PERCEIVED CHILDBEARING, CHILDREARING AND MARITAL CONCERNS OF PARENTS EXPECTING THEIR SECOND CHILD

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A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

MASTER OF SCIENCE IN NURSING

College of Nursing

1988

ABSTRACT

PERCEIVED CHILDBEARING, CHILDREARING
AND MARITAL CONCERNS OF PARENTS
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A descriptive study of 36 middle-class Caucasian couples expecting their second child was executed to determine the perceived childbearing, childrearing and marital concerns of parents during the third trimester of their second pregnancy. Self-administered questionnaires developed for the study provided data on the convenience sample. The seven sub-scales of concern related to self, spouse, marital relationship, firstborn, expected baby, childbirth, household and finances were not found to be acceptable as initially constructed. Mothers and fathers did not report high levels of concern on the retained study sub-scales, but the sub-scale measuring marital concerns had the highest reported level of concern by both mothers and fathers. Mothers reported significantly higher levels of concern than fathers on all study sub-scales. Based on findings from the study, the implications for nursing education, practice and research are addressed.

DEDICATION

This project is dedicated to my parents, Charles and Jeanne Fliss, who have lovingly encouraged and supported me through each stage of my life, and to my children, Jared and Jessica, who fill each day with love and joy, and to my wonderful husband Dan.

ACKNOWLEDGEMENTS

Further acknowledgments are given to the following individuals, who never failed to offer their support and encouragement:

Kathy Abolins

Judith Daniels

Cynda Greenman

Kathie Fliss Martell

Shirley Maudlin

Judy Smith

Manfred Stommel

Marge and Dick Tuinstra

Special recognition is given to the following members of my thesis committee for their professional guidance:

Barbara Given

Sandra Hayes

Patricia Peek

Jacqueline Wright

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CHAPTER I

THE PROBLEM

Introduction

Pregnancy and the period of transition into parenthood is generally accepted to be a stressful time for expectant parents. Previous roles must be redefined as couples prepare to enter into the new role of parent. Couples who are unable to meet the challenges and demands of parenthood are susceptible to crisis. In fact, some researchers refer to this period as a crisis point in the lives of parents (Dyer, 1963; LeMasters, 1957). Whether researchers argue that the childbearing period is a transition period accompanied by difficulty (Hobbs, 1976) or a crisis experience (Dyer, 1963; LeMasters, 1957), they must recognize that it "is a time when preventive intervention can do much to influence the attitudes and functioning of prospective parents" (Miller & Brooten, 1977, p. 90).

If nurses are to assist expectant parents in their adaptation to the childbearing period, then they must first be aware of parents' perceived concerns during this period of their lives. What about couples expecting their second child? Do they also have concerns regarding the second pregnancy and the demands it will place on them; or, are they more immune to these stressors because of their past experience? The literature abounds with concerns of

first-time parents as though to maintain that multiparous mothers and fathers have less concerns (or less important concerns?) and, therefore, need less support from nurses and other health care providers. With the assumption that there are differences the "second-time around", the purpose of this study was to explore expectant parents' perceived concerns during the third trimester of their second pregnancy.

Background

Over the past two decades there has been a trend to increase the involvement of expectant parents and their families in all areas of the childbearing process. Mothers have become more active in their childbearing experiences by participating in childbirth education classes, requesting rooming-in after delivery and choosing to breastfeed their infants (Lipkin, 1978). Fathers have joined their wives in becoming more involved in the birth of their child by also attending childbirth preparation classes, coaching their wives through labor and delivery, and being not passive, but active participants in both vaginal and cesarean births (Lipkin, 1978; Miller & Brooten, 1977). Parents are demanding and acquiring greater involvement in the childbearing process, not only by fathers but also by siblings (Marecki, et al, 1985). Siblings are now able to visit their mother and the new baby on many postpartum units and sometimes are present for

the birth itself (Mullaly & Kervin, 1978; Sweet, 1979). Of course, greater involvement of the entire family in the childbearing process was also made possible because it was promoted more by health care providers caring for expectant parents.

Nurses caring for expectant parents have also become more sensitive to the couple's changing needs and have attempted to learn more about the unique concerns that parents and their families might have during the childbearing period (Hiser, 1987; Kintz, 1987). As one might expect, the majority of the literature and research is directed to the concerns of primiparas, and first-time fathers, and to a lesser extent to multiparas and siblings.

This author has found very few studies which include second-time fathers. So, unfortunately, less is known about the concerns of both mothers and fathers expecting their second child. And yet, in 1980 there were 29.5 first-born live births and 21.8 second-born live births per 1,000 women in the 15-44 year old age range in the United States (U.S. Department of Health and Human Services, 1984). If we look at women in the 25-44 year old age range, during that same period, second-born live births surpass the number of first-born live births. But statistics are only as meaningful as the attention that is given to them, and those parents expecting their second child have received less attention by researchers in the health care system. As Jiminez, Jones and Jungman (1979)

conclude from their work with parents in repeat prenatal classes, "the health care system cannot in good conscience continue to overlook the needs of the family just because this is not their first time around in the childbearing cycle" (p. 308). As Mermin (1982) found in his study of both first-time and second-time parents, veteran parents may be more reactive to the birth of their second child, thus requiring greater adjustments in marital and child care role arrangements.

