to infant care demands and lack of energy. Although family communication may be occurring, it may focus more on the infant's needs rather than on nurturing the marital relationship. The wife may become preoccupied with the mother role. The couple strives to maintain and nurture marital bonds in the presence of an infant, whose demands may rob the couple of

time previously devoted exclusively to their relationship. Maintaining couple morale and motivation may become difficult in the drudgery of diapers and infant demands.

An important aspect of dyadic cohesion, the engagement in mutually satisfying sexual relations, facilitates the accomplishment of several of the family developmental tasks of the childbearing family. Continued expression of affection and appreciation on the part of each spouse will strengthen the marital bonds and promote the maintenance of spousal morale and a satisfactory marital relationship. Feelings of love and appreciation from the spouse will enhance confidence and satisfaction in parental roles and the development of parenting skills.

During the childbearing stage, the maintenance of a mutually satisfying sexual relationship may also be challenged by infant interruptions and demands, or by physical and hormonal changes in the wife, or, by birth control demands. The nursing mother may have limited birth control options which may result either in methods unsatisfactory to one or both partners, or, fear of pregnancy. Thus the task of family planning may affect the couple's sexual relationship. The first-time-father may perceive changes in the sexual relationship following the birth of an infant.

Decreased sexual responsiveness of their wives has been documented as an important adjustment concern for

first-time fathers (Hobbs & Cole, 1976). Other researchers have reported post-partum declines in affectional expression, strain caused by post-partum changes in the sexual relationship, declines in general spousal companionship, and declines in joint leisure and partnership (Belsky et al., 1983; Ellis & Hewat, 1985; Fein, 1976; Gordon & Carty, 1978; Harriman, 1983; Hoffman & Manis, 1978; Pineo, 1961; Rollins & Feldman, 1970; Sollie & Miller, 1980; Wente & Crockenberg, 1976). Thus, changes in sexual practices and a decline in sexual responsiveness of the wife following the birth of an infant may affect a first-time-father's perceptions of marital cohesion.

To summarize, although research findings regarding changes in dyadic cohesion after the birth of an infant have not been conclusive, investigators agree that changes do occur. As the marital family progresses into a childbearing family, developmental tasks evolve which focus on integrating the new member into the family. Changes in the marital relationship in terms of dyadic cohesion may occur due to the infant's presence and demands.

Summary: Family Systems and the Family Life Cycle

In summary, Family Systems Theory and Family Developmental Theory provide related frameworks which are utilized to examine the marital subsystem as it moves

through the family life cycle, and to identify stages and tasks the marital couple experiences. This framework can be useful in generating research questions regarding changes in marital cohesion following childbirth, and in anticipating and identifying many facets of family behavior.

The birth of an infant ushers the marital family into a new family life cycle stage (childbearing) in which the couple faces new tasks and responsibilities. One component of the marital relationship, dyadic cohesion, provides a relevant context in which to examine the accomplishments of family developmental tasks. Dyadic cohesion affects and is affected by the accomplishment of these family developmental tasks relating to integrating the new member. Depending on how the first-time-father experiences this family life event (birth of an infant), the father's perceptions of cohesion in the marital relationship may change.

Numerous attempts have been made to study the relationship between family life cycle stages and the marital relationship. The findings of these studies have been inconsistent, ambiguous, and inconclusive (Schram, 1979). Lack of agreement exists among researchers regarding perceptions of changes in marital cohesion. This researcher intends to provide additional findings regarding the direction of marital relationship changes expressed by

first-time-fathers in the childbearing stage of the family life cycle. In the following section, modifying variables which may influence first-time fathers' perceptions of changes in marital cohesion are addressed.

Modifying Variables

Age of the First-Time-Father

Researchers have documented a negative relationship between age of the first-time-father and level of perceived difficulty in adjusting to the birth of an infant. Russell (1974) found a negative correlation between father's age and crisis, with younger first-time fathers reporting higher levels of crisis than older fathers. Dyer (1963) and Hobbs (1965), however, found no significant relationship between parent age and difficulty in family relationships following the birth of an infant. This researcher will collect data on the age of the first-time-father in order to describe the sample and in order to support or challenge past findings.

Age of the Infant

While some investigators have found no relationship between infant age and adjustment difficulty (Russell, 1974), and others have reported greater difficulty during the first three months (Tomlinson, 1987), there is support in the literature to suggest that the age of the infant has

a significant effect on the marital relationship. Hobbs (1965) reported a positive correlation between age of the infant and level of crisis. Apparently enthusiasm over the new baby fades with time, the novelty wears off, and reality sets in. Therefore, the concept of a "baby honeymoon" has been suggested by Feldman (1971). Belsky, et al (1983) postulated that this "honeymoon" period is over by the time the infant reaches three months of age. Because of the possibility of the "baby honeymoon" effect, this researcher will collect data on the marital relationship three-to-five months after the birth of the infant.

Infant Temperament

Investigators have determined that an infant who is active, "noisy", and demands a lot of time and patience from the parents is associated with increased difficulty in post-partum adjustment. Russell (1974), Roberts (1983), and Ventura (1982) found positive correlations between infants who were described by parents as "difficult" or who had feeding problems and excessive crying, and degrees of crisis. Tomlinson (1985) and Harriman (1983), however, found infant temperament unrelated to perceived marital change scores. Data on infant temperament will be collected in this study to clarify the relationship between this variable and perceptions of changes in the marital relationship.

Income

Family income is an important variable to consider when assessing changes in the marital relationship following the birth of the first child. Researchers have reported negative correlations between income and difficulty or crisis (Hobbs, 1965; Hobbs & Cole, 1976). Financial strain can create added burden on the first-time-father as he strives to fulfill his role as supporter and provider. The developmental tasks of the childbearing family relating to making provisions for the baby can involve significant expenditures, even on a modest budget. The parents must acquire nursery furniture, diapers, clothing, and other infant supplies. Well-baby visits to the health care provider, usually not reimbursed by insurance, and babysitters constitute other new expenditures. Meeting increased financial demands created by the infant may be difficult for the first-time-father, especially if the wife has left the work force, or, if decreased resources for "extras" alter the couple's lifestyle, with less money available for activities which the couple may have previously shared.

Education of the Father and Mother

While Harriman (1983), and Russell (1974), found no relationship between the educational level of the father and marital change or crisis scores, other researchers have documented a negative relationship between these variables.

Dyer (1963) reported that fathers who were not college graduates experienced greater marital adjustment difficulties than fathers who had college degrees. Moore (1983) found no correlation between couples' marital satisfaction in terms of cohesion and either fathers' or mothers' level of education. In this study, the educational level of both parents will be assessed to determine if there is any relationship between education and perceived changes in the marital relationship.

Number of Years Married

The relationship between the number of years married and perceptions of changes in the marital relationship is unclear in the literature. Dyer (1963) documented a significant relationship between these variables. Couples in his study who were married more than three years experienced lower levels of crisis than couples married less than three years. However, Harriman (1983) and Russell (1974) did not find a statistically significant relationship between length of current marriage and degree of crisis or marital change. Therefore, in an effort to clarify this relationship, this researcher will consider the length of marriage as a potential modifying variable.

Normalcy of Pregnancy, Labor, and Delivery

Few research studies have included normalcy of pregnancy, labor, and delivery as variables to consider when assessing perceptions of changes in the marital

relationship following childbirth. Russell (1974) found that problem-free pregnancy was associated with lower levels of crisis, and that an uncomplicated, normal labor and delivery was positively related to ease of transition to parenthood. However, most research has been confined to normal pregnancies. This researcher will assess these potential confounding variables to determine if they are related to perceived changes in the marital relationship following childbirth.

Father's Participation in Childbirth Preparation Classes

Few studies were found in which fathers' participation in childbirth education classes was examined as a modifying variable in the transition to parenthood. Moore (1983) only compared couples who had participated in two different types of childbirth preparation rather than comparing prepared and non-prepared couples. Moore found that regardless of type of childbirth preparation, there was an improvement in level of marital adjustment from antepartum to one month postpartum. Although Wandersman (1980) did not examine differences between Lamaze and non-Lamaze prepared parents, she did compare levels of marital adjustment in fathers who had participated in parenting groups in the postpartum. Some preparation for parenting information is often included in childbirth preparation classes. Wandersman (1980) found that participation in

parenting groups did not radically change the pattern of marital adjustment for fathers.

Father's Presence in Delivery Room

No previous researchers have examined the father's presence at delivery in terms of its effect on perceptions of changes in the marital relationship following childbirth.

Employment of Wife

Finally, this researcher found only one study related to wife's employment and post-partum marital adjustment. Russell (1974) found no relationship between the wife's present or past employment and the perception of difficulty in transition to parenthood. Employment of the wife needs to be addressed in order to more fully understand the effect of the birth of an infant on the first-time-father's perceptions of changes in the marital relationship.

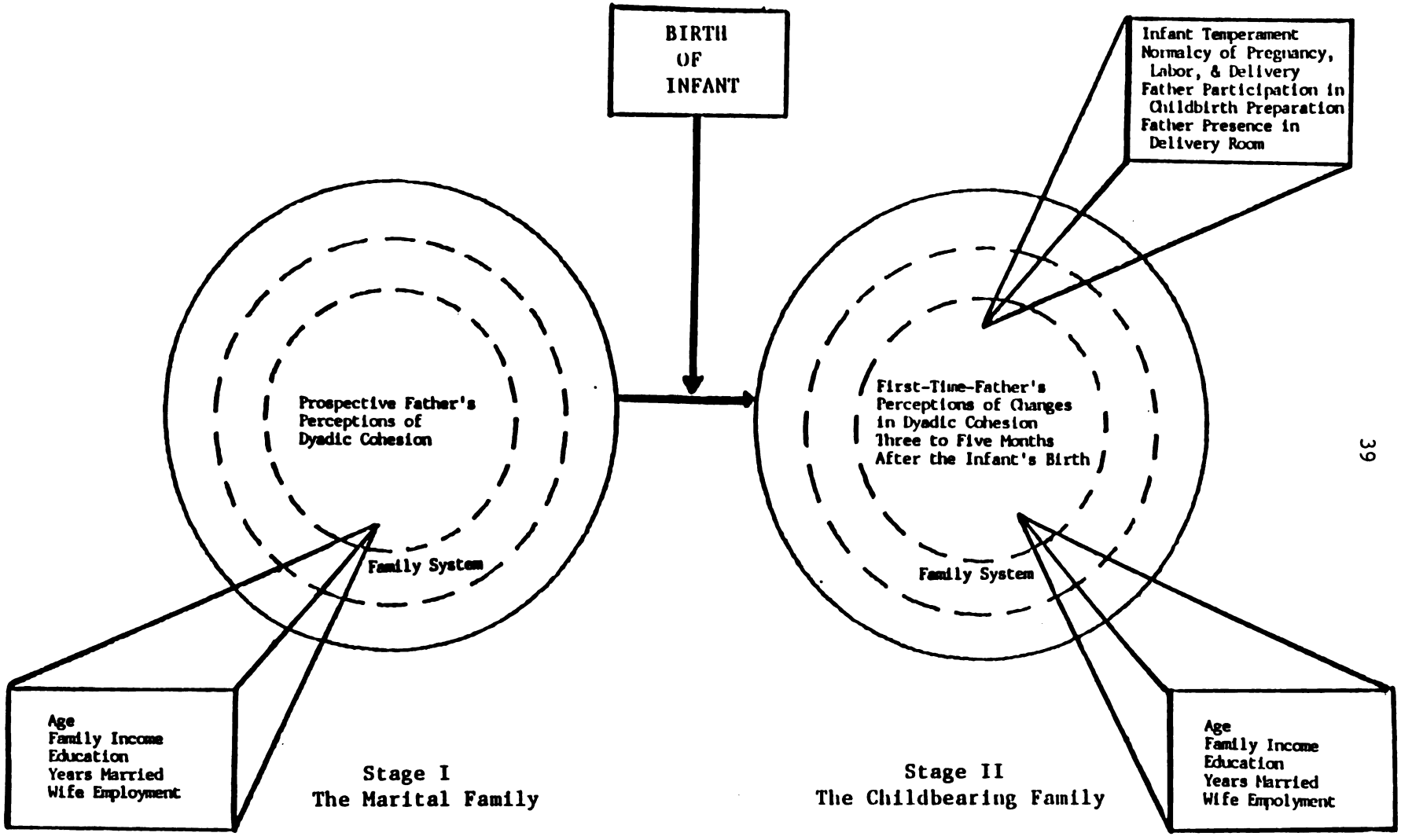
In conclusion, perceived changes in the family system following the birth of an infant may be assessed by examining one dimension of the marital relationship, dyadic cohesion. Either positive change, negative change, or no change can be identified. Family Systems Theory and the Family Developmental Life Cycle have been utilized in this chapter to conceptualize the changes the marital subsystem undergoes as a family event, the birth of a baby, occurs. Potential modifying factors which may influence perceptions of change include: age of the father; age of the infant;

infant temperament; income; education of the parents; number of years married; normalcy of pregnancy, labor and delivery; father's presence in the delivery room, father's participation in childbirth preparation classes, and, employment of wife. Study variables are depicted in Figure 3.

Given the changes that may occur in the marital relationship following the birth of the first child, the issue for nursing becomes the identification of fathers' perceptions. The primary health care provider, as part of the suprasystem, interacts with the father in an effort to promote growth and to strengthen the family system. King's (1985) nursing model provides the conceptual basis for that interaction. This model will be discussed in the following section.

Conceptual Framework for Nursing Assessment and Intervention

Although selected aspects of family systems and family developmental theory were utilized to examine changes in dyadic cohesion following the birth of an infant, these frameworks alone are inadequate to guide nursing intervention. In the following section an overview of a nursing conceptual framework developed by Imogene King (1981) is presented. The overview includes a description of the concepts within the model, a definition of man,



-Figure 3-
Framework Depicting Study Variables

environment, health, and nursing, and a description of the theory of goal attainment. Finally, the application of the study variables within King's conceptual framework is addressed.

King's (1981) conceptual framework is a systems model composed of three interacting systems: Personal, Interpersonal, and Social. Personal systems, or individuals, are subsystems of interpersonal systems. Social systems refer to the environments or suprasystem in which interpersonal systems exist. Understanding personal and social systems enhance understanding of interpersonal systems. The primary emphasis in King's model is the interpersonal system. Within the context of family systems theory discussed earlier in this chapter, it is the interpersonal system which is most relevant to the focus of the present study, both in terms of the marital dyad and in terms of the first-time-father/health care provider dyad.

King (1981) perceives man as a rational, sentient, perceiving, reacting, purposeful being. The environment is conceptualized as an open system with permeable boundaries permitting an exchange of energy and information. Health is defined as dynamic life experiences of human beings which involve continuous adjustment to stressors in the environment. She also defines health as the ability to function in social roles. King (1981) defines nursing as "...a process of human interactions between nurse and

client whereby each perceives the other and the situation; and through communication, they set goals, explore means, and agree on means to achieve goals" (p. 144, 1981).

Man and environment are open systems continuously exchanging matter, energy, and information. This interaction may or may not lead to optimum degrees of health or health promotion, which has implications for the practice of nursing. The interrelationships between person, environment, health, and nursing can be summed up in the overall assumption upon which King's conceptual framework and the theory of goal attainment are based: "The focus of nursing is human beings interacting with their environment leading to a state of health for individuals, which is an ability to function in social roles" (King, 1981, p 145).

A major concept in the personal system and a central theme in the process of interaction is that of perception. Perception is defined as a process of organizing and interpreting data, a process of human transaction with environment that gives meaning to one's experience and represents one's image of reality. Growth and development include cellular, molecular, and behavioral changes that occur in human beings in predictable patterns. Growth and development are affected by meaningful and satisfying experiences and by an environment conducive to helping

individuals move toward maturity and self-actualization (King, 1981; Fitzpatrick & Whall, 1983).

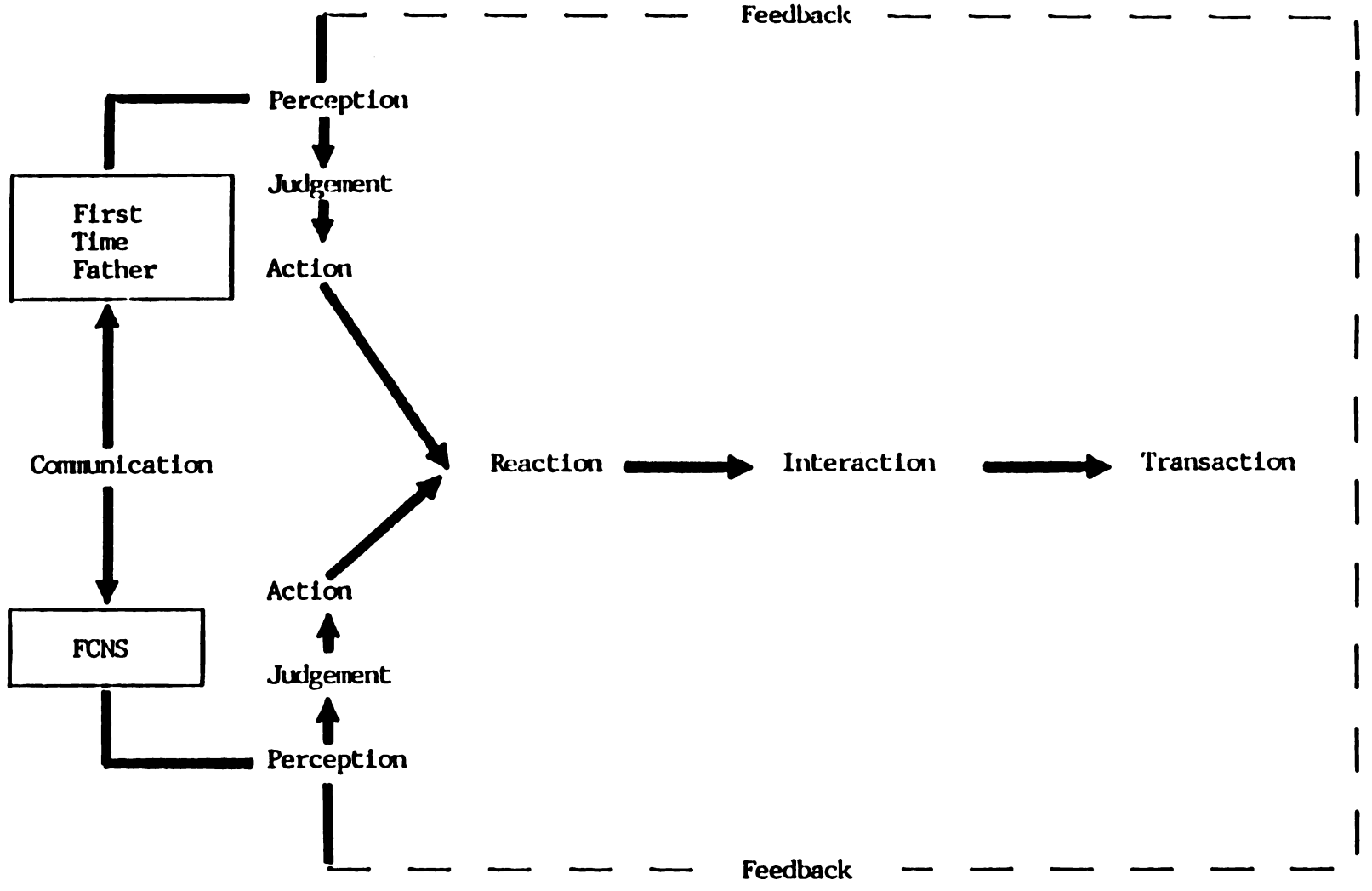
The interpersonal system is not only the major focus of King's (1981) conceptual framework but also the basis for the derivation of a theory for goal attainment. An overall assumption in King's model is that nurses and patients communicate information, mutually set goals, and take action to attain goals. Interactions within the interpersonal system are defined as sequences of verbal and nonverbal behaviors that are goal-directed. Concepts fundamental for understanding human interactions include perception, communication, and transaction. Individuals communicate on the basis of perceptions; perception is a central concept in looking at human interactions that lead to transactions. Communication, the transfer of information from one person to another, is the vehicle by which interpersonal relations are developed and maintained. All human activities that link person to person and person to environment are forms of communication.

Transactions are the processes of interaction in which human beings communicate with their environment. King (1981) describes transactions as observable behavior of persons interacting with their environment, behaviors which lead to goal attainment. Transaction is a critical variable in nurse-client interactions that lead to goal attainment. There is a clear relationship between

nurse-client transactions and the expected outcome of health (King, 1986).

Role is defined as a set of behaviors in a position, or the defined rights and obligations in that position. Role is "a relationship with one or more individuals interacting in specific situations for a purpose" (King, 1981, p.93). Whenever roles are enacted, there is potential for conflict which may lead to stress in the environment. Stress, which can be experienced as positive or negative, refers to a dynamic state whereby a human being interacts with his environment to maintain balance or equilibrium. This dynamic state involves exchange of energy and information to regulate and control stressors, which can be persons, objects, and/or events, including family life events (Fitzpatrick & Whall, 1983; King, 1981).

The process of interaction defined by King (1981) is depicted in Figure 4. Nurse and client, two personal systems, come together in some situation, perceive each other, make judgements about the other, take some mental action, and then react to each one's perceptions of the other. This is followed by an interaction which can be directly observed. In the interactive process, individuals mutually define goals and the means to achieve them. When they agree on these means, they move toward transaction.