Purpose of Study

There are numerous potential concerns perceived by parents expecting their second child, but second-time parents have been given little attention by investigators and, therefore, their specific concerns remain poorly studied. Without knowledge of these parents' concerns, nurses and other health care professionals cannot offer complete care to parents who are expecting a second child. Therefore, the purpose of this study was to explore expectant parents' perceived concerns during the third trimester of their second pregnancy. From the information gained by this study, nurses will be able to more fully understand the differences and similarities between fathers and mothers expecting their second child which will impact on their nursing interactions, assessments, and interventions with this population. Also, an expectation of the study was to uncover information which may assist nurses

and other health care professionals in the future development of research studies which will compare the concerns and needs of second-time parents to first-time parents thus promoting a broader base of knowledge for the profession of nursing.

Specific questions to be answered by this study were:

1. What are the perceived childbearing, childrearing, and marital concerns of mothers during the third trimester of their second pregnancy?

2. What are the perceived childbearing, childrearing, and marital concerns of fathers during the third trimester of the second pregnancy?

3. Are there differences in the perceived childbearing, childrearing, and marital concerns of mothers when compared to the perceived childbearing, childrearing, and marital concerns of fathers during the third trimester of a second pregnancy?

Definitions of Concepts

Perception

In order to meet the needs of parents expecting their second child, nurses must first validate the concerns perceived by the parents. Perceptions by nurses of the meaning of the second pregnancy to the pregnant couple are only valid when tested against the perceptions of the parents themselves. When the perceptions of both the expectant parent and the nurse are in synchrony, mutual

goal setting can occur. In this study, perception was understood to mean the father's or mother's "image of reality" which gives meaning to their pregnancy and childbirth experience and influences their behavior. This process of organizing, interpreting, and transforming information from their sensory data and memories was demonstrated by their responses on the concerns questionnaire during the third trimester of pregnancy (King, 1981, p. 24).

Concerns

Concerns of expectant parents identified in the literature have been categorized in a multitude of ways. Rubin's (1976) well-known framework of four maternal tasks of pregnancy (safe passage, acceptance by significant others, binding-in, and giving of self) was incorporated by Stark and Carrico (1983) in their study of primiparas and multiparas. Glazer (1980) utilized the Taylor Manifest Anxiety Scale along with a 62-item concerns questionnaire in her study of expectant mothers and subsequently grouped her results according to those major concerns related to baby, self, medical care, childbirth, finances, and subsequent pregnancies. In their study of both primiparas and multiparas, Light and Fenster (1974) investigated ten categories of concern related to the baby, childbirth, subsequent pregnancies, self, finances, medical care, family, doctor, medication and birth defects.

Based on a review of the literature, and with the consideration that this study was exploring the concerns of both mothers and fathers expecting their second child, concerns were investigated as they related to self (mother or father answering questionnaire), spouse, the marital relationship, first-born child, expected baby, the childbirth process, and the household and finances. Concerns were defined as those issues of interest viewed as important by the expectant parent or those issues seen as occupying his/her thoughts (Bull, 1981; Glazer, 1980).

Expectant parent

The term expectant parent potentially encompasses the time frame from the very moment of conception to the birth of the baby. Parent can further be described by the method of conception (biologic or artificial insemination), or assumption (adoptive or through re-marriage). Furthermore, being married is not a pre-requisite for parenthood. In order to limit the scope of the term, expectant parent, the more traditional description was used. Expectant parents were both mothers and fathers who were pregnant with their own second child, were married and living together at the time of the study and had one child of their own and no children from previous marriages.

Mother

The term mother potentially refers to any female who has a child. For the purpose of this study, mother

referred to the female spouse who had biologically conceived one normal child with her present husband and who was presently in her third trimester of pregnancy with her second child by the same father.

Father

In this study, father was defined as "the male who shared the (second) pregnancy with the female in the psychosocial as well as the biologic sense" (Jensen, Benson & Bobak, 1981, p. 221). The relationship was one that was legally sanctioned and the father did not have children from a previous marriage.

Third Trimester

It is possible that both fathers and mothers experience certain concerns during each trimester of their pregnancy. In her study of both primiparas and multiparas, Glazer (1980) found the greatest number of concerns expressed during the third trimester. Taking into consideration Glazer's findings, regarding the third trimester as a critical time period for uncovering parental concerns, then, expectant parents in this study were asked to complete the concerns questionnaire during the third trimester of their second pregnancy. Third trimester was defined as the last three, full, calendar months of the pregnancy or an estimated gestation of 27 weeks or more as calculated by the expected date of confinement (Clark & Affonsa, 1976).

Second Pregnancy

It is possible that the birth of a second child is not the result of a second pregnancy since abortions or miscarriages may have been experienced by the parents. To eliminate these variables and for the purpose of this study, second pregnancy denoted that the mother was a gravida 2; para 1 (Ruder, Mastroianni & Martin, 1980) who was experiencing a normal pregnancy or one that was not at high-risk.

High-risk pregnancy was defined as "one in which the life or health of the mother or offspring is jeopardized by a disorder coincidental with or unique to pregnancy" (Jensen, Benson & Bobak, 1981, p. 315). Also, the mother and father had one child of their own who was alive and without abnormalities and there were no children from previous marriages.

Research Questions

In this study the following research questions were investigated. Based on expectant parents' perceived concerns as gathered by means of the study questionnaire during the third trimester of their second pregnancy:

1. What are the perceived childbearing, childrearing, and marital concerns of mothers during the third trimester of their second pregnancy?

2. What are the perceived childbearing, childrearing, and marital concerns of fathers during the third trimester of the second pregnancy?

3. Are there differences in the perceived childbearing, childrearing, and marital concerns of mothers when compared to the perceived childbearing, childrearing, and marital concerns of fathers during the third trimester of a second pregnancy?

Assumptions

The following assumptions were accepted to allow for progression of the study.

1. Perceptions gathered from previous life experiences (a first pregnancy, labor, and birth) influence parents' perceptions of subsequent life experiences, such as a second pregnancy, labor, and birth experience.

2. Since the childbearing period is a stressful time, parents will have concerns during the second pregnancy.

3. Perceptions by parents of their concerns during the second pregnancy will influence their actions, interactions, and transactions.

4. Concerns perceived by expectant parents during a second pregnancy will cause stress which could interfere with their growth during the childbearing and childrearing stage of the life cycle.

5. Incongruent perceptions between nurses and expectant parents will interfere with their ability to successfully communicate toward mutually defined goals.

6. Nurses must be able to help expectant parents recognize and deal with their concerns so as to maintain the maximum potential level of health of the family unit.

7. Both mothers and fathers expecting their second child would be willing to relate their concerns.

Limitations

1. The size of the study sample was limited by the number of both mothers and fathers who agreed to respond to the concerns questionnaire.

2. Furthermore, the convenience sample drawn from private practices in one midwestern area also limited the population to which this study's results can be generalized.

3. Focusing on only the third trimester of pregnancy excluded parental concerns pertinent to the first two trimesters and to pregnancy as a whole.

4. Excluding couples who were expecting their first child and those couples expecting their third or more did not allow for comparisons, based on the variables on the concerns questionnaire, between these groups and the couples in this study.

5. The concerns questionnaire for this study was not previously used or tested on a large population. Reliability for this study needed to be established.

6. There were no controls set for the age of the first born child of parents in the study.

7. There were no controls set for the maximum age of the parents in the study.

8. The study results reflect a one-time measure of concerns of expectant parents since the study was not longitudinal in design.

9. Variables which may have influenced the study results, such as marital satisfaction, satisfaction within the family triad, history of infertility, or previous interventions to decrease concerns, were not addressed.

Even with consideration of the above limitations for this study, the perceived concerns of both mothers and fathers who were expecting their second child merited further investigation.

Contained in Chapter two is a discussion of the relationship between variables in the study to King's (1981) conceptual framework. A review of the literature related to the study's variables and the profession of nursing will be expanded upon in Chapter three. In Chapter four the methodology of the study, including descriptions of the sample population, definitions of the variables and explanations regarding the concerns questionnaire and scoring measures used, will be described. Analysis of the data and their relationship to the research questions will be described in Chapter five. Included in Chapter six will be a summary of the study and its implications for advanced nursing practice and primary care.

CHAPTER II

THE CONCEPTUAL FRAMEWORK

Introduction

In chapter two, the concepts of the study as they relate to findings in the current literature, will be further described. The relationship of the various areas of parental concerns to each other and to the conceptual framework of King, upon which the study is based, and subsequent implications for the profession of nursing will be discussed.

Not only are the needs of repeat parents overlooked by the health care system, but the system is designed to give more support to those pregnant mothers who are at high-risk and less support to those who are "normal". In her study of adaptation of "normal" primiparous women to motherhood, Curry (1983) found that 25% had difficulty adapting and, therefore, summarized that "all pregnant women and new mothers, not just those at high-risk, may potentially need additional support" (p. 120).

Concerns of multiparous mothers, especially those that are "normal", have not been fully addressed by health care professionals. Even less is known about the concerns of fathers expecting a second child. Because the concerns of parents expecting a second child have been less fully researched, health care providers caring for this group of parents may be basing their care on incomplete or

inaccurate assumptions. The increased complexity of interrelationships that occur within the family unit with the addition of a second child should alert health care professionals that second-time parents may need at least as much, if not more, support as parents expecting their first child. "Whereas the primipara, upon the birth of her infant, moves from one interrelationship or dyad in her nuclear family to three, the secundigravida encounters six dyadic relationships. If this is her third child, she goes home to face ten dyadic relationships" (Mercer, 1979, p. 301). Concerns of parents expecting their second child must be acknowledged so that they can be fully addressed.

Parental concerns previously identified by investigators have been drawn from samples of first-time mothers or fathers and, to a lesser extent, from second-time mothers. Concerns of second-time fathers are mentioned even less frequently in the literature. Since the rate of second births when compared to first births is substantial, it would seem appropriate that health care professionals caring for parents during their childbearing years be aware of the concerns of parents expecting their second child. Awareness of parental concerns is necessary in order to promote and maintain the total health of the family. With the advent of family-centered maternity care, it is accepted that the goal of each pregnancy is not only to have a healthy mother and baby, but also a healthy family unit as well (Lipkin, 1978).