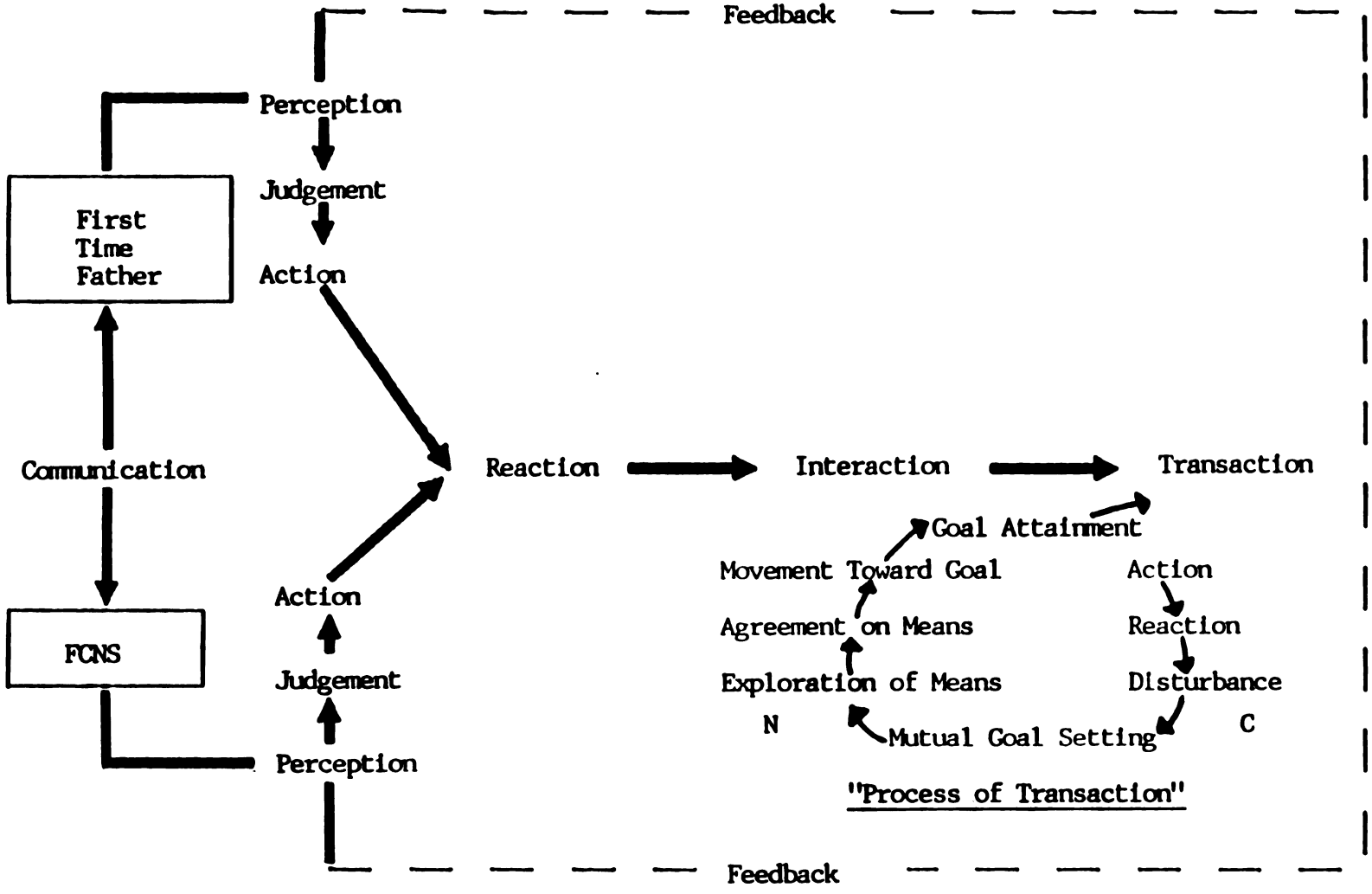
-Figure 4-
The Process of Human Interaction
From King (1981). A Theory for Nursing

Transaction occurs when the mutually agreed upon goal is attained (King, 1981).

King (1981) utilizes the concepts of interaction, perception, communication, transaction, role, stress, and growth and development in her theory of goal attainment. This theory is based on King's assumption that "...the focus of nursing is human beings interacting with their environment to achieve a state of health, which is the ability to function in social roles" (p.143). An outcome, a state of health, is presented as the goal for nursing. The theory of goal attainment is essentially a refinement of her earlier formulation of nursing process in which nurse-patient interactions are viewed in terms of outcomes or goals to be attained (Fitzpatrick & Whall, 1983).

Elements in nurse-patient interactions, or behaviors that lead to transactions, are depicted in Figure 5. These elements include:

1. Action: one member of the nurse-patient dyad initiates behavior
2. Reaction: other responds with behavior
3. Disturbance: problem noted if state or condition is identified
4. Mutual goal setting: goal agreed upon
5. Explore means to achieve goal
6. Agree on means and move toward goal
7. Transaction: goal is attained



-Figure 5-
Theory of Goal Attainment
Adapted from King (1981). A Theoretical Model For Nursing

Variables that facilitate goal attainment are accurate perceptions of both nurse and client, adequate communication, and mutual goal setting (King, 1981).

Relationship of Model to Study Variables and to Advanced Nursing Practice

Although the client in King's (1981) conceptual model is an individual, she states that the principles can be applied to families as clients. Problems relating to the marital relationship are within the family systems framework and require a systems approach. However, for the sake of clarity and simplicity, the application of King's model to advanced nursing practice as presented here will be focused primarily on the father.

The birth of the first child alters the first-time father's personal, interpersonal, and social systems. Within the personal system, the father's concept of self may be altered as he is suddenly required to adopt a new role, accomplish new family developmental tasks, and deal with possible changes in his relationship with his spouse. As the first-time father acquires new roles, responsibilities, and status, the interpersonal systems in which the father functions will also be affected. These interpersonal systems include the marital dyad, the

parent-infant dyad, the new family triad, and the health care professional-client dyad.

The birth of a child constitutes change in the father's external environment or social system as he interacts with new people and institutions in the community. Because becoming a father for the first time requires a new role, the father's internal environment may be stressed as well. These stresses will influence the father's health, which is a function of his continuous adjustment to environmental stressors and his ability to function in social roles.

As part of the father's social system, the clinical nurse specialist establishes an interpersonal relationship with the first-time father. Within this interpersonal system, nurse-client interactions lead to goal attainment, or the promotion and maintenance of health, which is the ability to function in social roles (King, 1981).

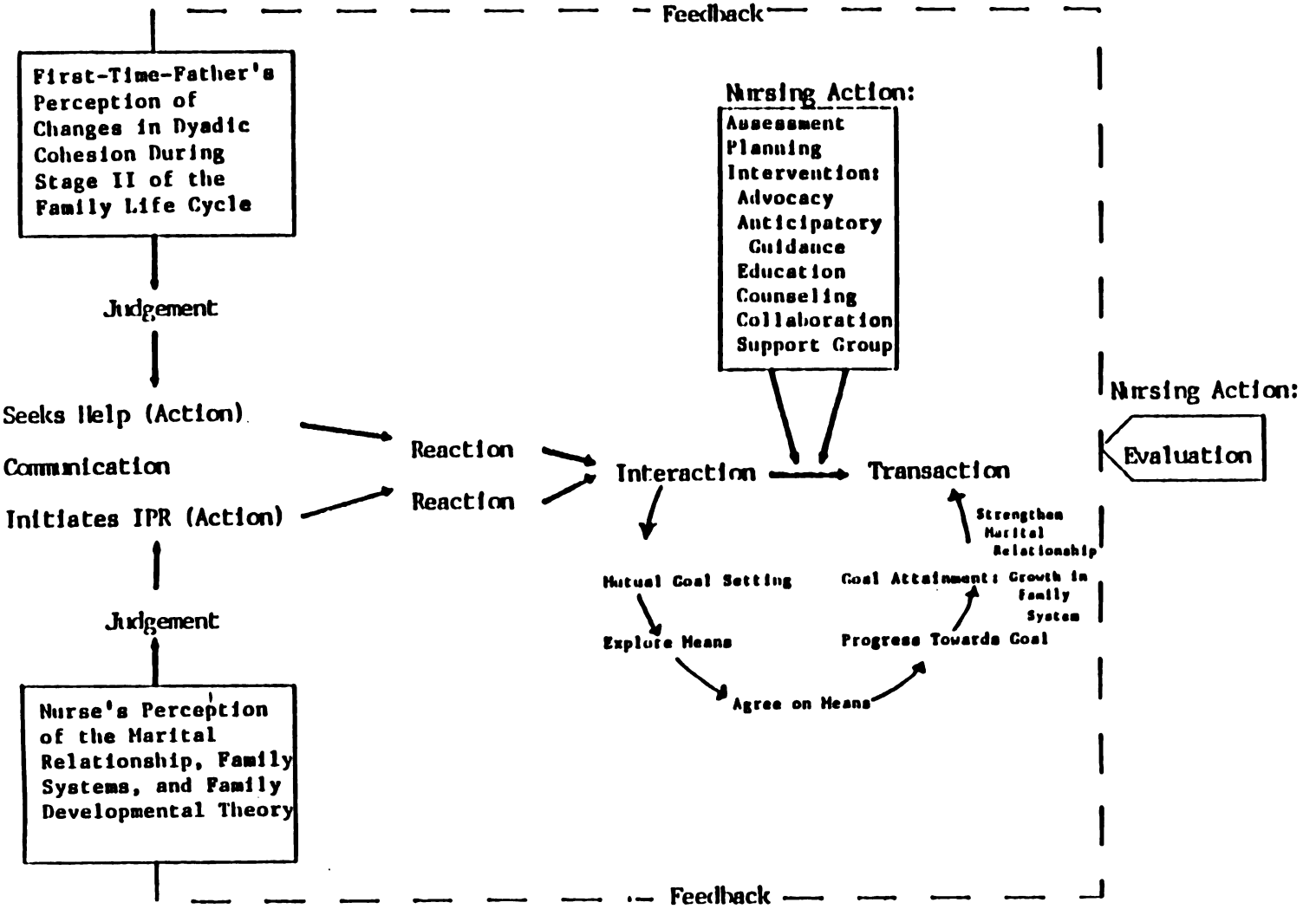
In facing the family developmental task of incorporating the first-born into the family system, the first-time father may perceive changes in the marital relationship as a result of the infant's birth. He may seek help from the health care system. The family clinical nurse specialist (FCNS) and the first-time father are each unique individuals who will react and interact with others on the basis of their own unique perceptions. These perceptions are subjective, personal, and selective, and

they are influenced by the individual's background of experiences, knowledge, needs, values, and personal growth and development. The FCNS's knowledge of systems and family developmental theory will influence her perception of changes that occur in a marital relationship after the birth of an infant, and that knowledge will be valuable in her role as assessor. The first-time father may perceive the family situation from a different perspective and with a more limited knowledge base, and he may react differently to changes in the marital relationship.

As the first-time father and the FCNS in her role as clinician come together in a nursing situation, a process of interaction begins. It is through this interpersonal process, or through the relationship established between FCNS and client, that growth, change, personal development, and goal attainment take place.

As the FCNS and first-time father interact, each share information about their perceptions of the situation. Accuracy of perception is essential for the CNS as assessor, since it is the basis for gathering and interpreting client information and making nursing assessments. The FCNS's knowledge of communication processes and skills in communicating will enhance accuracy of perceptions.

A model of interaction incorporating the concepts of this study is illustrated in Figure 6. As the marital



-Figure 6-
Clinical Application of Model
Adapted from King (1981). A Theoretical Model For Nursing.

couple strive to accomplish the family developmental tasks of the childbearing state, the first-time father may perceive change and stress within the family system, including changes in cohesion in the marital subsystem. He may make the judgement that help or support is needed, and he may act by seeking help. In communicating with the client, the FCNS assesses the father's perceptions of his needs, forms a perception of the first-time father and of the family based on her knowledge of transition to parenthood, and makes tentative judgements regarding the marital relationship. The FCNS then acts by taking the initiative to establish an interpersonal relationship with the father, focusing on his concerns, welfare, and needs. Both father and FCNS perceive, judge, act, and then react to one another. The client is perceived as being in need of assistance in dealing with environmental stressors, and the FCNS is perceived as sincere, competent, and in a position to help.

In the father's action to seek help, he may identify the infant as a factor influencing changes in the marital relationship. The infant's birth may have resulted in stressors, including alterations in lifestyle, role changes, and new responsibilities and obligations, all of which may be affecting the couple's relationship. The first-time father may verbalize positive or negative changes in the marital relationship in terms of dyadic

cohesion. Perceptions are influenced by each individual's unique past, present experiences, and frame of reference. Thus modifying factors such as father's age, occupation, income, education, health of family, length of marriage, and father participation in childbirth may affect the father's perception of changes that may have occurred.

Since a family life event such as the birth of the first child may result in changes in marital cohesion, the first-time father may act by communicating his concerns regarding changes in the sexual relationship. The FCNS reacts or responds, and a disturbance or potential problem is identified. The FCNS makes the diagnosis of Alteration in Family Processes related to the birth of a child. Through purposeful communication, the CNS and first-time father mutually identify goals, problems, and concerns. The outcome or goal for the first-time father may be to minimize the disruption, difficulty, or change in the sexual relationship and to alleviate the anxiety associated with the change. The CNS and client collaborate as they explore means to achieve the goal. The CNS as planner identifies and suggests interventions that may lead to goal attainment.

Once the CNS and client agree on means to achieve the goal, they move toward transaction. Transaction occurs when the first-time father identifies goal attainment or progress toward accomplishment of the family developmental

task of integrating the new member. The identification of goal attainment requires evaluation and feedback on the part of the first-time father as well as the CNS. This process of goal attainment is depicted within the interaction model illustrated in Figure 6.

Nursing interventions that lead to goal attainment can be directed toward enhancing dyadic cohesion. The FCNS as counselor can assist the client to define and solve problems by acknowledging and validating concerns regarding the marital relationship. The first-time father can be assisted to verbalize his feelings and anxieties, assess behavioral responses or coping mechanisms that have been effective in the past, and support and guide the first-time father in the problem-solving process. If the FCNS determines that serious marital problems exist, the couple can be referred; the FCNS would function as collaborator in working with a family therapist. The FCNS can also establish and facilitate parent support groups in which new parents can share concerns and solutions to problems.

Often changes in dyadic cohesion ("no time to do things together, decreased interest in sex") can cause anxieties and problems which can be alleviated by client education. The FCNS as educator can provide accurate information, for example, about female post-partum physical and hormonal changes, as well as suggestions for solutions to associated problems in the sexual relationship. Role

modeling as well as teaching principles of effective communication skills can help alleviate misunderstandings and enhance dyadic cohesion.

Finally, the traditional focus in perinatal care has been on the mother-child dyad. Since the father is often the "forgotten" member of the family, the FCNS can function as advocate for the father as she encourages him to be present in post-partum visits, focuses on his needs and concerns, and encourages him to participate in post-partum support groups.

Chapter Summary

In summary, the FCNS, in applying family systems theory, examines the marital subsystem as it moves through the stages of the family developmental life cycle. Perceptions of changes in dyadic cohesion experienced by the first-time-father are relevant to evaluate. Dyadic cohesion within the marital subsystem enhances the adaptive resources of the entire family system and facilitates the accomplishment of changing family developmental tasks. The FCNS provides interventions which support and strengthen cohesion, thus fostering growth in the family system.

King (1981) places value on the client as an individual who is capable of actively participating in his own health care. Applying King's conceptual model, the

FCNS can foster the unique potential of the first-time father. The FCNS interacts with the father to communicate information, mutually define problems and goals, take action, and evaluate and validate the attainment of health care goals. Through a goal-oriented, interpersonal relationship with the FCNS, the first-time father can be assisted toward active participation in achieving maximum potential in his roles as husband and father.

CHAPTER III

REVIEW OF THE LITERATURE

Introduction

This chapter includes a discussion of major research findings related to the concepts under investigation, along with an examination of strengths and weaknesses of the studies. The literature review begins with an examination of early studies related to the transition to parenthood, and is followed by a review of research focusing specifically on changes in the marital relationship following the birth of an infant. Finally, a review of studies relating more specifically to changes in those aspects of the marital relationship which pertain to dyadic cohesion is presented. Modifying factors which might affect research findings are addressed.

Early Research on the Transition to Parenthood

In early studies of the family, researchers examined the birth of an infant in terms of its crisis potential.

Based on Hill's (1949) concept that accession, or adding a family member, would constitute a change for which old patterns would be inadequate, LeMasters (1957) conducted the first study of parenthood as a "crisis". LeMasters interviewed 46 married, middle class couples between the ages of 25 and 35 years who had a child born within the past five years. Each couple rated their experiences related to the transition to parenthood from "no crisis" to "severe crisis" on a five-point scale. Eighty-three percent of the couples reported a severe crisis in adjusting to the birth of their first child.

LeMasters (1957) hypothesized that a first child would force reorganization within the marital relationship, calling for new roles, responsibilities, values, and need fulfillment. This reorganization required adjustments which constituted a crisis. According to LeMaster's findings, stability of marriage was not a predisposing factor in adjustment difficulty. LeMasters also found that the couples reporting crisis did not feel adequately prepared for parental roles and had romanticized parenthood. LeMasters found support, then, for the hypothesis that the transition to parenthood was a crisis that created changes in roles, values, responsibilities, and need fulfillment within the marital relationship. The changes in the marital relationship identified by first-time-fathers in LeMaster's study included a decline

in sexual response of the wife and interference with the couple's social life.

The sample used in LeMaster's (1957) study was non-random, limiting the generalizability of the results. Another limitation of the study was that couples were interviewed together, which may have influenced the honesty of the responses regarding perceived changes within the marital relationship. Frequency distribution of crisis scores by age of either parents or children were not given. Ages of the children ranged from one to five years; the longer time frame may have influenced the accuracy of recall. Different ages and developmental levels may have also influenced perception of the extent of crisis. Furthermore, the study is thirty years old, and significant changes in childbearing and parenting attitudes and practices have occurred. In summary, LeMasters found that perceived changes in the marital relationship following the birth of a first child were considered a crisis by first-time parents.

Dyer (1963) patterned a study after LeMaster's (1957) study in which he investigated whether the birth of the first child constituted a crisis and if so, how the crisis manifested itself. The methodology differed from LeMaster's in that Dyer administered separate questionnaires to the couples, whereas LeMasters interviewed the couples personally. Dyer also included

socio-demographic questions in his study to determine if there was a relationship between those variables and marital adjustment. Criteria for inclusion in Dyer's study were similar to LeMaster's sample except that the age of the child was limited to two years or younger.

Dyer (1963) utilized a convenience sample of thirty-two urban and/or suburban middle class couples ages 35 or under. Wives were not employed after the birth of the child. A Likert scale was devised to measure the extent to which the arrival of the first child constituted a crisis. Items measured included division of labor, authority, companionship, finances, homemaking, social life, child care, husband/wife mobility and freedom, health, and extra-family interests and activities. The average of the summed items scored for both husband and wife constituted the crisis score. The scores were then used to indicate the position of the family on a five point continuum similar to that used by LeMasters: (1) no crisis, (2) slight crisis, (3) moderate crisis, (4) extensive crisis, and (5) severe crisis.

Reliability of the scales in Dyer's (1963) study was reported to be .94. Validity was assessed using the jury opinion method with six married couples who had one or more children. The strength of the marriage prior to the baby's birth was rated from excellent to poor on the basis of a series of questions. A comparison of family organization

scores and crisis scores suggested that those couple's whose marriages were stronger and who had more resources to draw on experienced less crisis.

Severe crisis was experienced by 53% of Dyer's (1963) sample and 38% experienced moderate crisis. Problems reported by the new fathers, in order of frequency, included: (1) loss of sleep up to six weeks; (2) adjusting to new responsibilities and routines; (3) upset schedules and routines; (4) ignorance of the time and work the infant would require; (5) financial worries and adjustments. Negative relationships ($p < 0.05$) were found between crisis and marital adjustment, marriage preparation courses, length of marriage, education of husband but not of wife, planned parenthood, and age of the child. In summary, on the basis of these findings, Dyer found support for LeMaster's claim that the birth of the first child constituted a crisis event. A strength of this study lies in the fact that the researcher used separate questionnaires for each spouse to measure personal perceptions and to exclude the possibility of spouse influence.

Hobbs (1965) conducted a study to learn if earlier findings using middle class couples (LeMasters, 1957; Dyer, 1963) would generalize to a probability sample of first-time parents. Hobbs also searched for socio-demographic variables which might predict those

couples who would have difficulty adapting to parenthood. Using a random sample of white, urban, first-time parents whose infants were between three and eighteen weeks old, Hobbs administered an objectively scored checklist of 23 items that indexed the extent of crisis associated with the birth of the first child. Subjects indicated the degree to which they were "bothered" by a particular item using a three-point scale ranging from "none" to "somewhat" to "very much". The instrument yielded a split half reliability coefficient of .62 for each sex.

Hobb's (1965) data analysis demonstrated findings which contrasted sharply with those of previous studies. While LeMasters reported 83% and Dyer reported 53% in the "extensive to severe" crisis categories, none of the couples in Hobb's study scored in those categories. Hobbs identified 86% of the couples in the "slight" crisis category. Fathers indicated they were "somewhat or very much bothered" by only two items: interruption of routine habits and increased money problems.