Just as first-time parents may be concerned about their new role of mother or father (Dyer, 1963; Obrzut, 1976), second-time parents may also have concerns about their new role as a mother of two children or father of two children (Moore, 1978). The family is a social system. Like all systems, the family is affected by the addition of new members and certain changes are expected (Bash & Gold, 1981; Kreppner, Paulsen & Schuetze, 1982). As Brazelton (1981) states, "there are important adjustments that are distinct to each new addition to a family" (p. 39).

Although parenting one child may be helpful in preparing for a second, personal experience in parenting the second child will be necessary for role acquisition to be finalized. Since the final step necessary for role acquisition is the personal experience of that role (Thornton & Nardi, 1975), it is very likely that parents expecting their second child may have concerns about being a mother or father of two children, even though they have already experienced being a parent of one child. As expectant parents prepare to take on this new role as parents of two children, they may experience concerns regarding the effect this may have on themselves, their spouse, their marital relationship, their first-born child, the expected baby, the second upcoming childbirth experience and their household and finances.

The purpose of this study then was to investigate the perceived concerns of parents, both mothers and fathers,

during the third trimester of their second pregnancy and to explore the relationships between those concerns perceived by mothers as compared to those concerns perceived by fathers. Knowledge of repeat parents' concerns will assist the nurse in promoting the health of the family, since the closer the nurse's perceptions are to those of the parents, the more meaningful her interventions will be (King, 1981).

Definitions of Parental Concerns

In this study, the concerns of expectant parents were investigated as they related to self, spouse, the marital relationship, first-born child, expected baby, the childbirth process and the family's household and finances. These seven categories provided a method for assigning the concerns identified by parents into significant subscales for analysis. The following section includes brief definitions of these areas of concern.

Self

Concerns related to self were those specific to the individual needs and lifestyle of the parent, mother or father, responding to the questionnaire.

Spouse

Concerns related to the spouse were those identified by the mother or father as affecting the daily life, health and general well-being of their husband or wife.

Marital relationship

Both the physical and emotional components of communication, affection and time between spouses were

reflected in questions focusing on concerns relevant to the marital relationship.

First-born child

Concerns related to the first-born child were those relating to the general physical and mental well-being and care of the couple's first-born child.

Expected baby

Concerns related to the expected baby were those specific to the physical and mental health, love, care and acceptance of the second child.

Childbirth experience

Concerns relating to the forthcoming labor, delivery and immediate postpartum period, with the birth of the second child, along with the physical and emotional care by doctors and nurses during this time, were reflected in the area called childbirth experience.

Household and finances

Concerns related to the household and finances were those specific to the physical environment of the home, daily routines, income and expenditures of the family.

Now that the above areas of parental concerns have been defined, the literature relevant to the development of the study concepts will be presented.

Parental Concerns in the Literature

Concerns of mothers and fathers during pregnancy have been identified in the literature. Most of these concerns were gathered from first-time mothers and fathers, less

often from second-time mothers, and even less frequently from second-time fathers. The following concerns already identified in the literature helped to focus the direction of this study.

Concerns for self

Both mothers and fathers may wonder how a first or second child may alter their daily lives. Concern for the effect of a first child on the parent's self-identity, personal interests, freedom and social life have been well documented in the literature (Hobbs, 1965; Dyer, 1963; Le Masters, 1957). Mothers, especially, may be concerned about the effect of a new baby on their job or career goals (Le Masters, 1957). Simply having quiet time or time alone for oneself may be a concern to new mothers (Barber & Skaggs, 1975).

In their study of maternal concerns during pregnancy, Light and Fenster (1974) found that one of the most frequent concerns expressed by multiparas was the ability to care for their families. Mothers may worry about adequately fulfilling their new role as a mother of two children, or wonder if they will have the time, energy and patience required to nurture the emotional and physical needs of their spouse and children. It is feasible that second-time fathers, as well as mothers, may also feel challenged by the demand to balance the needs of self, spouse, first-born child and new baby (Duvall, 1977).

This newly reawakened feeling of responsibility for

another family member can cause both mothers and fathers to have more thoughts about their own health or possible death (Friederich, 1977; Kleinman, 1977). The second time around, each spouse may realize that any threat to their health could affect not just the other spouse, but also the remaining first-born child and possibly the new baby. These feelings are definitely not unique to mothers, for as Hott (1976) found, fathers may also harbor "fears and fantasies about their own deaths" (p. 1438).

Feelings regarding the pregnancy's affect on the woman's figure and weight, body image, and feelings of physical attractiveness have been well documented in the literature as being a concern of pregnant and newly delivered mothers (Mueller, 1985; Strang & Sullivan, 1985). In her study of both primiparous and multiparous women during the postpartum period, Gruis (1977) found that the most frequent concern expressed by these women was the return of their figures to normal.

Parents may feel they receive less support and attention from relatives and friends during their second pregnancy and after the birth of the second baby. Whereas the announcement of being pregnant with the first child might have been met with celebration, the announcement of being pregnant with the second child is more often met with less enthusiasm by relatives and friends (Jiminez, Jones & Jungman, 1979; Mercer, 1979).

Mothers, especially, may wonder if they will get the help and support from their husbands that they need in order to manage the demands of another child (Glazer, 1980; Leifer, 1977). Oftentimes, fathers may spend less time assisting their wives with infant care activities than the fathers themselves projected on doing prenatally (Hangsleben, 1983). By their use of a postpartum self-evaluation questionnaire, Lederman, Wiengarten and Lederman (1981) found that multiparas reported significantly less husband involvement in infant care than did primiparas. Many mothers may be trying to balance these new responsibilities, in addition to being employed outside the home, while receiving less help and support from their husbands, family and friends.

To summarize then, both mothers and fathers expecting a child may have concerns related to their own self during pregnancy. Realizing the demands that one child has made on their time may cause parents to wonder if the addition of a second child will further reduce their personal freedom and ability to pursue both career and social interests. Mothers may be especially concerned about their figure and weight. Pregnancy is a time when both mothers and fathers may spend more time thinking about their own death or possible illness as they ponder whether they will be able to meet the needs of their growing family. And all these concerns may be occurring at a time when parents expecting a second child feel they are receiving less support from

family and friends than when they were pregnant with their first child!

Concern for spouse

Expectant parents may have more thoughts regarding their own health, but they may also find themselves thinking more about the health or possible death of their spouse (Friederich, 1977; Lipkin, 1978). Since the wife is physically experiencing the pregnancy, labor and delivery, husbands may find themselves particularly concerned about their wives' health (Marquart, 1976).

The women are not the only ones concerned about the return of their figures once the baby is born. Evidently, concern with the expectant mother's weight gain and body changes can also be felt by the father (Moore, 1978). And, as Friederich (1977) acknowledges, "the support of the husband can be crucial to the woman's accepting her body change" (p. 30).

Both mothers and fathers may have concerns related to their spouse during pregnancy. Fathers may be especially concerned with their wives' health since the mother physically experiences the pregnancy and childbirth and may find themselves thinking more about their wives' possible death. Fathers may also wonder whether their wives will regain their prepregnant figure. Information specific to concerns regarding one's spouse during pregnancy is limited. There is an obvious need for more research to be done in this area.

Concern for the marital relationship

Concern that a couple may have regarding the effect of a child on their marital relationship has been repeatedly documented in the literature (Clark & Affonso, 1976; Duvall, 1977; Kleinman, 1977; Valentine, 1982). Concern for the marital relationship can be experienced by both first-time mothers (Leifer, 1977) and first-time fathers (Obrzut, 1976), and particularly by the multiparous couple (Jiminez, Jones & Jungman, 1979).

Mothers may concern themselves with trying to be a "good" wife and, therefore, not neglecting their husbands after the baby's birth (Dyer, 1963; Gruis, 1977; Lipkin, 1978). First-time fathers may feel semi-isolated or think that their wives are less interested in them, and possibly feel jealousy toward the baby (Bash & Gold, 1981; Hangsleben, 1983). Mothers may feel that their husbands are not paying enough attention to them after their first child is born (Ryder, 1973). This may explain why Rollins and Feldman (1970) found that the dependent children stages of the family life cycle were associated with negative evaluations of the marriage by the wife.

In his study of couples expecting their first child, Fein (1976) found that men's preparations for postnatal stresses in their relationships with their wives took several forms. Some men began taking time off from work while others began paying increased attention to their wives and spent more time talking about their relationship

and their future with the baby. Wandersman (1980) studied forty-seven first-time fathers and found that although fathers felt more comfortable as parents as their babies become older, they reported a slight decrease in marital satisfaction. Some parents find that their marital relationship has improved or at least stayed the same since their baby's birth (Russell, 1974).

Both mothers and fathers may have concerns related to changes in their sexual relationship during pregnancy and after the baby's arrival (Clark & Affonso, 1976; Gruis, 1977; Marquart, 1976). Dyspareunia, differing sexual drives, and impotency may be problems experienced by pregnant couples which can cause frustration and embarrassment (Jensen, Benson & Bobak, 1981).

In her study of both primiparas and multiparas, Larsen (1966) found that decreased libido concerned mothers prenatally and during the postpartum period. Marquart (1976) found that sexuality was not a source of overwhelming problems for the fifteen expectant fathers she interviewed, but that these men did ask many questions about sexuality when given the opportunity. Hobbs (1965) found that decreased sexual responsiveness of self was the second most discriminating item chosen by first-time mothers and that decreased responsiveness of spouse was the tenth most discriminating item chosen by first-time fathers.

Feelings regarding sexuality may vary between

expectant mothers and fathers during pregnancy. Some pregnant females may find their bodies fat and unattractive, or may feel more womanly and pleasing. Some men may find their pregnant wives more beautiful than ever, or lose sexual interest in their wives (Mueller, 1985). And, if sexual interest decreased and the frequency of sexual intercourse decreased after birth of their first child, parents expecting their second child may wonder if this pattern of decreased interest or frequency will worsen.

Considering contraceptive techniques to either prevent or postpone further pregnancies can be a concern to parents (Glazer, 1980). Parents may be weighing the decision of contraception versus sterilization after the second child's birth. In their study of women in the postpartum period, Light and Fenster (1974) found that multiparous women expressed a higher incidence of concern than primiparous women regarding either having more children than desired or the choice of contraceptive technique to use after the baby's birth.

In summary then, parents may be concerned about how their marital relationship will be altered by the birth of a child. Parents may wonder if they will have time for companionship as well as sexual intimacy. First-time fathers may feel somewhat isolated when their child is born. Choices to be made regarding contraception or sterilization after the baby's birth may concern parents.