In order to determine variables which might predict crisis, Hobbs (1965) investigated fourteen extraneous variables. Only three variables indicated distributions that departed from chance distribution to a statistically significant degree at the .05 level. Fathers demonstrated a negative correlation between income and crisis ($p < .01$), a positive correlation between infants who were ill and

crisis ($p < .05$), and, a positive correlation between age of baby and level of crisis ($p < .01$). Ninety-one percent of the fathers indicated that their marriages were more happy and satisfying than before the baby's birth.

Other changes identified by fathers in Hobb's (1965) study included decreased social contacts and decreased sexual responsiveness of wife. Hobb's findings diverged sharply from those of LeMasters (1957) and Dyer (1963), both in the degree of crisis experienced by the couples, and with regard to variables differentiating couples with little difficulty from those with greater difficulty. The search for variables predictive of crisis resulted in only one: family income. The coefficient between income and crisis was -.37, statistically significant at the .01 level of confidence. There was a negative correlation between family income and crisis.

Utilizing the checklist developed by Hobbs (1965), Russell (1974) reported results which supported the hypothesis that adjustment to the first child was not a severe crisis. Data from a random sample of urban couples, including working-class as well as middle-class parents, whose babies were in their first year, indicated that 95.2% of the fathers experienced no more than moderate difficulty in adjusting to the first child. Russell also included an eleven-item gratification checklist to measure what parents enjoyed about the first child. Subjects checked a higher

proportion of "gratification" items than "crisis" items, although the gratifications were of a personal nature rather than benefits to the marital relationship. Over 85% of the subjects indicated that the marital relationship had improved (42%) or remained the same (43.5%). Only 5% of the men felt that their marital relationship had declined since the baby's birth.

Of the 28 independent variables tested in Russell's (1974) study, two demonstrated significantly positive relationships to husbands' crisis scores. These are conceiving before marriage and "active" baby temperament. Four variables were significantly negatively correlated with crisis scores: levels of marital adjustment, an improved marital relationship since baby's birth, age of father, and level of role of "father" in his hierarchy of identities. Preparation for parenthood through classes, wanting more children, and placing "father" high on a hierarchy of identities were positively correlated with gratification among fathers. Education was inversely related to gratification for men.

Strengths of Russell's (1974) study included use of a large random sample of both lower and middle-class couples, and follow-up on non-respondents. Russell was the first researcher to investigate and report the gratifications as well as the problems associated with the transition to

parenthood. However, the gratification instrument, while yielding interesting results, was limited to face validity.

To sum, in early studies of the family, researchers globally examined the effects of the birth of an infant and described the event as a crisis (LeMasters, 1957; Dyer, 1963). However, the results of further research led later investigators to conclude that this family life event constituted a transition rather than a crisis (Hobbs, 1965; Russell, 1974). Researchers more recently have narrowed their focus and have examined childbirth specifically in terms of its effect on the marital dyad. Research pertaining to changes in the marital relationship following the birth of an infant will be reviewed in the following section.

Research Pertaining to Changes in the Marital Relationship Following the Birth of an Infant

Research conducted in more recent years on the effects of childbearing on the marital relationship has continued to yield conflicting results. Waldron and Routh (1981) investigated marital adjustment before and after the birth of the first child. Forty-six upper middle class urban couples expecting their first child completed the Locke-Wallace Marital Adjustment Scale during the last

trimester of pregnancy and again six-to-eight weeks after the birth of the infant. Spouses filled out the questionnaire independently. No information was included on the reliability or validity of the instrument.

Changes in the Locke-Wallace Marital Adjustment Scale for men and for women were analyzed using t-tests for paired measures. Wives' ratings of marital adjustment decreased from a mean of 126.00 to a mean of 119.61, a statistically significant change ($t(44) = 3.52$, $p < .001$). Husbands' mean scores decreased from 121.52 at pre-test to 118.59 at post-test; the change was not statistically significant. Although separate items measuring marital adjustment were analyzed only for the wives, the researchers found a significant decrease in the rating for "overall happiness" or satisfaction.

Waldron and Routh (1981) concluded that while wives' ratings of marital adjustment decreased significantly after the birth of the first child, husbands' ratings did not. A limitation of this study is that the researchers did not control for the effects of re-testing on the Locke-Wallace Scale. A small convenience sample was used, and the majority of the couples studied had participated in Lamaze classes. It is possible that there is some difference between couples who participate in childbirth preparation and those who do not. Thus the generalizability of the findings is limited. Furthermore, the six-to-eight-week

follow up period used in the study might not have been adequate to assess the full impact of the birth of the first child on the couple's marriage.

Karber (1985) conducted a descriptive study of adult first-time fathers to identify perceived changes within the marital relationship three to five months following the birth of an infant. Perceived changes were measured using an adaptation of Spanier's (1976) Dyadic Adjustment Scale (DAS). The 32-item self-administered DAS measured changes in dyadic cohesion, dyadic satisfaction, dyadic consensus, and affectional expression. The direction of perceived changes following the infant's birth was identified using a five-point Likert scale.

Karber's (1985) convenience sample included 66 first-time fathers 18 to 36 years of age. Data were analyzed using Pearson Product Moment Correlations, t-tests, and descriptive statistics. Karber found significant positive changes ($p<.05$) in the marital relationship three to five months following the birth of the infant in the areas of dyadic cohesion, dyadic satisfaction, and dyadic consensus. She found no significant change in affectional expression. Karber's investigation was limited by the use of a convenience sample, which limits the generalizability of the results, and by the fact that fathers were asked to recall the degree of prenatal marital satisfaction postnatally.

Postnatal recall may have been influenced by confounding variables such as current satisfaction with the marital relationship as well as current levels of self-esteem and role fulfillment.

Tomlinson (1987) conducted a study to determine if the birth of the first child had a significant impact on the marital relationship and to determine whether sex role attitudes, marital equity, father involvement, and infant temperament influenced marital adjustment. She used a convenience sample of 96 predominantly white, middle-class couples whom she tested in the last trimester of pregnancy and again three months after the birth of the first child. Variables measured in the pre-test included marital adjustment as measured by Spanier's (1976) Dyadic Adjustment Scale (DAS), equity, father involvement, and infant temperament. Cronbach alpha coefficients for both males and females (pre and post-test) ranged from .85 to .88 on the DAS. Post-test measures included the DAS and the equity scale.

Scores on the DAS showed declines in marital satisfaction for the total scale and for each of the subscales for both men and women. The repeated measures analysis of variance done on the total scale showed a significant main effect for time, $F(1,118)=25.38$, $p<.001$, but no main effect for sex ($F=2.20$) and no interaction between sex and time ($F=1.46$). Affectionate Expression and

Cohesion subscales appeared to be more important factors in the downward shift in marital satisfaction than declines in the other domains. Of all the variables studied, the researchers found that pre-birth marital satisfaction was the most powerful predictor of post-birth satisfaction.

Tomlinson (1987), like Russell (1974), found little evidence that transition to parenthood had a severe impact on marriage for the majority of subjects. Despite statistically significant marital satisfaction declines, mean scores of post-birth marital satisfaction were well above the marital dysfunction level suggested by Spanier (1976). Although the investigator found support for previous research relative to the consistent change in marital relationship for the group as a whole, the results were not consistent with other investigator's conclusions that wives experience greater decline in marital satisfaction than their husbands (Rossi, 1977; Russell, 1974; Waldron & Routh, 1981).

In summary, results of research on the transition to parenthood have been inconclusive and sometimes divergent. Furthermore, early investigators did not specifically address the marital relationship, but rather examined a variety of aspects of family life when measuring crisis LeMasters, 1959; Dyer, 1963). Later researchers (Russell, 1974; Waldron & Routh, 1981) began to single out the

marital relationship when studying the effects of childbearing on the family.

While LeMasters (1957) and Dyer (1963) reported findings which indicated that first-time parents experience moderate to severe crisis, Hobbs (1965) and Russell (1974) concluded that there was only a slight to moderate degree of crisis associated with the birth of the first child. Hobbs (1965) seriously questioned the appropriateness of a "crisis" label. Russell (1974) reported that the majority of subjects indicated that their marital relationship had either improved since the birth of the baby or had remained the same. Only 5.5% of men felt their marital relationship had deteriorated since the birth.

More recent research results have also yielded divergent findings. Karber (1985) reported significant positive changes in fathers' perceptions of the marital relationship following the transition to parenthood. Waldron and Routh (1981) concluded there was no significant change in fathers' perceptions of the marital relationship following the birth of an infant. Tomlinson (1987), on the other hand, found that both parents experienced a significant decline in the marital relationship after the birth of the first child.

The transition to parenthood studies reviewed were retrospective in design, with the exception of Tomlinson's (1987) and Waldron and Routh's (1981) work. Retrospective

designs required subjects to recall perceived changes that occurred within a wide range of time, spanning from birth to five years. Accuracy of recall may have been influenced by the passage of time and other confounding variables such as current status of the marriage. Although the infant's age may have influenced the degree of crisis or stress, some researchers (LeMasters, 1957) combined ages (infant through pre-school) when analyzing data, making it difficult to identify changes in the marital relationship specific to infant age. Lower crisis scores were reported for parents with infants under one year of age.

Differences in results may have also been due to methods used to collect data. Hobbs (1965) found that the interview method resulted in higher crisis scores than the checklist method. Differences in samples may also have contributed to discrepancies in findings. Studies limited to middle-class subjects (LeMasters, 1957; Dyer, 1963) classified up to 80% of the respondents in the severe crisis category. Due to the methods of sampling, findings were not generalizable to the larger population. Hobb's (1965) more representative sample, which included a large percentage of working-class parents, contained no cases of severe crisis. Some of the differences in degree of crisis, then, may have been explained in terms of the social class of the subjects.

Despite discrepancies in findings and despite

limitations of some of the studies reviewed, there is general consensus in the literature supporting the idea that the addition of the first-born child to the family system heralds a transition which is marked by change, including change in the marital relationship. The marital relationship is defined as a dynamic affiliation characterized by feelings and/or interactions between individuals who are legally married and living together.

Based on a review of the literature regarding the many components that make up the concept marital relationship, one component, dyadic cohesion, was selected to study. In the following section, research on the transition to parenthood as it pertains to changes in dyadic cohesion will be reviewed.

Studies Relating to Changes in Dyadic Cohesion in the Childbearing Family

There is a paucity of research pertaining to dyadic cohesion as a distinct, clearly defined dimension of the marital relationship. For the purposes of this study, dyadic cohesion has been defined in terms of both integrative activities and affectional bonds. Karber (1985) and Tomlinson (1987), in research previously reviewed in this chapter, utilized Spanier's (1976) Dyadic Adjustment Scale, which purported to measure cohesion and

affectional expression as separate subscales. Items which tap integrative activities and affectional bonds have been included in instruments used in several other studies as well. These studies will be reviewed in the following section.

A study was conducted by Wente and Crockenberg (1976) to determine the extent to which first-time fathers were bothered by perceived changes in the marital relationship, and to determine whether reported adjustment difficulty was related to the age of the baby when the data were collected. A convenience sample consisting of 46 Caucasian men ranging in age from 21 to 37 years of age with a median income of $10,000 to $15,000 per year was utilized. The sample was divided into matched groups by age of baby (0-3 months and 4-7 months) and by Lamaze or non-Lamaze class attendance. Change in routines experienced during the first three months and marital adjustment difficulty were measured by a questionnaire with a seven-point scale ranging from "no change" to "severe change". The questionnaire also included 17 items of possible adjustment difficulty to be rated on a seven-point scale ranging from "not bothered at all" to "severely bothered". Fathers in the 0-3 month group rated their present experiences; fathers in the 4-7 month group were asked to remember the first three months as they answered the questionnaire items. Pearson product moment correlations measured the

relationship of individual questionnaire items to total adjustment score and perceived change scores.

Wente and Crockenberg (1976) found that those items which dealt most directly with mutual engagement in activities, or cohesion, in the husband-wife relationship all correlated highly ($p < .001$) with total adjustment scores. These items included "wife has less time for me"; we have less time for each other"; "not enough time for family"; and "change in established relationship with wife". Fathers reporting more difficulty in the marital relationship had higher degrees of adjustment difficulty. Likewise, difficulty in the marital relationship also correlated significantly with perceived change scores. A series of t-tests was used to determine that fathers of 4-7 month old infants did not report greater adjustment difficulties when asked to reflect on earlier experiences than fathers of 0-3 month old infants. Fathers of 4-7 month old infants were more bothered by their wives having less time for them than were fathers of 0-3 month old infants ($t=2.48$; $p < .05$). No fathers in the 0-3 month group reported having been bothered to a severe degree, while 20% of the fathers in the 4-7 month group indicated severe difficulty with "wife having less time for me".

The findings of Wente's and Crockenberg's (1976) study support the hypothesis that reported disruption in the marital relationship is related to perceived difficulty in

the transition to fatherhood. The researchers also found that in the area of husband-wife relationships pertaining to mutual interaction, companionship, and mutual engagement in activities, or dyadic cohesion, adjustment difficulty was greater with the passage of time.

Belsky, Rovine, and Spanier (1983) conducted a study to determine how the addition of a first-born or later-born child affected the marital relationship. A multi-method strategy was used, assessing overall marital quality or adjustment, marital functioning (division of labor, joint leisure activities), and observed at-home interaction between spouses. It was hypothesized that overall marital quality would decline following the birth of a child. The researchers used a convenience sample of 72 predominantly middle-class, Caucasian couples, 41 bearing their first child and 31 bearing a later-born child. Fifty-six percent of the infants were planned; 44% of the infants were unplanned or could not be classified either way.

Belsky et al. (1983) studied each couple at several points in time: in the third trimester of pregnancy, and at one, three, and nine-months postpartum. A variety of methods was used at different points in time, including in-home researcher observation, questionnaires, and interviews. The researchers reported poor to acceptable reliability (Cronbach's alpha ranging from .50 to .64) on the various subscales of the researcher-designed marital

interview questionnaire. The engagement scale used for in-home observations had an alpha coefficient of .90. The several measures of the marital relationship used in this study were subjected to multivariate and univariate analysis of variance to determine how marital functioning changed. Correlational analysis was used to assess the extent to which individual spouses and couples maintained their relative rank across measurement periods.

Belsky et al. (1983) found a small but significant decline in self-reported marital adjustment across the period studied. Scores on items which pertained to cohesion, such as partnership, increased linearly over time; romance scores displayed a correspondingly linear decline, though the change was not statistically significant. Frequency of joint leisure activities declined. As expected, the overall quality of the marital relationship was lower for couples rearing more than one child. Finally, individual spouses and couples tended to maintain stability of individual differences; that is, they tended to maintain their relative ranking across measurement periods. With only poor to acceptable reliabilities reported on the marital interview questionnaire, however, the results of the study must be interpreted cautiously.

Strengths of the Belsky et al. (1983) study included the variety of measurement instruments and strategies used,

and the longitudinal design. In summary, the results of the study showed a modest but significant decline in partnership, joint leisure, and romance in the marital relationship after birth. However, due to the method of sampling, the findings were not considered representative of the general population.

Meyerowitz and Feldman (1966) studied the marital relationships of 400 primiparous couples from several different geographical areas of the United States. Data were collected at five months before delivery, at five weeks after delivery, and at five months after delivery. The researchers provided no information on instruments or methodology in this research report which simply summarized the findings. Five months before delivery, couples recalled having had a more positive marital relationship before than during pregnancy. The decline was significantly more pronounced for men than for women. Both spouses reported satisfaction with marriage to be slightly higher at five weeks post-partum than during pregnancy. At five months post-partum, marital satisfaction was reported to be higher than at pre-pregnancy. However, both spouses anticipated a steady decline in marital satisfaction.

The dimensions of the marital relationship examined by Meyerowitz and Feldman (1966) included measures of the frequency of "integrative" experiences such as laughing together and having a good time together. When the child

was one month old, an increase in these integrative experiences was reported. However, inability to express feelings, inability to discuss husband's work, and unshared leisure time increased as sources of complaints. At five months, increases were noted in spouses talking about problems openly and working at something together. In summary, Meyerowitz and Feldman (1966) reported marital cohesion to be slightly higher at five weeks and five months post-partum than during pregnancy. Dyadic cohesion was measured in terms of time available for each other, joint leisure activities, companionship, partnership, and interaction.

Karber (1985), in a study previously outlined in this review, measured first-time-fathers' perceived changes in dyadic cohesion three to five months after childbirth. Karber used an adaptation of Spanier's (1976) Dyadic Adjustment Scale (DAS) to measure perceived changes in four dimensions of the marital relationship. Karber defined dyadic cohesion as the mutual engagement in activities such as laughing, discussions, working together on a project, or joining together in outside interests. The researcher found significant positive changes in dyadic cohesion ($p < .05$). A limitation of Karber's study was the reported failure of the DAS to measure four separate constructs or dimensions of the marital relationship. The tool instead measured one dimension, overall marital adjustment. Thus

the results regarding changes in dyadic cohesion are called into question.

Moore (1983) investigated marital satisfaction, including changes in levels of cohesion, in 105 predominantly Caucasian, middle to upper-class, college-educated couples enrolled in two types of childbirth education classes. Marital satisfaction was measured using a 45-item Interpersonal Conflict Scale (IPC) designed to measure degrees of fulfillment of both emotional and interactional needs. Factors measured on the emotional subscale included security, recognition, and emotional satisfaction. The interactional subscale measured aspects of cohesion including agreement in thinking, communication, perception of the other's feelings, and companionship behavior. Cronbach's alpha reliability of the IPC was reported to be between .80 to .95.

Moore (1983) hypothesized that couples prepared by Lamaze classes experienced higher levels of marital cohesion than couples prepared by hospital classes. Couples were tested during the second trimester of pregnancy (API), the third trimester (APII), and at 3-21 days postpartum (PP). Moore found no significant difference in fulfillment of emotional and interactional needs between couples prepared by Lamaze and hospital-prepared couples. Regardless of type of

childbirth preparation, there was an improvement in level of marital cohesion on both the interactional and emotional subscales from API to APII to PP.

Moore (1983) found no correlation between couples' interpersonal conflict scores and male and female years of education, age, socioeconomic status, length of labor, medication in labor, and choice of rooming-in. While the results of this study demonstrated an increase in level of marital cohesion from mid-pregnancy to early postpartum, the time period was limited to observing the marital relationship only up until the third week postpartum, which includes the baby honeymoon period. The researcher also compared two very similar groups.

Wandersman (1980) used a convenience sample of forty-seven first-time fathers from Lamaze classes to study, among other variables, the marital relationship at various points following the birth of the first child. Among the measures of the marital dyad were Spanier's (1976) Dyadic Adjustment Scale (DAS) and the Positive and Negative Marital Interaction Scale (MI), which measured frequency of positive interaction (laugh together, have sex, work together on a project) and negative interaction (arguments, feel misunderstood). Dyadic adjustment measures were made at 2-3 months and at 9-10 months post-partum. Specific results on each subscale were not included in the research report. However, researchers

reported a small but significant decrease in overall dyadic adjustment as measured by the DAS and the MI ($p<.05$).

Twenty of the fathers in Wandersman's (1980) study attended Parenting Groups with their wives and infants (Parenting Group) while twenty-seven did not (Contrast Group). Participation in parenting groups did not radically change the pattern of marital adjustment for fathers. A strength of this study lies in the large variety of scales used to study father's feelings at three points in the first year after childbirth (two Self Measures, four Parent-Infant Dyad Measures, four Marital Dyad Measures, and two Social Network Measures).

Intimacy and affection, which include but are not limited to sexual expressions of love, are important aspects of cohesion which have been incorporated into this author's conceptual definition of dyadic cohesion. Both Menaghan (1983) and Ellis and Hewat (1985) examined changes in the affectional domain in their research. Menaghan used longitudinal data from two time points four years apart to examine the linkage between family transition and perceived equity and affection-fulfillment. The population of 639 urban adults ages 22 to 49 was classified into one of ten transitional and four stable (no family transition) groups. There were 259 stable and 380 transitional respondents. The ten transitional groups included those couples that had become parents for the first time.

Menaghan (1983) defined affectional expression as the extent of the spouse's love, affection, and appreciation, the extent to which the spouse is seen as enhancing the respondent's freedom to be the person he/she wants to be, and the extent to to which the respondent viewed the spouse as a good sexual partner. Items for both equity and affection scales were scored on a Likert scale. Cronbach's alpha reliability coefficients averaged .83 for the two scales and the two time points.

Menaghan (1983) reported no overall differences between transitional and stable groups in either equity or affection. A series of multiple regression equations were computed to assess the impact of multiple variables on perceived changes in equity and affection-fulfillment. The researcher reported that only transitions involving the last-born child's movement from toddler to school child, or from child-at-home to child-away were associated with perceived changes in the marital relationship. In summary, first-time parents were not significantly different from either childless or stable parents in their perceptions of affectional expression in the marital relationship. A strength of this study included the longitudinal design, the large sample, although no information was given about sample selection, and the use of comparison groups which eliminated the need for retrospective recall on the part of the respondents.

Ellis and Hewat (1985) designated sexual relations as a significant component of the marital relationship when they conducted a survey to determine womens' perceptions of changes in the marital relationship in the first six months post partum. Although father's perceptions were not measured directly, the results are pertinent to fathers and will be outlined briefly.