Concern for the first-born child

In addition to the above concerns, both parents may worry about the effect of the second child's arrival on their first-born child. Parents may be concerned that their first child will feel threatened (Barber & Skaggs, 1975; Jiminez, Jones & Jungman, 1979) or possibly exhibit regression (Lipkin, 1978). Parents may worry about how they will manage the care of their first-born child while they are at the hospital delivering and getting acquainted with their new baby (Larsen, 1966).

The potential for sibling rivalry and how expectant parents will deal with it may cause parents concern as they try to anticipate their first-born's reactions and adjustment to the new baby (Clark & Affonso, 1976; Moore, 1978, Moss, 1981). Will the first-born child possibly regress to the use of the bottle or pacifier again, or will gains made toward toilet training be lost? Maybe the parents fear that the older sibling will behave aggressively toward the new baby or behave negatively towards them. Parents' concerns regarding aggression and regression become even more valid if the two children are closely spaced since "the closer in age the two siblings are, the more likely the older one is to behave in a hostile manner toward the younger child" (Hymovich & Chamberlin, 1980, p. 271). Whereas an older child may at times compete with parents for the baby's attention, a younger child may be competing with the baby for their

parents' attention (Costello, 1985).

Mothers may feel guilty because they feel too tired during their second pregnancy to participate in the special activities that they formerly shared with their first-born child (Grubbs, 1980; Stark & Carrico, 1983). Both mother and father may fear the loss of the exclusive and unique relationship that they have developed with their first-born child (Jenkins, 1976; Moore, 1978). As Kendrick and Dunn (1980) found in their investigation of 40 families, there was a marked increase in confrontation between mother and first-born and a decrease in maternal attentive playfulness after the birth of the second child. The addition of the second child to the family system will necessitate that some changes be made. The effect of change on any system can be positive or negative. Anticipation of the perceived negative aspects of change on the family may concern both the expectant mother and father.

To summarize, parents may have many concerns related to their first-born child. Parents may wonder how they will manage the care of their first-born while the mother is hospitalized and also after the baby comes home. Parents may wonder if or how they will deal with their first-born child's developmental regression or possible aggression towards the baby. Parents may feel that their time with their first-born child and the special relationship that they have with that child will be threatened by the addition of the new baby to the family.

Concern for the expected baby

Along with concerns related to the first-born child, the expectant parents are likely to have concerns regarding the expected baby. It is not unusual for both mothers and fathers to feel somewhat ambivalent upon learning that they are expecting a child (Barber & Skaggs, 1975; Hrobsky, 1977; May, 1976). This ambivalence usually decreases as the pregnancy progresses (Lipkin, 1978; Moore, 1978). But for the mother or father expecting a second child, sensing this ambivalence toward the arrival of the baby may promote feelings of failure, fear or guilt (Gulbas, 1981; Jenkins, 1976). It is interesting to note, though, that these feelings of ambivalence do not seem to lessen a parent's concern for the health and welfare of the baby (Hott, 1976; Rubin, 1976). Both Larsen (1966) and Stark and Carrico (1983) found that concern for the baby's health and normalcy may be greater among multiparas when compared to primiparas. Parents may feel that since they have been fortunate enough to have had one normal child, that their luck might run out the second time around.

Mothers and fathers who have become accustomed to caring for the increasingly independent toddler or preschooler may again feel overwhelmed by the care required to meet the needs of a newborn baby. In their investigation of postnatal parental concerns, Sumner and Fritsch (1977) were surprised to find that 25% of the multiparous mothers eligible to call in for advice did so.

Also, although primiparous mothers made more phone calls seeking help with their new baby, multiparous mothers asked more questions per phone call. Concerns of fathers and mothers may not be limited to those related to the baby's physical care but may also include the aspect of promoting the baby's total growth and development (Giefer & Nelson, 1981). Greater concern for the baby's overall growth and development may be especially true for parents expecting their second child (Gruis, 1977; Moss, 1981).

With all this thought given to meeting the needs of the new baby, parents may feel concerned, and possibly guilty, that they will not be able to give their second child the individual time and attention that they gave their first-born child (Barber & Skaggs, 1975; Stark & Carrico, 1983). In addition, depending on whether or not parents delivered a child of the desired sex the first time, delivering a child of the desired sex may potentially become a greater concern the second time around (Bernstein, 1984).

Amidst feelings of ambivalence and lack of support from significant others, parents find themselves confronted by their emotions regarding an additional family member. Both mothers and fathers have developed a unique relationship with their first-born and with each other as a family unit or triad. A very frightening question that many expectant parents ask themselves is "can I love another child as much as the first?" Concern with their

own ability to love another child can haunt both mothers and fathers (Gulbas, 1981; Light & Fenster, 1974; Jiminez, Jones & Jungman, 1978; Mercer, 1979). This doubting of one's ability to love is expressed by the secundigravida in Jenkins' (1976) case study when she states, 'I think one difference between having your first baby and having your second baby is that when you're having the first, you love it almost from the time of conception. But, when you're having the second, you don't feel that way' (p. 120). This wondering about one's ability to love the second child, especially if this was not a concern while expecting the first child, may be cause for concern by the parents. Not only may each parent question their own ability to love a second child, but mothers and fathers may be concerned that their spouse will be able to love a second child (Jiminez, Jones & Jungman, 1978).