Ellis and Hewat (1985) used a convenience sample of ethnically diverse middle-class women, 51% of them primiparas. The subjects were given a 46-item researcher-developed questionnaire that focused on womens' perceptions of satisfaction with the marital relationship, relationship changes due to the infant's birth, extent of that change, changes in sexual interest, and the influence of breastfeeding on sexual enjoyment. Questionnaires were completed at one, three, and six months postpartum.

The majority of respondents in the Ellis and Hewat (1985) study indicated that at one, three, and six months postpartum, there was a positive change in the relationship with the baby's father. In the mother's perception, postpartum sexual interest in her partner declined considerably more than her partner's interest in the woman. The decline was attributed to fatigue and preoccupation with the infant. Breastfeeding was perceived by women to have no effect on the sexual relationship. Mothers indicated that their husbands' sexual enjoyment was most

negatively affected by decreased vaginal secretion and tender, leaking breasts.

In summary, Ellis and Hewat (1985) found that female perceptions of spousal relationships changed little after childbirth, although sexual interest of the women declined over six months. Limitations of the study include retrospective recall of prenatal marital satisfaction and unreported measures of reliability and validity of the researcher-developed instrument.

Other researchers previously reviewed (LeMasters, 1959; Belsky et al., 1983) have also reported declines in postpartum romance and sexual responsiveness of wives. Hobbs and Cole (1976), in a replication of a previous study, confirmed earlier findings that only slight amounts of difficulty in adjusting to the first child occurred. A random sample of predominantly white, urban couples completed a 23-item researcher-developed checklist designed to measure perceived difficulty in marital adjustment. When the researchers examined the most discriminating items on the index, they found that first-time-fathers reported a decrease on items in the affectional domain. A decrease in the sexual responsiveness of their wives was cited as the second most important adjustment concern after the birth of the first child.

In summary, researchers have reached different conclusions regarding postpartum changes in those aspects

of the marital relationship which pertain to dyadic cohesion. Wente and Crockenberg (1976) and Belsky et al. (1983) reported declining dyadic cohesion, whereas Meyerowitz and Feldman (1966) and Karber (1985) reported increases in measures of dyadic cohesion. Although Menaghan (1983) reported no change in terms of affectional expression and sexual interaction, Ellis and Hewat (1985), Belsky et al. (1983), LeMasters (1957), and Hobbs and Cole (1976) reported postpartum decreases in wives' sexual response, partnership, and romance. For the purposes of this study, dyadic cohesion is defined as integrative, bonding experiences, including the mutual engagement in activities such as talking, problem solving, joint leisure, working together on a project, laughing together, confiding in spouse, and affectional bonds, such as engaging in satisfying sexual relations and the mutual expression of appreciation, love, and support. These components of dyadic cohesion have been examined in past research on changes in the marital relationship (Belsky et al., 1983; Hobbs & Cole, 1976; Karber, 1985; Menaghan, 1983; Meyerowitz & Feldman, 1966; Moore, 1983; Tomlinson, 1987; Wandersman, 1980; Wente & Crockenberg, 1976).

A review of the literature on the transition to parenthood has demonstrated that results of research have been inconclusive and sometimes divergent. While researchers report varying degrees and different directions

of changes in the marital relationship, there is evidence that change does take place. Research specifically addressing fathers' perceptions of the effects of a family life event such as the birth of the first child has been limited. Only three studies were found in which researchers specifically addressed fathers (Karber, 1985; Wandersman, 1980; Wente & Crockenberg, 1976). A broader knowledge base and understanding of fathers' perceptions of changes in the marital relationship is essential if health care providers are to provide family-centered care to childbearing families. Furthermore, the marital relationship has not been clearly or consistently defined in past research, and few researchers have examined specific dimensions of the marital relationship. Based on the literature review, therefore, support for this investigation is warranted.

Modifying Variables Potentially Affecting Perceptions of the Marital Relationship

This researcher has identified several modifying variables which may affect the first-time-father's perceptions of changes in dyadic cohesion following the birth of an infant. These variables include the age of both the father and the infant, infant temperament, family income, education of both spouses, number of years married,

normalcy of pregnancy, labor, and delivery, father's participation in childbirth classes and delivery, and employment of wife. Research pertaining to these variables will be addressed in the following section.

Age of the First-Time Father

No studies were found that specifically examined the effects of the father's age on perceptions of change in cohesion. However, researchers have reported divergent results in regard to the relationship between the father's age and the effect of the first child's birth on the marital family. Dyer (1963) and Hobbs (1965) found no significant relationship between parent's age and the crisis level experienced; in both studies, fathers were 35 years or younger. Hangsleben (1983), in a study of 50 first-time-fathers', found a negative correlation between fathers' age and marital adjustment which she measured just prior to the infant's birth. Younger first-time-fathers scored higher on marital adjustment than older first-time-fathers. The ages of the fathers ranged from 18 to 45 years of age, with a mean of 27.1 years. Hobbs and Cole (1976) reported a significant positive correlation between adjustment difficulty and the age of fathers ($p < .01$). Research findings are inconsistent regarding the relationship between the age of the father and perceived difficulties in the marital relationship. This study will

add to the knowledge base concerning the relationship of the age of the father and perceived changes in the marital relationship.

Age of the Infant

The age of the infant may be an important variable. Researchers who included fathers of infants under one year of age in their samples (Hobbs, 1965, 1968; Russell, 1974; Hobbs & Cole, 1976) obtained lower crisis scores than investigators who included a wider range of infant ages (LeMasters, 1957; Dyer, 1963). This implies a positive relationship between infant age and the level of difficulty experienced after the infant's birth. However, Hobbs (1968) and Russell (1974) failed to show any statistically significant relationship between adjustment difficulty and age of the infant at the time data were collected. Dyer found a negative relationship between age of infant and crisis ($p<.05$); couples who's child was under six months of age experienced more crisis and problems than those whose child was six months or older. In contrast, Hobbs (1965) found that fathers of older infants tended to report greater crisis than did fathers of younger infants.

Researchers have suggested the existence of a "baby honeymoon" period (Feldman, 1971; Lenz, Soeken, Rankin, & Fischman, 1985; Miller & Sollie, 1980; Wente & Crockenberg, 1976;) or a curvilinear relationship between infant age and

adjustment difficulty, with parents in the middle of the curve experiencing the greatest adjustment difficulty (Jacoby, 1969). The "baby honeymoon" refers to the initial period when new parents fail to experience or gloss over the difficulties associated with the transition to parenthood. After the first four to six weeks, the reality of parenthood sets in, the excitement and novelty of a new baby wears off, and perceived changes in the marital relationship may surface.

Tomlinson (1987) found that declines in affectionate expression were most marked in the first three months post-partum; only a slight change was reported from 3-9 months post-partum, leading the investigator to conclude that the greatest impact in this domain following the birth of an infant is felt early in the infant's life (under three months).

Such conflicting results from previous research make it difficult to determine if the age of the infant affects perceived changes in the marital relationship. Due to the hypothesized "baby honeymoon" effect, marital relationship changes will be measured three to five months post-partum.

Infant Temperament

Harriman (1983), in testing the relationship of several independent variables and perceived marital change scores in husbands after the birth of an infant, found no

correlation between infant temperament and perceived change. Tomlinson (1987) likewise reported that infant temperament appeared to have little effect on post-birth marital satisfaction. However, the researcher reported reliability problems with the Infant Behavior Questionnaire and thus recommended caution in interpreting these results. Russell (1974) found that men who reported very "active", noisy babies were more likely to report a high degree of crisis.

Hobbs (1965) found a positive correlation between infants who required more than routine care or who were ill and crisis ($p<.05$). Roberts (1983) hypothesized that the amount of obligatory infant behavior (behavior requiring action on the part of the parents) would be negatively related to ease of transition. Pearson correlation coefficients supported the hypothesized relationship. The amount of infant obligatory behavior was negatively correlated with ease of transition ($r=-.32$, $p<.004$). Several of these investigators have suggested a relationship between infant temperament and ease of transition, but only Roberts (1983) has examined the behavior of the infant as a major variable in the transition to parenthood. This researcher will include infant temperament in the assessment of modifying variables.

Family Income

Only a few of the researchers reviewed examined the relationship between family income and ease of transition to parenthood. Russell (1974) found no relationship between crisis scores associated with transition and level of family income. In contrast, Hobbs (1965) reported a negative correlation between income and crisis ($p<.01$), and Hobbs and Cole (1976) also found a negative correlation ($r=-.27$, $p<.05$) between parent income and perceived difficulty scores. This researcher will examine this variable as a factor influencing changes in the marital relationship.

Level of Education

Conflicting results have been reported by investigators regarding the relationship between level of education and the difficulty associated with adjusting to parenthood. Harriman (1983) found no relationship between parent education and marital change scores. Russell (1976) likewise found no relationship between these variables, although education was inversely and significantly related to gratification scores for both men and women. Hobbs and Cole (1976) also reported no relationship between parent education and level of difficulty adjusting to the birth of the first child. Dyer (1963) reported a significant negative correlation ($p<.05$) between level of education and

perceived difficulty. Husbands who were non-college graduates experienced greater crisis than husbands who had a college degree. Moore (1983) found no correlation between postpartum marital adjustment and years of education of either husband or wife. Level of education will be examined as an intervening variable in this investigation.

Number of Years Married

Length of time married has also been explored as a factor potentially influencing the transition to parenthood. Dyer (1963) found that couples married three years or less reported significantly more difficulty with the transition than did couples married longer ($p<.05$). Russell (1974) could not find a statistically significant relationship between the number of years married and the degree of crisis reported. However, he found that couples who conceived premaritally reported significantly greater adjustment difficulty than couples who conceived postmaritally ($p<.02$). Yet these findings were not consistent with earlier studies which indicated no correlation between length of time married (Hobbs & Cole, 1976; Russell, 1974) or premarital versus postmarital conception (Hobbs, 1965, 1968; Hobbs & Cole, 1976), and the difficulty of transition. Different methodologies were used by researchers who observed a relationship between the

study variables and researchers who observed no relationship. In the current study, the researcher will examine the number of years married in relation to perceived changes in the marital relationship following the birth of an infant.

Normalcy of Pregnancy, Labor and Delivery

There is very little research in the literature that relates to the effect of labor and/or delivery experiences on perceptions of changes in the marital relationship following the birth of an infant. Russell (1974) found that a problem-free pregnancy and normal labor and delivery were positively related to the ease of transition to parenthood. This researcher will examine this variable as a factor influencing perceived changes in the marital relationship.

Father's Participation in Childbirth Preparation Classes

Few studies were found in which fathers' participation in childbirth education classes was examined in relation to perceived postpartum changes in the marital relationship. Moore (1983) only compared couples who had participated in two different types of childbirth preparation rather than comparing prepared and non-prepared couples. Moore found that regardless of the type of childbirth preparation, there was a positive change in level of marital adjustment

from antepartum to one month postpartum. Although Wandersman (1980) did not examine differences between Lamaze and non-Lamaze prepared parents, she did compare levels of marital adjustment in fathers who had attended parenting education groups in the postpartum. Some preparation for parenting information is often included in childbirth preparation classes. Wandersman found that participation in parenting groups did not change the pattern of marital adjustment for fathers. This researcher will examine the influence of this variable on perceived change in the marital relationship.

Father's Presence in Delivery Room

No studies were found that examined the father's presence at delivery in terms of its effect on perceptions of changes in the marital relationship following childbirth. Thus the father's presence in the delivery room is a pertinent variable which will be assessed in the present study.

Employment of Wife

The final modifying variable, wife's employment after the birth of the first child, has been addressed by only one investigator reviewed by this researcher. Russell (1974) found no relationship between the wife's present or past employment and the perception of difficulty in

transition to parenthood. Dyer (1963) looked at employment of the wife only prior to the arrival of the child and found no significant relationship between crisis and wife's employment. The wife's postpartal employment was not addressed. This researcher will examine the relationship between this variable and perceived changes in the marital relationship.

Summary and Conclusions

In conclusion, the results of the research reviewed above leave few definitive answers. The "crisis" orientation and crisis measures of earler research have served the purpose of calling attention to the effects of childbirth on the family. Although researchers have reported divergent findings, there is general consensus in the literature to support the idea that the addition of the first-born child, while it probably does not constitute a "crisis", does herald a family transition which is marked by change, including change in the marital relationship.

Few researchers, and even fewer nurse researchers, have specifically addressed first-time-fathers' perceptions of the marital relationship. Since the multi-faceted nature of the concept marital relationship does not lend itself to ease of definition, researchers have not come to a common definition of the concept, and have measured a

wide variety of interrelated components. Researchers have also measured broad concepts such as global adjustment or satisfaction, rather than identifying and measuring specific dimensions of marital relationships. Data on specific dimensions of the marital relationship would help focus, facilitate, and direct nursing interventions most appropriate to the specific needs of the family in transition.

Many of the studies have been retrospective in design, ranging from birth to five years. Thus the accuracy of recalling perceived changes may have been influenced by the passage of time. The infant's age at the time of data collection has been overlooked in some of the earlier studies. LeMasters (1957), for example, gathered data up to five years post-partum but he failed to include infant's age as an independent variable. Parents with a five-year-old and parents of a newborn were tested on the same variables without differentiation, although there is evidence in the literature that the infant's age may influence marital relationship changes.

In some investigations of perceptions of relationship changes, couple-interviews have been conducted. The first-time-father may not have had an opportunity to share his perceptions, or he may not have shared honestly in the presence of his spouse. Previous researchers investigating marital relationship changes have not

assessed modifying variables such as normalcy of pregnancy, labor and delivery, father's participation in childbirth preparation or delivery, and post-partum employment of the wife.

There are several implications for future research from this literature review. There is a need for additional nursing research investigating fathers' perceptions of the effect of childbirth on the marital relationship. The original focus on mothers' reactions to the birth of the first child has very gradually given way to more interest in fathers (Clinton, 1985; Hangsleben, 1983; May, 1982), although paternal-infant bonding, father participation in childcare, depression, and lifestyle adjustment have been the foci of this research. Nursing research must continue to expand in this area. However, very little research has been done on fathers' perceptions of changes in specific aspects of the marital relationship. Health care providers must clearly understand fathers' experiences if family-centered care that promotes health and growth in the family system is to be provided.

Another implication for research from this literature review involves the need to limit retrospective studies and to expand longitudinal studies in order to strengthen the findings. Retrospective studies examining perceived changes in the marital relationship should limit the time range in order to minimize the influence of time on recall.

Criteria for subject inclusion should control for variables not under investigation that could potentially influence perceived changes. Future research should control the age of the infant at the time of measurement by limiting the sample to a specific age range. Modifying variables not previously investigated should be included in designs for research on perceived changes in the marital relationship.

In the present study, the researcher will control for variables not under investigation that could potentially influence perceived changes, such as re-marriage, prematurity, family health problems, and pre-marital conception. The sample will also be limited to a specific infant age range, which avoids a weakness of some of the previous studies. The subjects in the present study will be asked to fill out the questionnaire in private in order to avoid some of the problems with openness and honesty in previous research designs. Variables which have not been previously addressed, such as father participation in childbirth preparation and delivery and employment of wife, will be addressed in this study.

Normal life transitions, such as that of the transition to parenthood, are important foci for nursing research. The present investigation will contribute to nursing's body of knowledge by singling out an important factor in the marital relationship, dyadic cohesion, rather than taking a global measurement of marital adjustment,

which has been predominant in previous research. Dyadic cohesion is a factor which has significant implications for the family's ability to cope with stress (McCubbin & Thompson, 1987; McCubbin et al., 1986). Research pertaining to this specific dimension is crucial for developing guidelines for nursing interventions throughout the postpartal period and beyond.

In Chapter IV, the operational definition of the variables as well as the characteristics of the sample, the data collection and data analysis procedures and methods, and the instruments and scoring will be addressed. The research questions will also be addressed.

CHAPTER IV

METHODOLOGY

Overview

A descriptive study was designed to investigate fathers' perceived changes in the marital relationship three-to-five months after the birth of their first child. A researcher-developed instrument based on Spanier's (1976) Dyadic Adjustment Scale (DAS) and on Karber's (1985) modification of that scale was used to measure fathers' perceptions of changes in dyadic cohesion. Sociodemographic data were collected to describe the study sample.

In the following chapter, the research questions and the operational definitions of the variables are presented, along with a description of the sample, the procedure for data collection, instrumentation and scoring, and human rights protection procedures.

Research Questions

The following questions were addressed in this investigation:

1. Does the first-time father perceive a change in dyadic cohesion three to five months after the birth of his child?

2. If the first-time father perceives a change in dyadic cohesion three to five months after the birth of his child, what is the direction of the change?

Sample

A convenience sample of first-time-fathers was utilized. Subjects were recruited from three adjacent cities in the Midwest with a combined population of approximately 400,000, as well as from surrounding rural areas. Nursing staff in doctors' offices and on postpartum hospital units offered information about the study to first-time-fathers and distributed sign-up sheets for voluntary participation in the study. Additional subjects were identified through newspaper birth announcements and at childbirth preparation classes. Subjects' phone numbers and addresses were obtained from the newspaper birth announcements, the phone book, and/or the volunteer sign-up sheets.

The following criteria were used to determine father eligibility for inclusion in the study: 1) married male between and inclusive of the ages of 18 and 35; 2) biologic father for the first time; 3) infant result of planned

pregnancy; 4) married at least one year to the infant's biologic mother; 5) first marriage for both partners; 6) no serious or chronic illness since birth of infant; 7) no other children or individuals living in the household. In addition, the first-time-father's infant had to be 1) three to five months of age; 2) free from known abnormality or serious or chronic illness since birth; and 3) born not more than four weeks prematurely. Finally, the first-time-father's wife had to be basically healthy with no serious or chronic illness since the birth of the infant.

Procedure for Data Collection

Personal contact by phone was made with 75 potential subjects. The standardized format used in each phone contact (see Appendix A) included an introduction of the researcher by name and title followed by a brief description of the study and its purpose. The method of obtaining potential subjects' names was explained.

The initial screening criteria for inclusion in the study was determined by making the following inquiries: whether this was the father's first and biologic child and first marriage, if the pregnancy was planned, date of infant's birth, whether infant was born prematurely, the father's age, the health status of the infant and both

parents, the number of years married, and whether he had any other individuals living in the household. Fifty fathers met the initial screening criteria and were asked to participate in the study. The fathers were informed that participation would require about fifteen minutes to complete and mail in a questionnaire, and were assured that the information provided would remain confidential. The fathers were given an opportunity to ask questions about the study, and were informed that they could refuse to participate if they changed their minds at a later time.

If the first-time father agreed to participate in the study, a cover letter, instructions and consent form, the questionnaire, and a self-addressed, stamped envelope were mailed to the father within one day of the pre-screening (see Appendices B, C, D, and E). The subject was asked to return the questionnaire within one week, and to complete the questionnaire himself and not in the presence of his spouse. A code number was used for each participant and placed on the questionnaire to facilitate follow up. A log was maintained for each subject in order to identify returned questionnaires and to establish a telephone follow-up date for non-respondents (See Appendix F). If the father failed to return the questionnaire within ten days, he was recontacted by phone to determine if he had any difficulties or concerns about the questionnaire. If the initial questionnaire was misplaced, another was

offered. No further contact was made if the father failed to return the questionnaire after the second phone call. Forty-four of the fifty eligible subjects returned questionnaires.

Instrumentation

The development of the instrument utilized in the present study is described in the next section, followed by the operational definitions of the study variables.

The instrument utilized in this study, The Change in Dyadic Cohesion Scale (CDCS), was adapted from the cohesion and affectional expression subscales of the Dyadic Adjustment Scale (DAS) developed by Spanier (1976). Some of the changes were based on Karber's (1985) adaptation of Spanier's instrument. Spanier's total DAS measured marital adjustment; the subscales addressed four dimensions of marital adjustment. A brief review of the original DAS is followed by a discussion of the modification of the DAS for the present study.

Spanier's (1976) original DAS consisted of 32 items which purported to measure the following four components of the marital relationship: dyadic cohesion, dyadic consensus, dyadic satisfaction, and affectional expression. Spanier developed the DAS from a large pool of all the items ever used in measures of marital adjustment. The

items were subjected to factor analysis which supported the four components. Content validity was evaluated by a panel of judges. Concurrent validity was established with known groups (Spanier, 1976).

Spanier (1976) established construct validity by using the Locke-Wallace Marital Adjustment Scale (Locke & Wallace, 1959) to assess whether the DAS measured the same construct. The Pearson correlation between these scales was .86. Construct validity was further established through factor analysis of the 32 items. Four inter-related components were found to exist, leading Spanier (1976) to conclude that the DAS appeared to measure the concept as he defined it. Internal consistency reliability of the DAS was measured using Cronbach's coefficient alpha. A reliability of .96 was reported for the total scale. Reliability for the cohesion subscale was reported to be .86; Cronbach alphas for consensus, satisfaction, and affectional expression yielded values of .90, .94, and .73 respectively (Spanier, 1976).

Researchers have criticized Spanier's conceptualization of the marital relationship. Spanier's (1976) factor structure has been replicated in some studies (Spanier & Thompson, 1982; deTurck & Miller, 1986) and not in others (Sharpley & Cross, 1982). Sharpley and Cross, in their failure to duplicate Spanier's (1976) factor analysis

supporting four separate dimensions, suggested that the DAS may be measuring only one concept, marital adjustment.