In summary, parents may be concerned with their ambivalent feelings towards a second child, yet multiparas may be particularly concerned for the second baby's health and normalcy. The sex of the second child may become a greater issue the second time around if this is the couple's last pregnancy or if their first child was not the sex they had wanted. And parents may be concerned that they will be unable to offer the second baby the undivided time and attention that they offered their first child. Finally, parents may wonder if they and their spouse will be able to love their second child as much as their first.

Concern regarding the childbirth process

With anticipation of the new baby's arrival may come concerns regarding the childbirth process, or actual labor and delivery, and postpartum hospitalization. Both mothers (Glazer, 1980; Rubin, 1976) and fathers (Hott, 1976; Marquart, 1976) may worry about possible injury to the mother during childbirth. In fact, Westbrook (1978) found that there tended to be greater mutilation anxiety with increasing parity. The couple's experience during their first labor and delivery can either increase or decrease their fears of the second birth process. As Norr, Block, Charles and Meyering (1980) discovered in their study on parity and birth experiences, multiparas tended to worry more about what childbirth would be like than did primiparas. As these authors concluded, "multiparas, with at least one birth experience behind them, cannot so easily ignore any fears they have" (p. 31).

Regarding an upcoming childbirth, mothers may wonder if they will be able to stay in control (Lipkin, 1978). Fathers may also be concerned with maintaining control during labor if this has been a mutual goal the couple has set for their labor and delivery experience. Parents may also be concerned about the controls put on them by the hospital environment. In their study of primiparas and multiparas, Pridham and Schutz (1983) found that mothers wanted greater involvement of both fathers and older siblings during the delivery and postpartum hospitalization

period than was made available to them.

Besides the expectations for themselves that parents may share, they are also likely to have certain expectations for the doctors and nurses caring for them. Parents may be concerned that they will receive quality physical care and sensitive emotional support from their doctors and nurses (Glazer, 1980; Larsen, 1966).

Support by the father is especially important to the laboring mother (Larsen, 1966; Valentine, 1982). In their study on the affect of support of the husband and obstetrician in pain perception and control in childbirth, Block and Block (1975) found that practical help by the husband increases the mother's ability to utilize tools effectively and control pain. And yet, Norr, Block, Charles and Meyering (1980) found that even though multiparas worried more about the birth process, they prepared for it less and received less support from their spouses during labor.

In summary, both mothers and fathers may worry about the safe process of the mother through the childbirth process. Multiparas may actually have greater concerns than primiparas regarding the delivery and yet multiparas may be receiving less support from their husbands. In addition, parents may wonder about the quality of care they will receive from their doctors and nurses while hospitalized.

Concern regarding finances/household

In addition to the above concerns are those related to the economic reality of adding another member to the family. The family's financial situation is likely to be challenged by the addition of another household member (Dyer, 1963; Moore, 1978; Obrzut, 1976). Career changes may be made to accommodate the addition of a second child (Dyer, 1963; Le Master, 1957). Mothers may choose to quit their jobs or decrease their work hours. Mothers who continue to work full time or part time after their pregnancy leave expires will be faced with the task of arranging and paying for child care for two children instead of one.

All these career and financial changes may be occurring at a time when family expenses are increasing due to added health care costs and the need for more clothes, food, and furniture (Clark & Affonso, 1976; Light & Fenster, 1974; Lipkin, 1978). With these potential changes in mind, it is no wonder that parents may be concerned that they will be able to buy what each of them wants and needs and also what their children will want and need (Glazer, 1980).

Along with additional financial pressures will come additional demands for physical space. Living quarters or sleeping arrangements may need to be changed in order to accommodate the fourth family member (Jiminez, Jones & Jungman, 1979; Lipkin, 1978; Moore, 1978). The house that

seemed to adapt easily with the addition of the first child may suddenly seem cramped when a fourth family member moved in to share the finite space available. Managing the daily upkeep of the household along with additional child care demands may be a concern for both parents, but especially for the expectant mother (Glazer, 1980; Leifer, 1977).

The economy of the United States has undergone a variety of changes over the past decades. For the previous generation, it was the mother's job and duty to bear children and stay home to raise them. Fathers were the main breadwinners. Today's prospective parents have to consider balancing career and maternity leaves with day care, or the professional and financial drawbacks of having children in the first place. Working parents living in New York City can expect to spend as high as twenty-seven thousand dollars for their child during the first year (Lee & Siegel, 1986). With this in mind, the potential economic implications of having a second child on the family's household and budget cannot be overlooked.

In summary, the added cost of having and raising a second child, along with the added demand for space, may be a concern to both parents, although general upkeep of the household and family may be a greater concern for mothers. A family's financial income and household space do not necessarily expand proportionately as the family grows.

From these areas of concerns related to self, spouse, the marital relationship, first-born child, expected baby,

childbirth, and household/finances, it appears that not only first-time parents, but also those experiencing a second pregnancy, may perceive many concerns related to their upcoming developmental stage of parenthood. As indicated in previous studies, multiparas may have more or different concerns than primiparas (Glazer, 1980; Gruis, 1977; Larsen, 1966; Light & Fenster, 1974; Moss, 1981; Stark & Carrico, 1983; Westbrook, 1978). A previous experience with pregnancy, labor and delivery or a demanding newborn can actually increase the multipara's anxiety regarding the upcoming birth process (Brown, 1979; Tolchin & Egan, 1978; Winokur & Werboff, 1956). Therefore, multiparas could potentially experience more emotional problems and feel more vulnerable during their pregnancies and postpartum adjustment periods than primiparas (Cohen, 1966; Grubbs, 1980; Jarrahi-Zadeh, Kane, Van DeCastle, Lochenbruch & Ewing, 1969; Knox & Wilson, 1978).