Karber (1985) modified Spanier's (1976) total DAS to measure perceived changes in four dimensions of the marital relationship by altering the stem of the questions to read "Since the birth of the baby", which allowed changes within the marital relationship to be measured in reference to the infant's birth. Although Karber's analysis of internal consistencies of the four subscales indicated an adequate level of reliability, alpha coefficients were lower than those reported by Spanier (1976). Karber reported the following alphas in her study: Dyadic Consensus, .73; Dyadic Cohesion, .65; Dyadic Satisfaction, .80; Affectional Expression, .75. Karber found that intercorrelations between the subscales in her study yielded values ranging from .27 to a maximum of .58. Based on these findings and on Sharpley and Cross's (1982) data, Karber concluded that her adaptation of Spanier's tool failed to measure the four separate dimensions she attempted to measure, and that in fact she measured only one concept, marital adjustment.

The scale utilized in the present study, the Change in Dyadic Cohesion Scale (CDCS) was derived from Spanier's (1976) Dyadic Adjustment Scale (DAS). The development of the CDCS is addressed next.

The Change in Dyadic Cohesion Scale

This researcher chose to modify and expand Spanier's

(1976) cohesion subscale for the purposes of this study. Since critics of the original DAS have cited the instrument's failure to measure four separate dimensions of the marital relationship, this researcher chose to focus on only one dimension of the marital relationship, dyadic cohesion. In order to reflect both the integrative activities and affectional bonds of cohesion as it has been defined for the purpose of this study, items from both Spanier's (1976) cohesion and affectional expression subscales were included in the Kraska Change in Dyadic Cohesion Scale (CDCS). Since Spanier's (1976) cohesion and affection subscales were limited by their length (five and four items respectively), ten additional items were added in an effort to develop a more reliable measure of the concept under investigation. In addition, item 19 on Spanier's (1976) satisfaction subscale (frequency of confiding in one's mate) was placed on the cohesion scale to correspond more closely to Spanier and Thompson's (1982) factor analysis. A comparison of items in Spanier's DAS and Kraska's CDCS, including an illustration of the additional items which tap integrative activities as well as the affectional aspects of cohesion, can be seen in Table 2. The CDCS is illustrated in Appendix D.

The original DAS measured <u>levels</u> of dyadic cohesion; the present Change in Dyadic Cohesion Scale (CDCS) measures fathers' perceptions of <u>change</u> in dyadic cohesion. The

Table 2.

A comparison of items on Spanier's (1976) Cohesion and Affection Subscales and Kraska's Change in Dyadic Cohesion Scale (CDCS)

	Spanier	Kraska
Items which tap integrative experiences:		
	Engage in outside interests together (24)	Engage in outside interests together (1)
	Have a stimulating exchange of ideas (25)	Have a stimulating exchange of ideas (2)
	Laugh together (26)	Laugh together (3)
	Calmly discuss something (27)	Calmly discuss something (4)
	Work together on a project (28)	Work together on a project (5)
		Confide in each other (6)
		Do leisure things together (7)
		Solve problems together (8)
		Share household tasks (11)
		Make decisions together (13)
		Do things together with our friends (15)
		Seek wife's attention when facing troubles (17)
Items which tap affectional bonds:		
		Feel close to each other (9)
	Demonstrations of affection (4) (30)	Exchange words of affection, appreciation, & support (10)
		Share physical expressions of love & caring (12)
	Sex relations (6) (29)	Enjoy satisfying sexual relations (14)
		Express deep, strong feelings to spouse (16)
		When away, I feel very good about getting bac

stem of the question was changed to read "Since the birth of our baby, my wife and I...", which was followed by the items. A five-point Likert scale was used to record responses. Response categories included "Much less often", "Less often", "No change", "More often", and "Much more often".

Operational Definitions of the Variables

Dyadic Cohesion was operationalized by eighteen questions which asked about perceived changes since the birth of the infant in terms of the frequency of engaging in outside interests together, exchanging ideas, laughing together, confiding in one another, calmly discussing things, engaging in mutual decision-making, joint leisure, and satisfying sexual relations, working together on a project, sharing household tasks, and exchanging verbal and physical expressions of love and appreciation. Responses were recorded on a five-point scale ranging from "much less often since the birth of the baby" to "much more often since the birth of the baby". A response coded (1) or (2) was considered to reflect the perception of negative change. A response coded (4) or (5) was considered to reflect the perception of positive change. No perceived change was coded as a (3).

Positive change was defined as the first-time-father's perception that he is experiencing a greater degree of dyadic cohesion in the the marital relationship since the birth of his infant. Negative change was defined as the first-time-father's perception that he is experiencing a lesser degree of dyadic cohesion in the marital relationship since the birth of his infant.

Instrument Reliability and Validity

According to Polit and Hungler (1987), the reliability of an instrument is the degree of consistency with which it measures the attributes it is supposed to measure. Internal consistency reliability reflects the extent to which all of the subparts are measuring the same characteristic. To determine whether there are similar response patterns to items on the Change in Dyadic Cohesion Scale (CDCS), internal consistency was computed using Cronbach's coefficient alpha. The normal range of values for coefficient alpha is between 0.00 and +1.00; higher values reflect a higher degree of internal consistency. A reliability coefficient of 0.70 or above is considered satisfactory for group-level comparisons. Reliability of psychosocial scales is affected by the number of items in the scale, and can be improved by adding more items that tap the same concept (Polit & Hungler, 1987).

Validity refers to the degree to which an instrument measures what it is intended to measure. Like reliability, validity has several different aspects and approaches to assessment. However, the validity of an instrument, according to Polit and Hungler (1987), is extremely difficult to establish, and "solid evidence supporting the validity of most psychologically oriented measures is rarely avaliable" (p. 323).

Three types of validity include content, concurrent, and construct validity. Content validity, or the sampling adequacy of the content area being measured, is necessarily based on judgement (Polit & Hungler, 1987). Content validity is determined by the degree to which items of a scale represent all relevant aspects of the concept (marital cohesion) under investigation. Content validity was accepted based on the expert opinions of a panel of judges evaluating the Change in Dyadic Cohesion Scale (CDCS). The panel consisted of family clinical nurse specialists, nurse researchers, a social scientist and statistician, and a family therapist.

Concurrent validity refers to the ability of an instrument to distinguish individuals who differ in their present status on some criterion (Polit & Hungler, 1987). Spanier (1976), comparing known groups, established concurrent validity for the total DAS, from which the present scale was taken. However, since additions were

made, concurrent validity of the CDCS has not been adequately established. Further evaluation of criterion-related validity of the scale, although beyond the scope of the present study, is warranted.

Construct validity, according to Polit and Hungler (1987) refers to the degree to which an instrument adequately measures the concept under investigation. One approach to construct validation employs factor analysis, a method for identifying clusters of related variables. Each cluster represents a relatively unitary attribute, and factor analysis is used to identify and group together different measures of some underlying attribute. Construct validity of the CDCS has not been established. Evaluation of construct validity, beyond the scope of this study, needs to be evaluated through factor analysis with a larger sample.

Instruments are subject to potential problems and threats to validity, including response sets. Response sets including social desirability and extreme responses are pertinent to this study. Social desirability refers to the tendency of some subjects to misrepresent their attitudes by giving socially desirable responses. This problem was addressed in this study by provisions for respondent anonymity, and by requesting the respondent to fill out the questionnaire alone.

The extreme response set is a bias reflected in some subject's tendency to express their attitudes in terms of extreme response alternatives (e.g., "much more", or "strongly agree") while others characteristically choose middle-range alternatives. This response style can be a distorting influence. However, Polit and Hungler (1987) state that although there is little that a researcher can do to counteract this bias, the distortion introduced by extreme response sets is not powerful.

Modifying Variables

Sociodemographic

A questionnaire modeled after Karber's (1985) instrument was used to gain information about variables that may influence first-time-fathers' perceptions of change within the marital relationship. The following items were included in this instrument (See Appendix E).

Age of the father was determined by a question that asked the respondent to record his age in years.

Number of years married was determined by a question that asked the respondent to record the total number of years he had been married to his wife.

Level of education was determined by asking the respondent to indicate the highest grade he and his wife

completed. Responses ranged from eighth grade or less to post-graduate work.

Annual income was determined by asking the respondent to indicate the annual family income range before taxes in the year prior to the infant's birth. Responses were recorded on a scale from $5,000 to $70,000 and over.

Race/Ethnic origin was determined by asking the respondent to indicate his racial or ethnic background. Responses were recorded as Black, Caucasian, American Indian, Hispanic, Oriental, or other.

Occupation/Employment status was determined by asking the respondent to indicate whether he was currently working at a regular job, unemployed, a student, disabled, or other.

Other Modifying Variables

Normalcy of wife's pregnancy was determined by asking the respondent to indicate if the pregnancy was normal and uncomplicated. A yes or no response was recorded.

Normalcy of labor and delivery was determined by asking the respondent to indicate if the labor and delivery were normal and uncomplicated. A yes or no response was recorded.

Father's presence in the delivery room was determined by asking the respondent to indicate whether or not he was

present in the delivery room (or operating room if Cesarean birth). A yes or no response was recorded.

Infant temperament was determined by asking the respondent to indicate whether he would describe his infant as fussy, colicky, a restless sleeper, and difficult to console, which was coded as "difficult temperament", or whether he would describe his infant as calm, peaceful, "easy to care for", and sleeps well, which was coded as "calm temperament".

Father's participation in childbirth preparation classes was elicited by asking the respondent to indicate if he had participated in childbirth preparation classes with his wife. A yes or no response was recorded.

Employment of wife was determined by asking the respondent to indicate if his wife was employed full-time, employed part-time, or not employed at the present time.

Information obtained about each modifying variable was summarized in order to describe the study sample.

Human Rights Protection

An instruction sheet explaining the research study and goals, the approximate time involved in participation, and assurances of confidentiality and anonymity, was given to each participant (See Appendix G). Participation in the

study was voluntary and the subjects could withdraw at any time. An identification number was assigned to each questionnaire by the investigator to further insure anonymity. Data were kept separate from consent forms and stored in a locked file cabinet. Approval of proposed methods to protect the rights and welfare of human subjects was obtained from the Michigan State University Committee on Research Involving Human Subjects (Appendix G).

Procedure for Data Analysis

Sociodemographic characteristics of the sample and scores on the Change in Dyadic Cohesion Scale were described using descriptive statistics (percentages, means, and standard deviations). Differences from the value of "no change" (3) versus the reported change were analyzed using mean scores to determine the direction of perceived change. The range of the scale was from 1 to 5. Scores above (3) were regarded as positive change; scores below (3) were regarded as negative change. The mean scores of the total CDCS, the integrative activities subscale, and the affectional bonds subscale were analyzed separately. Utilizing the standard error of the mean, confidence intervals for a hypothesized "no change" mean of 3 were calculated to determine if sample means were different from 3 or "no change".

Relationships between selected modifying variables and perceived change in dyadic cohesion were determined utilizing the Pearson product moment coefficient (r). A correlation indicates the extent to which two variables are linearly related without implying causality; the magnitude of the relationship is measured by the correlation coefficient. The strength of correlations found in this study was interpreted according to criteria found in Best and Kahn (1986; p. 240):

Value of (r)	Strength of Relationship
0.00 to 0.20	Negligible relationship
0.20 to 0.40	Very slight relationship
0.40 to 0.60	Moderate relationship
0.60 to 0.80	Substantial relationship
0.80 to 1.00	High to very high relationship

A level of confidence was set at .05 for correlations to be considered statistically significant.

Summary

In Chapter IV, the research questions and the operational definitions of the study variables and modifying variables were presented. Also discussed were the sample criteria, procedures for data collection,

instrumentation development, scoring, and data analysis. Reliability and validity of the instrument was also addressed. In the following chapter, the data is presented and the results analyzed in relation to the research questions.

CHAPTER V

DATA PRESENTATION AND ANALYSIS

Overview

A description and analysis of the study sample and the research results are presented in this chapter. Reliability measures for the Change in Dyadic Cohesion Scale (CDCS) and its subscales, the mean score of the CDCS, and the mean scores on the subscales are presented. Findings among the modifying variables and the study scales are also addressed.

Description of the Study Sample

Seventy-five potential subjects were contacted. Questionnaires were mailed to 50 fathers who met the criteria for inclusion in the study and who were willing to participate. Forty-four questionnaires were returned. The sample consisted of 44 first-time-fathers between the ages of 23 and 35 years who were married to the infant's biological mother for at least one year. Subjects, their wives and their full-term infants had no serious or chronic

diseases. Both spouses were married for the first time and lived as a family with no other persons living in the household.

Sociodemographic Characteristics

The sociodemographic variables addressed in this study included: years married, paternal age, racial or ethnic background, paternal and maternal education, family income, and employment status of both spouses. Frequency distributions and percentages of these variables are presented in Tables 3, 4, and 5.

Years Married. The range for the number of years married was from two to ten years, with a mean of 4.8 years.

Age of Father. The age of the fathers ranged from 23 to 35 years with a mean age of 28.6 years.

Racial Background. Forty-one of the fathers (93%) were Caucasian. The remaining three subjects represented Hispanic, Oriental, and "other" racial/ethnic backgrounds. There were no Afro-Americans represented in the sample.

Education. The educational levels of both the first-time-fathers and their wives ranged from "graduated from high school" to "post-graduate or professional school". The mean educational level for both spouses was "some college".

Family Income. Income levels reported ranged from $5,000 to $70,000 or more annually. The median income

Table 3.

Number and Percentages of Subjects by Age, Years Married, Racial or Ethnic Background

Variable	Number of Subjects	Percent
Age in years (Mean = 28.6)		
23-26	12	27
27-30	17	39
31-34	13	30
> 34	2	5
Total	44	100
Years Married (Mean = 4.8)		
2-4	21	49
5-7	16	37
8-10	6	14
Total	43	100
Racial or Ethnic Background		
Caucasian	40	93.0
Hispanic	1	2.3
Oriental	1	2.3
Other	1	2.3
Total	43	99.9

Table 4.

Number and Percentages of Subjects by Educational Level

Variable	Number of Subjects	Percent
Education/Husband		
Graduated High School	11	25.6
Technical School	3	6.9
Some College	8	18.6
Graduated College	15	34.8
Post Graduate/Professional	6	13.9
Total	43	99.8
Education/Wife		
Graduated High School	10	22.7
Technical School	4	9.3
Some College	7	16.2
Graduated College	15	34.8
Post Graduate/Professional	7	16.2
Total	43	99.2

Table 5.

Number and Percentages of Subjects by Annual Income and Employment Status of Husband and Wife

Variable	Frequency	Percent
Income (n=41)		
$5,000 to $9,999	1	2.4
$10,000 to $14,999	1	2.4
$15,000 to $19,999	5	12.1
$20,000 to $24,999	3	7.3
$25,000 to $29,999	5	12.1
$30,000 to $34,999	8	19.5
$35,000 to $39,999	5	12.1
$40,000 to $44,999	3	7.3
$45,000 to $49,999	1	2.4
$50,000 to $54,999	1	2.4
$60,000 to $64,999	2	4.8
$70,000 or over	6	14.6
Total	41	99.4
Husband Employment Status (n=44)		
Working at a Regular Job	43	97.7
Unemployed or Laid Off	1	2.3
Total	44	100.0
Wife Employment Status (n=44)		
Not Working	16	36.4
Working - Full time	13	29.5
Part time	15	34.1
Total	44	100.0

level was in the category of $30,000 to $34,900; over one-half reported incomes at or above this level. Three subjects elected not to answer the question.

Employment Status. All but one of the fathers in the sample were currently employed. Twenty-eight, or 63.6% of the subjects reported that their wives were working. Of those wives working, 53.6% were employed part-time and 46.4% were employed full-time.

In summary, the sample consisted primarily of Caucasian men with a mean age of 28.6 years, reporting a median annual family income ranging from $30,000 to $34,900. Fifty percent of the sample had graduated from college, had done graduate work and/or had a graduate or professional degree. The other half of the sample had at least graduated from high school and had attended college or technical school. The majority of the subjects' wives were employed either full-time or part-time.

Other Descriptive Variables

Additional modifying variables used to describe the sample included normalcy of pregnancy, labor, and delivery, father's participation in childbirth classes, father's presence in the delivery room, and infant temperament. All of the fathers were present in the delivery room, and all but one father had participated in childbirth preparation

classes. According to subject responses, a majority of infants were of calm temperament and spouses' pregnancies were normal. Twenty-seven (61%) of the subjects indicated a normal labor and delivery. Seventeen (39%) reported that their wives experienced abnormal labors and deliveries. The majority listed cesarean sections as the explanation for an abnormal delivery. Three subjects reported induction with posterior presentation, vacuum extraction, and "incompetent cervix" as abnormal labors and deliveries. The frequency distributions of these variables are presented in Table 6.

Reliability of the Study Instrument

The statistical procedure used to determine the internal consistency of the Change in Dyadic Cohesion Scale (CDCS) was Cronbach's Coefficient alpha. The alpha reliability of the 18-item CDCS was .81, indicating an adequate level of internal consistency. The CDCS was then decomposed into items which tapped integrative experiences and items which tapped affectional bonds. These subscales were also subjected to a reliability analysis. The Coefficient alpha of the integrative items (items 1 through 8, 11, 13, 15, and 17) was .63. The alpha reliability of the affectional bond items (items 9, 10, 12, 14, 16, and 18) was .82.

Table 6.

Number and Percentages of Subjects Responding to Normalcy of Labor and Delivery (n=44)

Variable	Frequency	Percent
Normalcy of Labor/Delivery		
Normal Delivery	27	61.4
Abnormal Delivery:		
Cesarean section	14	31.8
Vacuum extraction	1	2.3
Long labor/posterior	1	2.3
Incompetent cervix	1	2.3
Total	44	100.0

Further analysis revealed that the reliabilities of the total scale and the integrative activities subscale could be improved if three items of the original instrument were dropped. Items 5 and 11 correlated poorly with the rest of the total scale with item-total correlations of .11 and .24 respectively. Item 17 also performed poorly, especially as part of the integrative items subscale with an item-total correlation of .09. By deleting items 5, 11,

and 17, the alpha Coefficient of the total scale was increased to .83. The alpha Coefficient of the integrative subscale was increased to .66.

Conceptually, both items 5 and 11 (working together on a project and sharing household tasks) reflected joint work activities, whereas the rest of the items on the integrative scale addressed interpersonal communication or relational activities, such as sharing ideas and interests, laughing together, and sharing affection. Thus on both statistical and conceptual grounds, items 5, 11, and 17 were deleted from the CDCS. The final scale used for analysis, then, consisted of a total of 15 items. These items, along with item-total correlations, can be seen in Table 7. The alpha reliability of the 15-item CDCS was .83 (Table 8).

Table 7.

Correlations for Revised CDCS and Subscales

Item Number		Item-Total Correlation/ CDCS	Item-Total Correlation/ Subscale
Integrative Activities Subscale			
1	Engage in outside interests together	.42	.28
2	Have a stimulating exchange of ideas	.35	.32
3	Laugh together	.39	.66
4	Calmly discuss matters	.27	.20
6	Confide in each other	.31	.42
7	Do leisure things together	.35	.41
8	Solve problems together	.44	.42
13	Make decisions together	.20	.35
15	Do things together with our friends	.33	.24
Affectional Bonds Subscale			
9	Experience feelings of closeness	.69	.70
10	Exchange words of affection, support	.61	.66
12	Share physical expressions of love	.72	.63
14	Engage in satisfying sexual relations	.47	.47
16	Express deep, strong feelings to wife	.72	.72
18	Feel good about getting back home when away from wife	.39	.31

Table 8.

Coefficient alpha Reliabilities of the CDCS and its Subscales

Scale	Reliability	Number of Items
Change in Dyadic Cohesion	.83	15
Integrative Items	.66	9
Affectional Items	.82	6

Study Results

Presentation of Data Related to Research Questions

In this section, the data analysis procedures used to answer the research questions are presented.

Research Question 1: Does the first-time father perceive a change in dyadic cohesion three to five months after the birth of his child?

Fifteen items (Table 7) were utilized in the analysis of perceived change in dyadic cohesion. The mean score and standard deviation of the instrument were calculated and are shown in Table 9. The response options for the items ranged from 1 ("much less often") to 5 ("much more often"), with 3 defined as "no change". Scores below 3 are indicative of negative change, while scores above 3 are indicative of positive change.

The Change in Dyadic Cohesion (CDCS) total mean score was 3.1, with a standard deviation of .44. Utilizing the standard error of the mean (.07), the 95% confidence interval for a hypothesized no change mean of 3 was calculated to be 2.86 to 3.14. The sample mean fell within this 95% confidence interval; thus, the first-time-father perceived no significant change in dyadic cohesion three to five months following the birth of his infant.

Research Question 2: If the first-time-father perceives a change in dyadic cohesion three to five months after the birth of his child, what is the direction of the change?

Referring to Research Question 1, no overall change in dyadic cohesion was perceived. Therefore, this research question could not be answered.

Table 9.

Perceived Changes in Dyadic Cohesion Expressed by First-Time-Fathers Three to Five Months Following the Birth of Their Infants

Variable	Mean	Standard Deviation	Standard Error
Change in Dyadic Cohesion Scale (CDCS)	3.1	.44	.07
Integrative Activities	3.0	.41	.06
Affectional Bonds	3.3	.63	.10

Subscale Results

Since this author conceptually defined cohesion in terms of both the affective and integrative domains and thus drew some distinction between the two, these two aspects were examined separately.

Integrative Activities. The mean score on the integrative activities subscale was 3.0 with a standard

deviation of .41 and a standard error of the mean of .06. The 95% confidence interval for a hypothesized no change mean of 3 was calculated to be 2.88 to 3.12. The sample mean fell within that interval; therefore, first-time-fathers perceived no statistically significant change in the integrative activities domain of dyadic cohesion.

Affectional Bonds. The mean score on the affectional bonds subscale was 3.3 with a standard deviation of .63. Utilizing the standard error of the mean (.10), the 95% confidence interval for a hypothesized no change mean of 3 was calculated to be 2.81 to 3.19. The sample mean fell outside this interval; therefore, a very slight but significant positive change was perceived in the affectional domain by first-time-fathers three to five months following the birth of their infants.

To sum, although first-time-fathers perceived no overall change in dyadic cohesion as measured by the total CDCS, the results indicated that the respondents differentially perceived changes with respect to the subscales. Although no change was perceived in the integrative activities domain, a slight positive change reflected in the affectional bonds subscale indicated fathers perceived a positive change in the affectional domain.

Other Findings Among the Modifying Variables and the Study Scales

In addition to calculating the mean score and standard deviation for the total CDCS and for the two defined aspects of cohesion, integrative activities and affectional bonds, correlation coefficients were also computed among the CDCS scores, the subscale scores, and potential modifying variables. These correlations are depicted in Table 10.

Table 10.

Correlations Between the CDCS, its Subscales, and Potential Modifying Variables

Modifying Variables		CDCS	Affect	Integration
Father's Age	(N=44)	-.43*	-.38*	-.35*
Family Income	(N=41)	-.33*	-.28	-.34*
Years Married	(N=41)	-.16	-.18	-.10
Father's Education	(N=43)	-.45*	-.45*	-.36*
Wife's Education	(N=43)	-.42*	-.39*	-.40*

*p<.05

Bivariate analysis of the effects of the age of the father, the number of years married, and family income on perceived change in dyadic cohesion was undertaken utilizing Pearson Product Moment correlations. One subject did not respond to the questions on education, and three chose not to respond to the items on family income and number of years married.

Father's Age. A moderate negative correlation was obtained between the first-time-father's age and perceived change in dyadic cohesion three to five months following the birth of his infant. Likewise, negative correlations were obtained between the first-time-father's age and both the affective and integrative subscales. That is, there was a tendency for older men to perceive more negative change in cohesion than younger men, both in the affective and integrative domains as well as on the total scale.

Family Income. A slight but significant negative correlation was obtained between family income and perceived change in dyadic cohesion. A negative correlation was also obtained between income and perceived change in integrative activities. However, no significant correlation between family income and perceived change in the affectional domain was found. Higher income fathers, then, tended to perceive more overall negative change in cohesion than lower income fathers, as well as more negative change in integrative activities. There was no

relationship, however, between income and perceived change in affectional bonds.

Years Married. The number of years married failed to correlate significantly with the perceived change in dyadic cohesion scale or with its subscales.

Level of Education of Father. A moderate negative correlation was obtained between the father's level of schooling and perceived change in dyadic cohesion. Negative correlations were also obtained between the father's level of education and perceived change in both the affectional and integrative activities domains. Thus the higher the level of education of the father, the greater the tendency there was to perceive negative change in both aspects of dyadic cohesion.

Level of Education of Wife. A moderate negative correlation was obtained between the level of education of the wife and perceived change in dyadic cohesion. There was a tendency for fathers whose wives had college or graduate degrees to perceive more negative change than fathers whose wives had lower levels of education. A negative correlation was also obtained between the wife's level of education and perceived change in the affective domain, as well as perceived change in the integrative activities domain. Thus fathers whose wives had college or graduate degrees tended to perceive more negative change in

overall cohesion as well as in both the affective and integrative domains.

Multivariate analysis of the relationships between husband and wife education, years married, income, and age of the father and perceived change in dyadic cohesion was also undertaken. Results are illustrated in Table 11. The combined effect of all of these variables on perceived change in cohesion was moderate (multiple R = .48) although not statistically significant at the .05 level. The effects of the individual modifying variables were examined, and although no statistically significant predictors emerged, the father's age and his level of education were the strongest predictors, with beta weights of -.22 and -.21 respectively. That is, the older the father and the higher the father's level of education, the more negative the perceived change in dyadic cohesion.

Separate analysis of the affect and integrative subscales revealed that the combined effect of husband and wife education, years married, income, and father's age was moderate (see Table 11). Again, although no significant predictors emerged, the strongest predictor of perceived change in the affective domain was the father's education. The strongest predictor of perceived change in integrative activities was the father's age. The Pearson product moment correlation between age and father's education was

Table 11.

Standard Multiple Regression Using Father's Age, Family Income, and Level of Education to Predict Changes in Cohesion

Variable: CDCS

Analysis of Variance

Variable:

Multiple R .48

R^2 .23

Adjusted R^2 .12

S.E. .42

	DF	Sum of Squares	Mean Square
Regression	5	1.85	.37
Residual	35	6.12	.17

F = 2.11 F-Probability = .09

Variable:	Beta	T	T-Prob.
Wife Education	-.11	-.57	.57
Yrs. Married	.05	.25	.80
Husb. Education	-.21	-.99	.33
Income	-.05	-.23	.82
Father Age	-.22	-.87	.39

Variable: Affect

Analysis of Variance

Variable:

Multiple R .49

R^2 .24

Adjusted R^2 .13

S.E. .59

	DF	Sum of Squares	Mean Square
Regression	5	3.90	.78
Residual	35	12.35	.35

F = 2.21 F-Probability = .07

Variable:	Beta	T	T-Prob.
Wife Education	-.10	-.53	.60
Yrs. Married	-.03	-.15	.88
Husb. Education	-.35	-1.64	.11
Income	.01	.03	.98
Father Age	-.09	-.34	.73

Variable: Integration

Analysis of Variance

Variable:

Multiple R .40

R^2 .16

Adjusted R^2 .04

S.E. .42

	DF	Sum of Squares	Mean Square
Regression	5	1.08	.22
Residual	35	5.68	.16

F = 1.33 F-Probability = .28

Variable:	Beta	T	T-Prob.
Wife Education	-.10	-.46	.65
Yrs. Married	.11	.57	.57
Husb. Education	-.02	-.08	.93
Income	-.09	-.43	.67
Father Age	-.31	-1.18	.25

.65, and between age and income .53, indicating moderate to high correlation between these variables. Thus, multicollinearity, often a problem in small samples, may have contributed to the fact that none of the individual betas were statistically significant.

In sum, bivariate analysis of the correlation between the father's age and education yielded results indicating statistically significant negative relationships between these variables and perceived change in dyadic cohesion. However, the effect of each of these variables was reduced by entering all of the modifying variables together, rendering it difficult to disentangle the individual effects of each independent variable. Multiple regression analysis showed that the joint influence of age, income, and level of education on perceived change in cohesion was not statistically significant at the .05 level.

Employment Status of Wife. A one way analysis of variance was performed to determine the relationship between the employment status of the wife and the first-time-father's perceived change in dyadic cohesion (see Table 12). No significant differences were found between fathers whose wives were employed either full-time or part-time and those whose wives were not employed. The F-probabilites for both the affect and integrative items can also be seen in Table 12. Again, no significant differences were found between the employed and

Table 12.

Oneway Analysis of Variance Between Employment of Wife and Perceived Change in Dyadic Cohesion

Wife Employment Status:	CDCS Mean	Affect Mean	Integrative Mean
Employed Full-Time	3.0	3.2	2.9
Employed Part-Time	3.1	3.5	2.9
Not Employed	3.0	3.2	3.0

Analysis of Variance

CDCS:

	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	2	.0798	.0399	.1948	.8237
Within Groups	41	8.3997	.2049		
Total	43	8.4795			

Affect Items:

Between Groups	2	.6652	.3326	.8210	.4471
Within Groups	41	16.6094	.4051		
Total	43	17.2746			

Integrative Items:

Between Groups	2	.0425	.0213	.1237	.8839
Within Groups	41	7.0490	.1719		
Total	43	7.0915			

non-employed groups when the two aspects of cohesion were analyzed separately.

Normalcy of Delivery. A one way analysis of variance of the effects of delivery experiences showed no relationship between this variable and first-time-fathers' perceived changes in cohesion. There were no differences between those fathers who indicated their wives' deliveries were complicated and those whose wives' experienced normal deliveries. Separate analysis of the affect and the integrative subscales also yielded no significant differences between groups (see Table 13).

Other Potential Modifying Variables. Analysis of the effects of normalcy of pregnancy, racial background, infant temperament, father participation in childbirth preparation, and father presence at delivery was not performed due to lack of variability in the sample.

Summary

In Chapter V, data were presented that described the study sample. Data analysis utilizing descriptive statistics was reported. First-time-fathers perceived no significant overall change in dyadic cohesion three to five months following the birth of an infant. However, an examination of the separate subscales indicated that fathers perceived a slight positive change in the

Table 13.

Oneway ANOVA Between Normalcy of Delivery and Perceived Change in Dyadic Cohesion

Delivery	CDCS Mean:	Affect Mean:	Integrative Mean:
Normal Delivery	3.03	3.39	2.95
Abnormal Delivery	3.12	3.18	2.95

Analysis of Variance

CDCS

	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	1	.0754	.0754	.3767	.5427
Within Groups	42	8.4042	.2001		
Total	43	8.4795			

Affect Items:

Between Groups	1	.4707	.4707	1.1765	.2843
Within Groups	42	16.8039	.4001		
Total	43	17.2746			

Integrative Items:

Between Groups	1	.0000	.0000	.0001	.9929
Within Groups	42	7.0915	.1688		
Total	43	7.0915			

affectional domain. Pearson product moment coefficients and multivariate analyses were utilized to identify the degree and direction of the relationships among the study variables. Reliability indices for the instrument were discussed.

In Chapter VI, data described in Chapter V will be interpreted and summarized. Conclusions and implications for nursing practice, nursing education, and nursing research will be discussed.

CHAPTER VI

SUMMARY, INTERPRETATION, AND CONCLUSIONS

Overview

In Chapter VI a summary of the study results is presented. This summary and interpretation includes a review of previous chapters followed by a discussion of the sociodemographic characteristics of the sample. The influence of potential modifying variables is also addressed. Findings for the research questions are discussed within the context of previous related research. Limitations of the study are addressed and implications of the study for advanced nursing practice, nursing education, and nursing research are presented.

Summary of Findings

A descriptive study of first-time-fathers was conducted to identify perceived changes in dyadic cohesion three to five months following the birth of an infant. Perceived changes in dyadic cohesion were measured using a researcher-developed instrument, the Change in Dyadic Cohesion Scale (CDCS). A five-point Likert scale was used to identify the direction and strength of perceived change.

Family Systems Theory, Family Developmental Theory, and King's (1981) nursing theory provided a framework in which to examine first-time-fathers perceptions of changes in the marital relationship three to five months following their childrens' birth.

Data were collected from 44 first-time-fathers, ages 23 to 35 years. Data were analyzed using descriptive statistics, Pearson product moment correlations, and multiple regression. According to study results, first-time-fathers perceived no significant change in dyadic cohesion. When the two defined dimensions of cohesion were analyzed separately, it was found that although fathers perceived no significant change in integrative activities, they perceived a slight positive change in affectional bonds.

Review of Previous Chapters

In Chapter I, the transition to parenthood was discussed in terms of the change in the family system that occurs in response to the birth of the first child. Since the late 1950's researchers have investigated changes in the marital relationship following childbirth. However, inconsistent findings as to whether the changes are positive or negative remain unanswered. There is a paucity of nursing research describing fathers' perceptions of

changes. Furthermore, few researchers have examined the specific dimension of cohesion in the marital relationship, nor has cohesion been clearly defined conceptually or operationally. Therefore, the purpose of this investigation was to identify first-time-fathers perceptions of changes in dyadic cohesion three to five months following the birth of their infants. Conceptual definitions, research questions, and strengths and limitations of the study were identified.

A conceptual framework derived from Family Systems Theory, Family Developmental Theory, and King's (1981) nursing theory was presented in Chapter II. The family is a dynamic social system consisting of dyadic and triadic subsystems which interact with each other and with the surrounding environment. Dyadic cohesion is one dimension of the marital subsystem which contributes significantly to effective family functioning. The marital subsystem may undergo changes as the family moves through the family developmental life cycle, and family life events, such as the birth of the first child, may challenge family resources and alter stability within the system. Depending on how the first-time-father experiences this family life event, his perceptions of cohesion in the marital relationship may change.

A review of literature related to the transition to parenthood was presented in the third chapter of this

thesis. Results of the research have been inconclusive and sometimes divergent. While researchers report varying degrees and different directions of changes in the marital relationship following the birth of an infant, there is evidence that change does take place. It was acknowledged that very little nursing research exists which measures changes in dyadic cohesion following the birth of an infant.

In Chapter IV of this thesis, the research questions and the operational definitions of the study variables were presented. Sample criterion, procedures for data collection, instrument development, scoring, and data analysis were discussed.

Finally, the fifth chapter of this thesis included a presentation of the results of data analysis. The first-time-father does not perceive a significant overall change in dyadic cohesion three to five months following the birth of his infant. He does, however, perceive a slight positive change in affectional bonds. In the following section results of the study will be summarized and interpreted.

Interpretation of Results

Sociodemographic Characteristics of the Sample

The sociodemographic variables of the subjects in this

study will be discussed and compared to those of subjects in related research.

Number of Years Married. The mean number of years of marriage for participants in this study was 4.8 years, with a range from 2 to 10 years, which was similar to that of Karber's (1985) study.

Age. The mean age of first-time fathers was 28.6 years with a range of 23 to 35 years. The ages of the first-time-fathers in this study were most similar to subjects in investigations by Karber (1985), Russell (1974), Menaghan (1983), Hobbs (1965), Tomlinson, (1987) and Hobbs & Cole (1976).

Level of Education. All of the respondents in the study were high school graduates. The mean educational level for both spouses was "some college" with over half of the sample reporting a college degree and/or graduate school for both husband and wife. Compared to the educational level of the general U.S. male population, (U.S. Bureau of the Census Current Population Reports, 1989), 25% of the general population have below a high school education, 33% have graduated from high school, another 19% have attended college, and 17% have graduated from college. The subjects in the current study were more highly educated than the general population. A possible explanation for this may be related to the relatively large number of colleges (five) in the immediate area, and to the

presence of a large research and scientific community associated with a major chemical company. Participants in the current study were most similar to those in Karber's (1985) study and in Moore's (1983) investigation; the majority of subjects in both studies were college graduates.

Annual Income. Over 50% (N=41) of the sample reported an annual family income of $30,000 to $34,999 or above, which is comparable to the income level of subjects in Karber's (1985) study in which two-thirds of the sample reported incomes above $25,000. Subjects in Wente and Crockenberg's (1976) study reported a median income of $10,000 to $15,000. Although income levels were not specified, the majority of researchers reviewed described their samples as "middle to upper class" (Waldron & Routh, 1981; Tomlinson, 1987; Belsky et al., 1983; Moore, 1983).

Racial or Ethnic Background. The majority of the participants in this study were white. The three non-Caucasians described themselves as Hispanic, Oriental, and "other". Similar racial backgrounds have made up the samples of previous studies (Belsky et al, 1983; Hobbs, 1965; Karber, 1985; Tomlinson, 1987; Wente & Crockenberg, 1981). According to the 1980 U.S. Census projections (Current Population Report, 1989), 79% of the population is white, 11% black, and the remaining racial groups comprise 10% of the population. Therefore, there is a larger

proportion of whites in the present study than in the general population.

Likewise, in comparing the study population to the population of Midland, Bay, and Saginaw counties, data based on the 1980 Census projections (Michigan Statistical Abstract, 1987) indicated that blacks comprise 17% of the population, Hispanics 9%, and whites 74%, with the highest percentage of blacks residing in Saginaw County. Based on the tri-county data, then, the study population contained a larger percentage of white subjects. The underrepresentation of blacks and Hispanics may be explained by the fact that the major subject recruitment effort took place in Midland and Bay Counties, where agency interest and cooperation with subject recruitment was highest.

Employment Status. All but one of the subjects in the study indicated they were working at a full time job. Data based on the 1983 U.S. Bureau of Labor Statistics (Statistical Abstracts of the U.S., 1989) indicated that 94.6% of males between the ages of 16 and 34 years and over are employed. Compared to national data, then, the study sample contained a larger number of employed first-time-fathers than in the general population. A strong economy in both the automobile and chemical industries located in the tri-county area may account for the high level of employment. Furthermore, the sample was

comprised of highly educated men which presumably may enhance employment opportunity.

To sum, the study sample consisted of fathers between the ages of 23 to 35 years, with a mean age of 28.6 years. The subjects were married from 2 to 10 years, with a mean of 4.8 years. All of the subjects had a high school education or higher, with over 50 % having college and/or graduate degrees. The median family income was $30,000 to $34,999. Almost all of the fathers were caucasian. The sample characteristics are similar to samples of other studies of first-time-fathers (Belsky et al., 1983; Dyer, 1963; Karber, 1985; LeMasters, 1957; Moore, 1983; Tomlinson, 1987; Waldron & Routh, 1981).

Research Questions

Two research questions regarding first-time-fathers' perceptions of changes in dyadic cohesion were investigated in this study. Results of the study in relation to these questions will be summarized and interpreted in terms of related research in the following section.

Question 1. Does the first-time-father perceive a change in dyadic cohesion three to five months following the birth of his infant?

Question 2. If the first-time-father perceives a

change in dyadic cohesion three to five months following the birth of his infant, what is the direction of the change?

According to study results, first-time-fathers perceived no significant change in dyadic cohesion three to five months following the birth of an infant ($\bar{x}$ 3.0; SD .44). Dyadic cohesion was defined as integrative, bonding experiences, including the mutual engagement in activities such as talking, problem-solving, joint leisure, working together on a project, laughing together, confiding in spouse, and affectional bonds, such as engaging in satisfying sexual relations and the mutual expression of appreciation, love, and support.

In the present study, first-time-fathers differentially perceived change in dyadic cohesion. Both the integrative activities and the affectional bond items were analyzed separately. Fathers perceived no significant change in integrative activities, ($\bar{x}$ 3.0; SD .41) and a slight positive change in affectional bonds ($\bar{x}$ 3.3; SD .63). While the first-time-father generally perceived no overall change in cohesion, the results can be interpreted that although he experienced no significant change in integrative activities, the affectional bonds between the couple had grown stronger.

In contrast to the present study, earlier researchers' (LeMasters, 1957; Dyer, 1963) reported that

first-time-fathers perceived the birth of an infant as a crisis in the marital relationship. Although LeMasters (1957) did not identify crisis as either positive or negative, his findings identified areas of change from a negative perspective.

The findings of the present study also conflict with those researchers (Tomlinson, 1987; Wandersman, 1980) who in longitudinal studies found a decrease in dyadic cohesion following the birth of the first baby. Spanier's (1976) DAS, from which the tool in the present study was derived, was utilized in both studies. The sample characteristics of these two studies were similar to the present study in terms of age, education, and socio-economic status. However, different research methodologies, such as different study designs and different points in time of data collection, may have contributed to inconsistent results. Both Tomlinson (1987) and Wandersman (1980) used longitudinal designs which may detect changes that retrospective designs fail to measure due to inaccurate recall. Furthermore, Wandersman (1980) gave no information on the results of the individual subscales of the DAS, which limits a valid comparison of the study results.

Wente and Crockenberg (1976) and Belsky et al., (1983), although utilizing different measurement tools, also found a decrease in those items which pertained closely to the definition of cohesion in the present study,

thus reporting results inconsistent with this researcher's findings. Although the sample was similar to that of the present study, Belsky et al. (1983) utilized a longitudinal design, and the reliability of the instrument was poor, which may contribute to inconsistent findings. Furthermore, Wente and Crockenberg's (1976) sample was of lower socio-economic status than that of the present study sample. It is possible that different socioeconomic groups perceive changes in the marital relationship following the birth of an infant differently, thus accounting for the discrepancy in findings. Again, longitudinal designs may detect changes that retrospective designs fail to measure due to inaccurate recall.

Both Ellis and Hewitt (1983) and Hobbs and Cole (1974) found significant decreases in the sexual responsiveness of the wives of first-time-fathers and a decrease in affectional expression, again, a sharp contrast to this researcher's findings. Ellis and Hewitt, (1983) however, measured only wives' perceptions, a distinct difference from the present study. Both sample selection methods as well as socio-demographic characteristics and measurement tools differed from those of the present study as well, which may have contributed to divergent findings.

There are also investigators who have reported an increase in dyadic cohesion (Karber, 1985; Meyerowitz & Feldman, 1966; Moore, 1983). The study design, conceptual

definitions, measurement tool, and sample selection and characteristics in Karber's (1985) work correspond most closely to that of the present study. Karber (1985) reported an increase in dyadic cohesion but no change in affectional expression, which she defined as a separate construct. However, Karber reported poor reliability on the 4-item affectional measure, and a further limitation was the failure of the instrument to measure cohesion as a separate construct. Thus Karber's findings are to be interpreted cautiously.

Although Moore (1983) and Meyerowitz and Feldman (1966) did not clearly define cohesion as the concept they were measuring for change, the increases they measured were in areas of communicating feelings, companionship, and integrative experiences. Moore (1983), however, measured perceived changes only three weeks post-partum, well within the "baby honeymoon" period. Menaghan (1983), who measured changes in perceived affection-fulfillment, found no difference in affectional expression in first-time parents versus childless couples, which is in contrast to the slight increase in the affectional dain found in the present study.

Only Waldron and Routh (1981) reported findings consistent with those of the present study. Waldron and Routh (1981) indicated no perceived change by first-time-fathers in the area of overall marital

adjustment. Although the instrument used to measure marital adjustment (Locke-Wallace SMAT) included items tapping integrative activities and affectional bonds, Waldron and Routh (1981) did not define cohesion as a distinct concept. Thus comparison of Waldron and Routh's study results was necessarily limited by the fact that the conceptual and operational definitions of the constructs being measured were not congruent. Furthermore, no information was available on the validity or reliability of the instrument. However, the sample size and characteristics were similar to those of the present study. Waldron and Routh (1981) utilized a longitudinal design, thereby eliminating the need for retrospective recall, which was a limitation of the present study.

In summary, the results of the present study conflict with the majority of research findings which indicate either a positive or a negative change in dyadic cohesion following the birth of the first child. The concept of cohesion, however, has not been clearly defined as a separate dimension of the marital relationship, although activities that have been examined to measure cohesion are similar to those in the present study. The lack of uniform conceptual and operational definitions of the marital relationship and its components renders it difficult to make valid comparisons among research findings. The sample characteristics among past studies are similar to

the present study in regard to social class, education, income, and race. Differences include different research designs (longitudinal vs cross-sectional), different assessment modalities (interview vs questionnaire), and, again, varying conceptual definitions of the dependent variable.

Conclusions Regarding Study Findings

According to the results of the present study, first-time-fathers perceive no significant change either in overall cohesion or in the integrative activities domain three to five months following the birth of an infant. First-time-fathers do perceive a slight positive change in the affectional domain.

One explanation for the lack of perceived change in overall cohesion may lie in the fact that systems are self-regulating and through feedback, are able to detect variation between a disturbed state and a steady state or equilibrium. In the process of feedback the family system provides output to the environment in the form of information or energy, and receives input in the form of information and support. If the birth of an infant indeed brought about a disturbance or change in dyadic cohesion, negative feedback would have facilitated adjustment by the marital subsystem in order to bring the family functioning

back to its usual level. It is possible, then, that the marital subsystem, seeking to restore equilibrium, effectively utilized information, resources, and support from health care providers, extended family, and friends. By three to five months postpartum, equilibrium may have been effectively restored and therefore no change in cohesion was perceived.

Furthermore, the successful accomplishment of family developmental tasks enables the family system to cope with normative transitions. It is possible, therefore, that the couples in this study had a level of cohesion which facilitated the successful accomplishment of the tasks of the childbearing family. That is, the couples were able to integrate the new member with a minimum of disruption in the marital relationship and were able to effectively maintain couple motivation and morale. Furthermore, the accomplishment of those tasks may in fact have built cohesion in their relationships, which may explain the perception of a slight positive change in the affectional domain.

Another explanation for the lack of perceived change in cohesion may lie in the fact that the range of the number of years married for subjects in this study sample was 2 to 10 years. It is possible that these first-time-fathers and their spouses had adequate time to adjust to marriage, to establish strong affectional bonds,

and to grow and mature together in the marital relationship. They may have been very successful in accomplishing the family developmental tasks of the first stage of the family life cycle, which would enhance their ability to successfully accomplish the tasks of the following stage, including integrating the new family member. It is also possible that there may have been ample time to establish stable, comfortable patterns of behavior and interaction which may not have been readily or adversely affected by the birth of the infant. Furthermore, the marital relationships of the subjects in the study sample may have been particularly strong prior to the birth of the baby, which, according to researchers, is predictive of stability and positive adjustment after the birth of the baby (Dyer, 1963; Tomlinson, 1987; Wandersman, 1980). Again, no change in cohesion may have been perceived because resources may have been sufficient to effectively restore equilibrium following the infant's birth.

The social support, coping and adaptation skills of subjects in the present study sample may also have been particularly strong. The subjects and their spouses were highly educated with high family incomes, and all of the subjects had attended childbirth preparation classes where information is routinely given regarding sustaining and nourishing the marital relationship. Income levels in the

sample indicate financial ability to engage in shared leisure activities and to hire babysitters. These socio-economic resources may have been employed effectively during the early post-partum, and by three to five months, no negative changes may have been perceived. In summary, a high level of functioning in the marital subsystems represented in the present study, therefore, may have contributed to the lack of perceived significant change in dyadic cohesion three to five months following the birth of an infant.

While child-care responsibilities may cut into the time available for shared leisure, an explanation for the lack of perceived change in the integrative activity aspect of cohesion may relate to the increased role fathers play in child care. With over half of the subjects' wives working, the division of labor in the home may change. Husbands, as they increase their participation in household tasks and childcare activities, may perceive just as much involvement with their wives as they had prior to the baby's birth. The baby may simply provide a different focus for new shared activities, such as picking out clothing, toys, and furniture, and of course infant care.

A possible explanation for the perceived positive change in affectional bonds may lie in the fact that birthing and caring for a newborn may be in themselves "integrative, bonding experiences". All but one father had

attended childbirth education classes and all of the fathers in the study were present at birth. Current obstetrical practice includes the father not only as a coach throughout the labor process but also as an active participant during birth, including positioning his wife, cutting the cord, and handing the infant to the mother. The entire birth experience is an emotionally high, intimate, shared experience for the couple, an experience which may cement the marital relationship and one which the couple may build on as the affectional bonds within the marriage grow.

Finally, the practice of "rooming in", standard in the three hospitals serving the subjects of this study, encourages the father to share in the care of the infant. Thus as both maternal and paternal-child bonding takes place, the father is drawn into the triad immediately, and the couple may grow closer to one another as well through this shared experience. The positive change in affectional bonds may also be related to the knowledge gained in childbirth preparation classes and in hospital parenting classes. Parents are encouraged in these classes to take time for each other and to nurture the intimacy of their relationship.

To sum, researchers have examined changes in marital adjustment as well as changes in various aspects of the marital relationship including dyadic cohesion, and have

reported conflicting results. Lack of agreement on conceptual definitions and inconsistent study findings support the need for continued research to clearly define and operationalize the concepts and to further investigate changes in dyadic cohesion following the birth of the first child. According to results of the present study, there is support for the idea that middle to upper-class traditional families, through strengths and resources both within the marital subsystem and from the surrounding environment, are capable of restoring equilibrium in the family system following the birth of an infant.

Additional Findings Among the Modifying Variables

Potential modifying variables such as normalcy of labor and delivery, as well as selected sociodemographic variables (number of years married, age, level of education, wife employment, and income) were correlated with the Change in Dyadic Cohesion Scale (CDCS) and with the two subscales. Results of the Pearson product moment correlations were reported in Chapter V. Data are summarized and interpreted for statistically significant relationships in this section.

Father's Age. There was a negative relationship between the first-time-father's age and perceived change in dyadic cohesion. There was a tendency for older fathers to

perceive more negative change than younger fathers both in the affective and integrative domains as well as on the total scale. Although the number of years married failed to correlate significantly with perceived change, there was a moderate correlation between age and number of years married. It is possible that older fathers may have had longer-term relationships with their spouses, during which time they may have developed the expectation of a high degree of togetherness and sharing. The intrusion of an infant, then, may have resulted in a greater sense of loss of that closeness than perhaps the younger father may have perceived. Older fathers may have been more established in careers which demand more time and energy, leaving fewer resources for nurturing the marital relationship.

Family Income. There was a slight but significant negative correlation between family income in the year prior to the infant's birth and perceived change in dyadic cohesion . Those fathers with higher incomes perceived more negative change than fathers with lower incomes. It is possible that couples with higher income levels may have had the means to travel or to become accustomed to more leisure activities together and the infant may have curtailed the amount of structured time available for spousal companionship.

Although employment status of the wife prior to the infant's birth was not measured, it is also possible that

the wife may have stopped working, thereby reducing the family income and leaving fewer resources to continue previous levels of spousal activities. The negative relationship between income and perceived change in cohesion was found only in the integrative activities domain. It is possible that higher income couples may have had more to lose in terms of leisure time, assuming they had more financial resources for leisure activities and vacations. No correlation between income and perceived changes in the affective domain may indicate that financial resources are not linked to emotional bonds.

Level of Education. Both the father's and mother's level of education correlated negatively with perceived change in dyadic cohesion in both integrative activities and affectional bonds. There was a tendency for college graduate fathers whose wives had college or graduate degrees to perceive more negative change than their less educated counterparts. The negative relationship between the father's education and perceived change in cohesion was stronger in the affective domain than in the area of integrative activities. This negative correlation between level of education and perceived change in cohesion lends some support to the idea that the job responsibilities and career interests of the more highly educated father may channel more time and energy away from the marital relationship, particularly in the area of emotional

investment. A great deal of emotional energy invested in careers and preoccupation with business pressures may leave less time and energy for nourishing marital bonds of affection.

Interpretation of the relationships between age, education, family income, and perceived change must be tentative, however. When these modifying variables were subjected to multivariate analysis, the combined effect of each of these variables on perceived change in cohesion was moderate but not statistically significant. Furthermore, although the father's age and level of education were the strongest predictors, the beta levels were not statistically significant. Thus, although bivariate analysis yielded results indicating statistically significant negative relationships between the father's age, income, and education and perceived change in cohesion, the effects of each of these variables was reduced by entering all of the modifying variables together. The joint influence of age, income, and education on perceived change in cohesion was not statistically significant, nor was the individual contribution of each variable.

It is possible that the sample size contributed to the results of multiple regression. It is difficult with a small sample (N=44) to approach statistically significant beta weights when analyzing the individual effects of each

independent variable. Furthermore, the Pearson product moment correlations between age and the father's level of education was .65, and between age and income .53, indicating a moderate to substantial correlation between these variables. Thus multicollinearity, often a problem in small samples, may have contributed to the fact that none of the betas weights were statistically significant. Again, it becomes difficult if not impossible to disentangle the effects of each variable and difficult to approach statistically significant results when subjecting data from a small sample to multivariate analysis.

Therefore, the data in the present study should be interpreted cautiously with regard to the negative correlations between father age, income and education and perceived change in cohesion. It is appropriate, however, to note that there were trends in the present study in which older fathers with higher levels of education and higher income tended to perceive more negative change in both the integrative and affective domains of dyadic cohesion following the birth of their infants. The exception was the lack of a significant negative relationship between income and perceived change in the affective domain.

Limitations of the Present Study

The following limitations, in addition to those cited in Chapter I, may have affected the outcome of this study.

The sample consisted almost entirely of white, highly educated, high-income fathers. Dependence for subject recruitment on the only hospital in the area with the highest proportion of minorities and lower-income families limited access to that portion of the population. The findings and conclusions of the study, then, cannot be generalized beyond upper-middle-class , white, traditional families.

The retrospective design of the present study was a further limitation. Longitudinal designs may more effectively detect changes that the retrospective design may fail to measure due to inaccurate recall. Recalling the level of dyadic cohesion months in the past may be an unreliable measure of the actual level of cohesion prior to the infant's birth. Current circumstances and the current state of the marital relationship may influence the first-time-father's perceptions of both the present and the past.

The threat of bias due to social desirability may be another limitation. The "positive change" fathers identified in the affectional domain may have been influenced by the subjects' responding to the socially

desirable answer rather than the true perception of change. Although the subject was asked to fill out the questionnaire alone, it is possible that he knew or thought his spouse would read it.

The age criteria for inclusion placed yet another limitation on the generalizability of the findings, since adolescent and older fathers were excluded. Many fathers over the age of 35 (over 15 % of all the fathers contacted) were excluded after the first interview. Since postponing parenthood has become a recent trend in our society, a large segment of the first-time-father population was overlooked, and the opportunity to compare age extremes was lost.

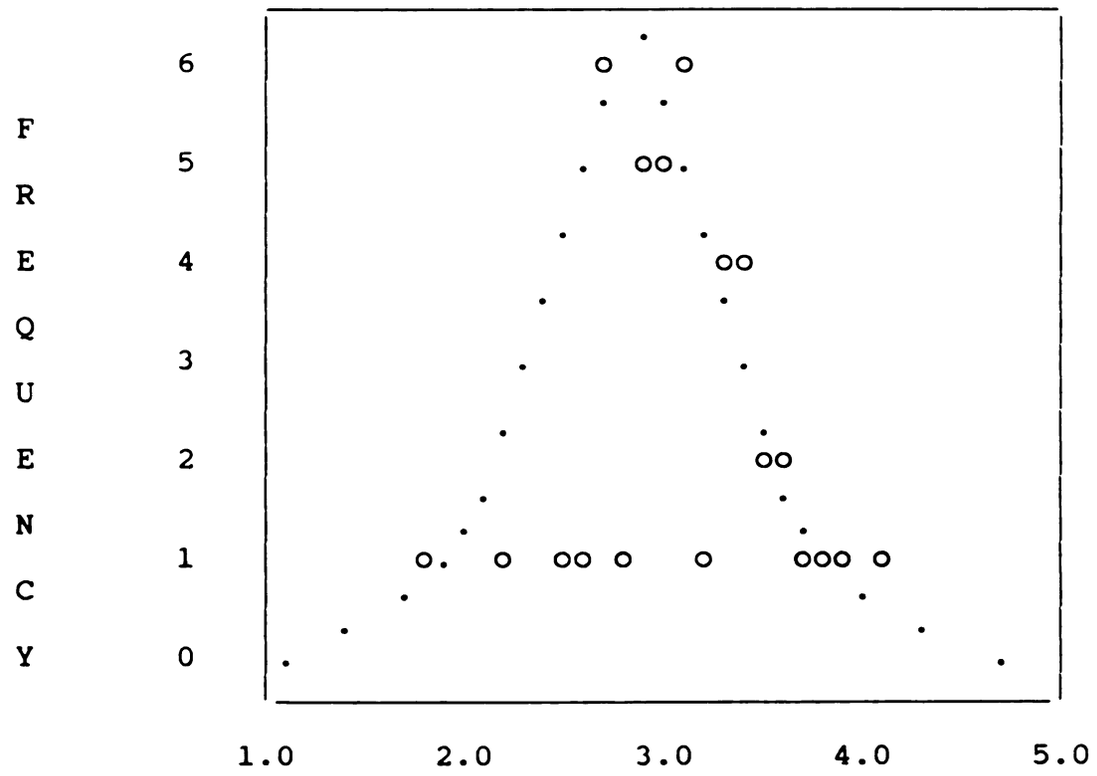
Implications for Nursing

In the following section, the implications of the study findings will be presented in relation to nursing practice, nursing education, and nursing research. The Family Clinical Nurse Specialist (FCNS) providing primary care to first-time-fathers and their families has an opportunity to implement a variety of interventions that will promote growth in the family system.

Implications for Advanced Nursing Practice

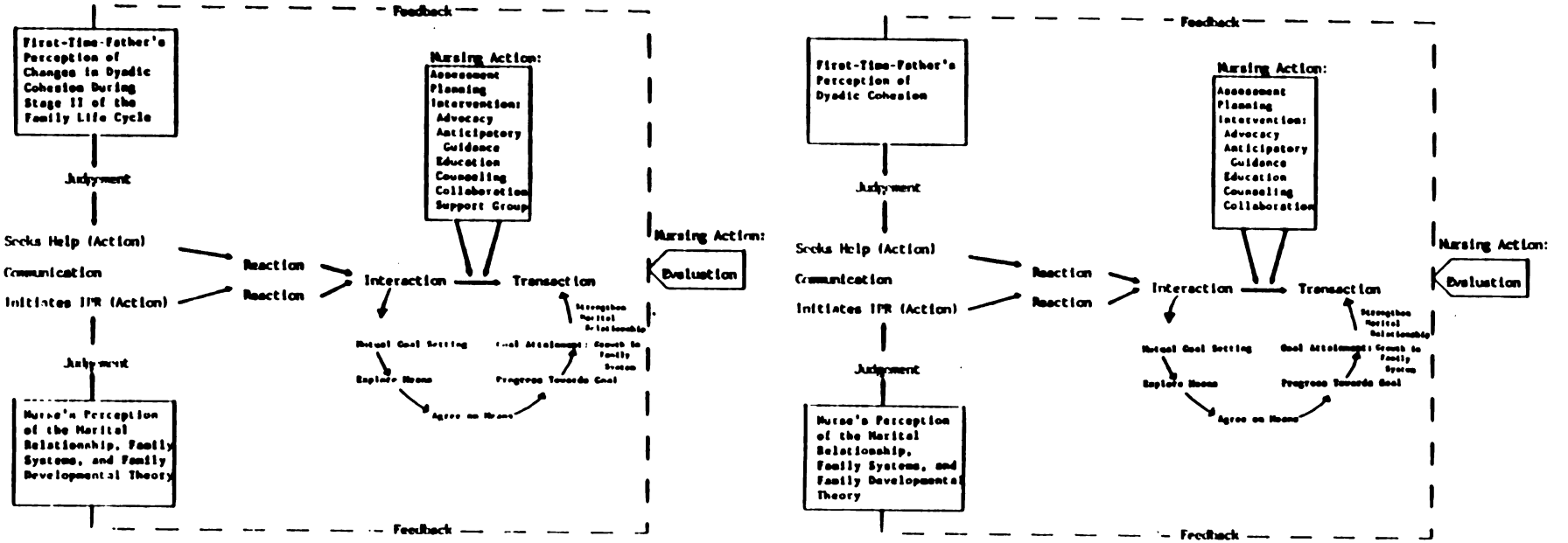
Although on the average, first-time-fathers in the present study perceived no overall change in dyadic cohesion, there were fathers who indeed perceived negative change as can be seen in the frequency distribution illustrated in Figure 7. Furthermore, other researchers (Belsky et al., 1983; Tomlinson, 1987; Wandersman, 1980; Wente & Crockenberg, 1976) have reported a decrease in dyadic cohesion following the birth of the first child. Finally, the results of the present study cannot be generalized to lower socioeconomic status, non-white, non-traditional families. Therefore, the FCNS has a significant role in assessing father's perceptions of changes in the marital relationship, in reinforcing the stability of marital relationships, and in identifying those families in which the potential for instability exists. When transitions such as childbirth occur in the family system, the couple can draw upon the strengths of the marital relationship as they adjust to family life events. The role of the FCNS in promoting those strengths and optimum adjustment will be described in the context of the revised nursing process model adapted from King (1981) and illustrated in Figure 8.

In the present study, first-time-fathers on the average perceived no overall significant change in dyadic



-Figure 7-

Frequency Distribution: CDCS



Stage I
The Marital Family ⟶ Stage II
The Childbearing Family

-Figure 8-
Revised Model for Clinical Application
Adapted from King (1981). A Theoretical Model For Nursing.

cohesion following the birth of an infant, but perceived a slight positive change in affectional bonds. There was a tendency, however, for older, higher income, and more highly educated fathers to perceive more negative change.

Cohesion, a critical resource in adapting to transitions and essential for accomplishing family developmental tasks, can be fostered and supported through selected nursing interventions. Several implications for the FCNS emerge when the findings of the present study are considered in relation to King's (1981) model. King defines nursing as "a process of human interactions between a nurse and a client whereby each perceives the other and the situation, and through communication they set goals, explore means and agree on means to achieve goals" (p.144). In interacting with the first-time-father, the FCNS determines his perceptions of the marital relationship, and together the nurse and client work toward the mutually defined goal of reinforcing the subsystem's efforts to maintain or restore previous levels of dyadic cohesion.

Certain protocols for nursing practice are appropriate as the FCNS strives to implement King's (1981) model with the childbearing family. In order for effective interaction to occur, the nurse clinician must first establish an effective line of communication with the first-time-father during Stage I of the family life cycle. By scheduling a "couple" visit early in the antepartum, the

FCNS can communicate to the dyad her interest in the father's experience. The development of a trusting relationship and the communication of interest and concern should be continued by periodically including the father in antepartum visits. Evening or noontime appointments should be offered to accomodate the working father's schedule.

The father should be included in the first prenatal visit by offering a joint interview with his wife and the FCNS. Opportunities for questions regarding the pregnancy and for sharing of concerns should be given to the father as well as to the mother in order to reinforce the marital dyad.

Assessment of the father's perception of dyadic cohesion should begin in the antepartum. The CDCS might be adapted for this purpose, or other tools, such as FACES, the Family Adaptability and Cohesion Evaluation Scale (Olson, Bell, & Portner, 1978) could be utilized. If the CDCS is utilized, the stem question and the response categories on the Likert scale on the antepartum Dyadic Cohesion Scale should be altered. "Since the birth of the baby" should be deleted from the stem of the question and the response categories should read "all of the time", "most of the time", "more often than not", "occasionally", and "rarely", with scale values from 5 ("all of the time") to 1 ("rarely"). The use of family assessment tools could show that the FCNS is interested in the marital

relationship and in the integrity of the family system.

Cohesion assessment tools should be administered during the second trimester to take advantage of the remaining time of the pregnancy if a problem is perceived for which further intervention is indicated. Assessment of the father's (and mother's) perception of change in cohesion should also be undertaken during the postpartum, preferably at the 4-month well-baby examination. This appointment can be planned early so that the father can be present and so that additional time can be scheduled for the couple. Assessment of the perception of change in cohesion should be used as a basis for exploration and discussion.

As the FCNS and the first-time-father interact, fathers perceptions, concerns, and needs are assessed, and specific goals are mutually identified. In addition to the role of assessor, the nurse may implement several other role characteristics of the CNS, including that of counselor and planner. Depending on the needs of the couple, the FCNS would plan appropriate interventions to achieve the goals of reinforcing family strengths, family growth, and adjustment to childbirth. If indicated, counseling sessions should be offered (alone and/or jointly with spouse) in which the FCNS would assist the father and/or the couple to explore perceptions and feelings about the marital relationship, to engage in effective

problem-solving, to increase communication skills, and to enhance coping skills.

The nurse as educator should provide anticipatory guidance by offering information regarding the potential for changes in the marital relationship. If the father does perceive changes he is uncomfortable with, such information may normalize the experience for him and facilitate further counseling if needed. In turn, it may be helpful to inform and reassure the concerned prospective father that there is support for the idea that there may be no changes in cohesion following the birth of the baby. Education packets could be developed that include information specifically related to the fathers' experiences. A pamphlet "especially for fathers" could be designed which would include answers to common questions and concerns fathers might have regarding possible changes the first child may bring to the marital relationship. Other topics pertinent to fatherhood, such as infant care and the assumption of the father role could also be included. Such a pamphlet may also be used as a springboard for discussion.

In order to reinforce the stability of the marital relationship, the FCNS may want to encourage couple participation in programs that promote family strengths, particularly if the couple has concerns or is simply interested in family growth. For example, the nurse as

advocate and coordinator needs to be aware of those community resources that provide such services, and to disseminate the information to the couple. Family Enrichment Programs, Relationship Enhancement (Guerney, 1977), and Marriage Encounter are examples of programs the community may have in place. In the case of Relationship Enhancement, the FCNS could adapt and implement the program herself if the practice setting allowed and if enough couples demonstrated interest.

A support group for new parents, with specific attention given to the marital relationship and to the needs of fathers, could also be established for those couples who are experiencing difficulty or who are interested. Likewise, parenting groups can be organized which may facilitate the father's adjustment to parenthood by providing realistic expectations about infants and about the dynamic nature of the marital relationship. Such groups need not be limited to the family practice setting. The FCNS as consultant and/or expert clinician should offer these services to local hospitals for use in their community health programs, to churches, and to any other community agency that might be interested.

It is the responsibility of the FCNS to raise the consciousness of health care providers, educators, and the public to the dynamics of early parenthood and to the potential needs for additional preparation and support.

The FCNS must collaborate with other providers, such as physicians and childbirth educators, to increase awareness of the needs of fathers. The nurse researcher in particular must disseminate research findings in an attempt to influence the delivery of health care to families. Findings should be shared with those responsible for the content of parent education programs as well as with maternity nurses, physicians and other FCNS's in obstetric and family practices.

Due to the dynamic nature of the marital relationship, ongoing family assessment should occur as the FCNS continues to interact with the marital dyad throughout the family life cycle. Menaghan (1983), in her research on family transitions and affection-fulfillment, found that transitions involving the last-born child's movement from toddler to school child, and any child's moving out of the home, resulted in perceived negative changes in the marital relationship. Thus it is essential that the FCNS continue ongoing assessment of the family system throughout each developmental stage of the family life cycle. Having addressed the concept of cohesion early in the childbearing stage, the FCNS will have set the tone for continued attention to the importance of the marital relationship. Attention should be given particularly to those dimensions such as cohesion which lend strength and resources for effective coping during family life cycle transitions.

Implications for Nursing Education

Several suggestions for nursing education are generated from the present study. The literature review yielded little nursing information regarding fathers' perceptions of the marital relationship. Curriculum developers in both graduate and undergraduate nursing programs should work to increase awareness of the potential for change in the marital relationship following the birth of the first child. Likewise, nursing educators should address family strengths and resources which enhance the family's coping and adaptation skills in the face of normative transitions. In teaching nursing process, nursing interventions which reinforce family strengths and which assist the family system to maintain equilibrium need to be incorporated. Nursing educators, in socializing nurses to fatherhood trends and issues, must focus on identifying nursing's role in primary care settings, in the hospital, and in the community in regard to assisting young families in their adjustment to transitions that occur in the family life cycle.

Nurses, long active in family and child care, are in excellent positions to improve the knowledge base of fatherhood. This can be accomplished not only in nursing curricula, but also through in-service programs for nurses

as well as other health care professionals. Issues of fatherhood need to be incorporated not only in hospital in-service education, but also in obstetric and family practice settings where the FCNS can work with office nurses. The FCNS can also collaborate with childbirth educators, social workers, and other colleagues to establish community education programs which serve to sensitize childbearing families to the issues of fatherhood.

Recommendations for Nursing Research

The implications for further research that can be derived from this study are many. In view of continued conflicting results and measurement issues, further inquiry into the transition to parenthood should not focus on determining whether change in the marital relationship takes place, but rather on identifying the predictors of change. Does the higher socioeconomic status first-time-father, for example, perceive more negative change than his lower socioeconomic status counterpart? Does the older father perceive more negative change than the younger father? Is there a difference in the perceptions of change between married and non-married, cohabitating parents? What are the predictors of change? Data could be used to identify those couples at greater

risk for disruption and thereby facilitate early identification and intervention.

The search for modifying variables predictive of change in dyadic cohesion was confounded in the present study when those variables were subjected to multiple regression. In particular, therefore, family income and level of education should be re-examined to sort out the effects of these variables on perceptions of change. Multivariate analysis utilizing a larger sample is recommended to determine if the negative correlations between these variables and perceived change found in this study can be replicated. If indeed certain populations may be at higher risk, early identification of potential problems would promote early intervention.

One source of inconsistent findings among related research lies in the operationalization of the marital relationship and its components. Divergent measures undoubtedly contribute to the contradictory findings that characterize this area of inquiry. The methodological weakness inherent in a wide variety of operational definitions of the marital relationship should be addressed by future studies which utilize the same conceptual and operational definitions of the various components of the marital relationship. This can be enhanced by selecting specific dimensions of the marital relationship for measurement, such as dyadic cohesion. Establishing common

definitions would facilitate more valid comparisons between researcher's findings.

The operationalization of dyadic cohesion in the present study needs to be further evaluated and refined. Since the CDCS was a researcher developed, untested tool, further analysis should be undertaken. Efforts to refine the CDCS and its subscales should include the use of large, representative samples with adequate variability of responses. The homogeneous sample in the present study may have lowered the level of variance, thereby reducing the size of the inter-item correlations. The sampling of items may have been adequate but the sampling of people may have been inadequate, in effect "putting a ceiling" on the level of variance. Thus individual item analysis with larger, heterogeneous samples would provide valuable information in the search for an internally consistent tool with which to measure changes in dyadic cohesion.

The alpha coefficient of the integrative subscale in this sample was particularly low (.66). However, the items were more highly correlated as part of the total scale, that is, the integrative items related better to the whole than as a separate dimension. In the present sample, then, the affective and integrative items appeared to be not two separate dimensions but rather two subscales of the same underlying concept. Although additional items were added to Spanier's (1976) scale, the alpha coefficient on the

integrative items was actually decreased from .83 (Spanier, 1976) to .66 in the present study. Thus this researcher did not improve the measure of integrative activities as a separate concept even with doubling the number of items on the scale.

There is further support, then, for further analysis and refinement of the CDCS. A content validity study should be undertaken to determine if the operational definition is adequately tapping the concept of dyadic cohesion. The items on the CDCS need to be tested to determine whether the conceptual definition fits the whole set of items, whether each item belongs or is unique, and whether the items fit together to form a scale. A qualitative study could also be undertaken to help generate items perceived as important to couples in the measurement of dyadic cohesion.

Since there is usually greater potential for adequate sampling of the content universe with the addition of more items, a continued search for additional items should parallel the best items on the existing scale in the present study. Items 2, 3, 7, and 8 had the highest item/total correlations upon reliability analysis of the CDCS. Finally, factor analysis should be undertaken to further examine construct validity. Again, a much larger sample (N = 128-180) would be required for this analysis (Gable, 1986).

The homogeneous sample in the present study does not reflect the changes that have taken place in the American family in the past two decades. The inclusion of middle-aged fathers, couples who conceived post-maritally, and cohabitating couples would more adequately represent the American family and increase the generalizability of findings. The inclusion of more ethnically and socioeconomically diverse subjects would also increase the generalizability of findings and would invite comparisons between different populations. Access to the non-white population would be enhanced by utilizing large metropolitan inner city clinics and inner city hospitals for subject recruitment. If commonalities were found among various samples, stronger direction for the establishment of nursing standards regarding first-time-father's needs and concerns would be provided. In addition, random selection of a sample would further increase generalizability of findings.

One other implication from this study is the need to include more fathers in the 18 to 22 year age range, either as part of a larger sample or as a separate population. There were few first-time-fathers in this age group who, for the purpose of this study, met the eligibility requirement of post-marital conception. Future research with this age group would increase knowledge of the unique

perceptions and needs of late adolescent married as well as unmarried fathers.

A longitudinal study should be conducted in order to examine dyadic cohesion both prior to the infant's birth and further into the infant's first year. Data should be collected during pregnancy and at one, four, eight, and twelve months postpartum. Examining perceived changes at several postpartum times would also support or refute the "baby honeymoon" time frame and would provide information that would identify the most appropriate time to evaluate changes. A longitudinal design would also provide more accurate assessment of changes by eliminating the need for recall inherent in a retrospective design.

A stricter control of the setting in which first-time-fathers fill out the questionnaires would decrease social desirability bias in the responses. Although fathers were asked to fill out the questionnaires alone without consulting the spouse, there were no means to control this factor in the home. Having fathers complete the instruments in the primary care setting would reduce the possibility of bias. In addition, a measure of social support, a potentially confounding variable, should be included in future studies of change in dyadic cohesion since it is possible that the degree of social support may influence the fathers' perception of martial relationship changes.

A change in dyadic cohesion may or may not necessarily be perceived as a problem by the first-time-father. According to McCubbin and Thompson (1987), family systems are characterized by selective boundary maintenance, that is, the dyad establishes boundaries between them which are most comfortable for both members. While cohesion has been identified as a dimension of the marital relationship essential for weathering family developmental changes, there is not an "optimal" level of cohesion. The question may not be "how much", or "how much more or less", but rather the degree of comfort and satisfaction the father has with the present level of cohesion in the marital relationship. Thus future researchers should focus not only on perceived changes in cohesion and the variables predictive of change, but should also examine the father's feelings about perceived change.

An important implication from this study is the need for nursing to continue to conduct additional fatherhood research in order to add to the limited amount of nursing literature on fathers. There are insufficient research data available to enable nurses to address specific needs of fathers and to establish theory-based standards of practice. Constructs are poorly or ambiguously defined. Nursing interventions are not necessarily based on empirical evidence. A great deal of work needs to be done

in order to develop standards for family-centered care that are based on research findings.

Summary

This investigator has examined changes in dyadic cohesion perceived by fathers three to five months following the birth of the first child. The results of this study have implications for nursing practice as well as for other disciplines. Marriage counselors, family-life educators, social workers, clergy, and physicians can all benefit from an increased understanding of the experiences of fathers and their perceptions of changes in the marital relationship during the transition to parenthood.

Further research in the area of fatherhood and family transition, as well as dissemination of research findings, will enhance the level of care provided to the marital and childbearing family. Individual and collaborative nursing practice, directed toward fathers and their perceptions of the marital relationship, can have a positive impact on the health and growth of families as they move through the family life cycle.

APPENDIX A

PRESCREENING TELEPHONE INTERVIEW FORMAT

PRE-SCREENING TELEPHONE INTERVIEW FORMAT

Introduce self, the purpose of the study, and how name was obtained. Determine the following information for inclusion in the study:

First infant ___Yes ___No

Biologic child ___Yes ___No

Planned pregnancy ___Yes ___No

Father's age ____ (D. O. B. _____)

Infant's age ____ (D. O. B. _____)

Was baby born more than 4 weeks prematurely?

___Yes ___No

Infant's health status:_____

Father's health status:_____

Mother's health status:_____

Married more than one year prior to infant's birth?

___Yes ___No

First marriage for both?

___Yes ___No

Does anyone else live in your household, other than you, your wife, and infant?

___Yes ___No

If initial screening criteria are met, ask if father would be interested in participating in the study. (If not, thank him for his time.) Explain that participation will require about fifteen minutes to complete and mail in a self-addressed, stamped questionnaire; information provided will remain confidential; participant may withdraw at any time if he changes his mind. Ask if he has any questions about the study. CONFIRM ADDRESS.

APPENDIX B

COVER LETTER

Judith A. Kraska
1402 Sylvan Lane
Midland, MI 48640

Dear

Enclosed is the questionnaire that I talked with you about on the phone recently. At your convenience, please answer the questions. After you have completed both sections of the questionnaire, please return it to me in the enclosed stamped envelope. It is important to have this questionnaire back to me by_____if possible.

I assure you that all of your responses will be kept in strictest confidence. The code number is the only identification on the questionnaire; returned questionnaires will be kept separate from consent forms.

If you have any questions about the questionnaire or about the study, please feel free to phone me. I will be happy to help in any way that I can. I greatly appreciate your willingness to be part of this research. Thank you again for your participation!

Sincerely,

Judith A. Kraska, B.S.N., R.N.
Student Family Clinical Nurse Specialist
Michigan State University
College of Nursing Graduate Program

Phone: 517-631-7015

APPENDIX C

INSTRUCTIONS AND CONSENT FORM

INSTRUCTIONS

The study in which I am asking you to participate is designed to measure first-time-fathers' thoughts or feelings about changes that may occur in the marital relationship following the birth of an infant.

Participation in the study will take approximately fifteen minutes of your time and will require you to answer each question honestly and accurately. Your responses will be held in complete anonymity and no attempt will be made to identify you in any manner. PLEASE COMPLETE THE QUESTIONNAIRE ALONE WITHOUT CONSULTING YOUR SPOUSE. Only father's responses are being measured in this study.

When filling out the questionnaire, think back to how it was for you BEFORE THE BABY'S BIRTH, and answer how it is for you NOW. I am interested in whether or not you think any CHANGES have occurred.

If you are willing to participate, please read and sign the following statement:

1. I have freely consented to take part in a study of first-time-fathers conducted by a nurse researcher in the Michigan State University College of Nursing.

2. The study has been explained to me and I understand what my participation will involve.

3. I understand that participating in this study is voluntary.

4. I understand that I may withdraw from participating at any time without penalty.

5. I understand that the results of this study will be treated in strict confidence and that my name will remain anonymous. I understand that within these restrictions, results can, upon request, be made available to me.

I,_____, state that I understand what is required of me as a participant and agree to take part in this study.

Signed_____ Date_____

APPENDIX D

CHANGE IN DYADIC COHESION SCALE

ID # ___ ___ ___
1 2 3

DYADIC COHESION SCALE

Please respond to each of the following statements by placing a mark under the column that best expresses **your perception** or feeling **since the birth of the baby** AS COMPARED TO BEFORE THE BABY'S BIRTH:

SINCE THE BIRTH OF OUR BABY, MY WIFE AND I:	Much Less Often (1)	Somewhat Less Often (2)	No Change (3)	Somewhat More Often (4)	Much More Often (5)	
1. Engage in outside interests together	___	___	___	___	___	___ 4
2. Have a stimulating exchange of ideas	___	___	___	___	___	___ 5
3. Laugh together	___	___	___	___	___	___ 6
4. Calmly discuss matters	___	___	___	___	___	___ 7
5. Work together on a project	___	___	___	___	___	___ 8
6. Confide in each other	___	___	___	___	___	___ 9
7. Do leisure things together	___	___	___	___	___	___ 10
8. Solve problems together	___	___	___	___	___	___ 11
9. Experience feelings of closeness to each other	___	___	___	___	___	___ 12
10. Exchange words of affection, appreciation, and support	___	___	___	___	___	___ 13
11. Share in household tasks	___	___	___	___	___	___ 14
12. Share physical expressions of love and caring	___	___	___	___	___	___ 15
13. Make decisions together	___	___	___	___	___	___ 16
14. Engage in mutually satisfying sexual relations	___	___	___	___	___	___ 17
15. Do things together with our friends	___	___	___	___	___	___ 18
SINCE THE BIRTH OF OUR BABY, I:						
16. Express deep, strong feelings to my wife	___	___	___	___	___	___ 19
17. Seek my wife's attention when I'm facing troubles	___	___	___	___	___	___ 20
18. Feel very good about getting back home when I'm away from my wife	___	___	___	___	___	___ 21

APPENDIX E

SOCIODEMOGRAPHIC QUESTIONNAIRE

ID # 1 2 3

SOCIODEMOGRAPHIC QUESTIONAIRE

Please answer **all** of the following questions unless otherwise indicated.

1. Was your wife's pregnancy a relatively normal, uncomplicated pregnancy? (nausea, vomiting, fatigue, light bleeding or cramping during the first 3 to 4 months can be considered normal unless your doctor indicated otherwise) (CHECK ONE)

   _____ Yes (1) _____ No (2) 4

2. Was your wife's delivery normal and uncomplicated? (CHECK ONE)

   _____ Yes (1) _____ No (2) 5

   If your answer was **NO**, please list the problem(s).

   _____

3. How many **years** have you and your wife been married? _____ years 6 7

4. What is your age? _____ years 8 9

5. What is your racial or ethnic background? (CHECK ONE) (optional)

   ( ) Caucasian (1) ( ) Hispanic (3) ( ) Oriental (5) 10
   ( ) Black (2) ( ) American Indian (4) ( ) Other (6)

6. Please indicate the highest level of schooling you and your wife have had: (CHECK ONE FOR EACH)

You:	**Wife:**	**You:**	**Wife:**	
( )	( ) Some grammer school (1)	( )	( ) Technical, business, or trade school (5)	11
( )	( ) Junior high school (7th-9th grade) (2)	( )	( ) Some college (6)	
( )	( ) Some high school (3)	( )	( ) Graduated from college (7)	12
( )	( ) Graduated from high school (4)	( )	( ) Post-graduate or professional school (8)	

ID #___ ___ ___

(Please answer all of the following questions unless otherwise indicated.)

7. At the present time, is your wife working for pay? (CHECK ONE) _____Yes (1) _____No (2) ___ 13

If yes, CHECK ONE: _____Full Time (1) _____ Part Time (2) ___ 14

8. At the present time, are you: (CHECK ONE)

_____ Working at a regular job (1)
_____ Unemployed or laid off (2)
_____ Student (3)
_____ Disabled (4)
_____ Other (Specify) _____ (5) ___ 15

9. Taking all sources into consideration, what was your 1983 family income (before taxes and other deductions)? (CHECK ONE) (optional)

_____ Less than $5,000 (1)	_____ $25,000-$29,999 (6)	_____ $50,000-$54,999 (11)	
_____ $5,000-$9,999 (2)	_____ $30,000-$34,999 (7)	_____ $55,000-$59,999 (12)	
_____ $10,000-$14,999 (3)	_____ $35,000-$39,999 (8)	_____ $60,000-$64,999 (13)	___ 16 ___ 17
_____ $15,000-$19,999 (4)	_____ $40,000-$44,999 (9)	_____ $65,000-$69,999 (14)	
_____ $20,000-$24,999 (5)	_____ $45,999-$49,999 (18)	_____ $70,000 or over (15)	

10. Were you present in the delivery, birthing, or operating room when your baby was delivered? (CHECK ONE)

_____Yes (1) _____ No (2) ___ 18

11. Generally speaking, how would **you** describe your baby's **present** temperament? (CHECK ONE)

_____Baby is generally fussy, colicky, restless, difficult to console (1) ___ 19

_____Baby is generally calm, peaceful, easy to care for, and sleeps well (2)

12. Did you participate in childbirth preparation classes with your wife? (CHECK ONE)

_____Yes (1) _____ No (2) ___ 20

This completes the questionaire. THANK YOU FOR YOUR PARTICIPATION.

APPENDIX F

SUBJECT LOG

SUBJECT LOG

ID #	Name/Address/Phone	Age	Infant	Mailing	Recheck	Comp.

APPENDIX G

UCRIHS APPROVAL LETTER

MICHIGAN STATE UNIVERSITY

UNIVERSITY COMMITTEE ON RESEARCH INVOLVING
HUMAN SUBJECTS (UCRIHS)
206 BERKEY HALL
(517) 353-9738

EAST LANSING • MICHIGAN • 48824-1111

August 23, 1988 **IRB# 88-292**

Judith A. Kraska, B.S.N., R.N.
1402 Sylvan Lane
Midland, MI 48640

Dear Ms. Kraska:

Subject: "FIRST-TIME-FATHERS' PERCEIVED CHANGES IN MARITAL COHESION THREE-TO-FIVE MONTHS FOLLOWING THE BIRTH OF THEIR INFANTS IRB# 88-292"

I am pleased to advise that because of the nature of the proposed research, it was eligible for expedited review. This process has been completed, the rights and welfare of the human subjects appear to be adequately protected, and your project is therefore approved.

You are reminded that UCRIHS approval is valid for one calendar year. If you plan to continue this project beyond one year, please make provisions for obtaining appropriate UCRIHS approval prior to August 23, 1989.

Any changes in procedures involving human subjects must be reviewed by the UCRIHS prior to initiation of the change. UCRIHS must also be notified promptly of any problems (unexpected side effects, complaints, etc.) involving human subjects during the course of the work.

Thank you for bringing this project to our attention. If we can be of any future help, please do not hesitate to let us know.

Sincerely,

John K. Hudzik, Ph.D.
Chair, UCRIHS

JKH/sar

cc: B. Given

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