Although more has been learned about the concerns of multiparous women, little attention has been given to the study of fathers expecting their second child. Considering the paucity of information in the literature on the concerns of second-time fathers, it appears that the attitude that just because it's their second time around, "they know the ropes" may exist for second-time fathers as well as mothers.

Rubin (1970) states that "pregnancy is a period of preparation for giving up rights and privileges in the

prevailing sets or relationships to accommodate another new set of relationships in the realignment of the family group" (p. 506). As seen by this description of pregnancy, a second pregnancy may actually require more, or at least different, preparation and accommodation on the part of the family group as they move from triad to tetrad.

Since the family is a system with numerous roles and functions, any change in the structure (addition of a second child) will require change in other aspects of the system (mother, father, first-born child) as the system (family) attempts to regain balance (Kandzari & Howard with Rock, 1981). "The integration of the second child can thus be seen as a long chain of intrafamilial interaction sequences in which shifts and changes between and among all family members occur" (Kreppner, Paulsen & Schuetze, 1982, p. 376).

The attention and support a couple receives during the prenatal period can influence their ability to adapt to their new life situation (Benson, 1978). If it is accepted that the addition of a new child to the family is a stressful period in their lives, then it is also a time when preventive interventions of the part of all health care professionals, particularly nurses, are likely to be accepted (Donner, 1972). "Promoting parental bonding begins prenatally" (Jenkins & Westhus, 1981, p, 115). In order to promote parental bonding, the perceived concerns of parents must be understood. Knowing that reactions

during pregnancy may be indicative of future parenting behavior (Leifer, 1977) and warn of the risk of postpartum depression (Petrick, 1984), the prenatal period is a likely starting point for anticipatory guidance and therapeutic interventions.

Conceptual Framework

The conceptual framework of Imogene King can guide the interactions of nurses providing health care for parents expecting their second child and was chosen to give direction to this study. King is a nursing theorist, educator, practitioner and author who has organized a conceptual framework for nursing practice based on the concepts of man, social systems, perceptions, interpersonal relationships, and health (George, 1980). From her studies, King has also developed a model to represent the interpersonal relations that occur between the nurse and her clients (King, 1981). The following section will further describe King's framework and model and their significance to the interactions between nurses and second-time expectant parents.

Nursing is defined by King as "a process of action, reaction and interaction whereby nurse and client share information about their perceptions in the nursing situation" (1981, p. 2). Therefore, nursing is understood to be a process of human interaction leading to goal attainment with a client. King's framework is based on the

five concepts of man, social systems, perceptions, interpersonal relationships and health, with man being the central focus of the framework (George, 1980).

King (1981) defines health as "dynamic life experiences of a human being which implies continuous adjustment to stressors in the internal and external environment through optimum use of one's resources to achieve maximum potential for daily living" (p. 5). As the largest group of health professionals in the United States, nurses can assist individuals and communities in coping with changes in their health and also play a part in discovering new knowledge about human transactions with the environment which can help maintain healthy individuals and communities. The goal of nursing is to help individuals and groups attain, maintain, and restore health. King's framework indicates that human beings are the focus for nursing.

Perception is defined by King (1981) as "a process of organizing, interpreting and transforming information from sense data and memory ... a process of human transactions with environment" (p. 24). Perception is one's image of reality which gives meaning to life experiences and influences an individual's behavior. Therefore, nurses must have a knowledge of perception in order "to assess, interpret and plan for a client's identification and achievement of goals that maintain health" (King, 1981, p. 24).

Human beings are understood to be reacting beings. "An individual's perceptions of self, of body image, of

time and space, influence the way he or she responds to persons, objects and events in his or her life" (King, 1981, p. 19). Therefore, man actively processes information from the environment, constantly relating past experiences to present events. Man is viewed by King as a social, time-oriented being. Through human interactions, man reacts to persons, events and objects through his/her own set of expectations, needs and perceptions. Man's prediction for the future is based on past experiences along with an awareness of the present. How a man perceives, judges, acts and reacts to a situation will determine the transactions he makes in that situation. Therefore, as King (1981) summarizes, "if behavior is an outcome of perceptions, then human perceptions become the basic data of human interactions and the facts that nurses must gather and analyze if they are to deliver effective nursing care" (p. 47).

Through her model for a process of human interaction (Figure 1), King demonstrates how the perceptions and judgments of individuals are involved in every type of interaction. Each person involved in human interactions with another brings to that situation his/her perceptions derived from previous life experiences. Based on these perceptions, judgments are formed of the present situation. A value is placed on the situation. Action then follows which "may be verbal or nonverbal and will involve a sequence of behaviors related to recognition of and efforts

to control conditions and events" (George, 1980, p. 190). Reaction involves each person then indicating their perceptions and actions to the other. In King's model for human interaction, the steps of perception, judgment, action and reaction are behaviors that cannot be directly observed but rather only references can be made about them.

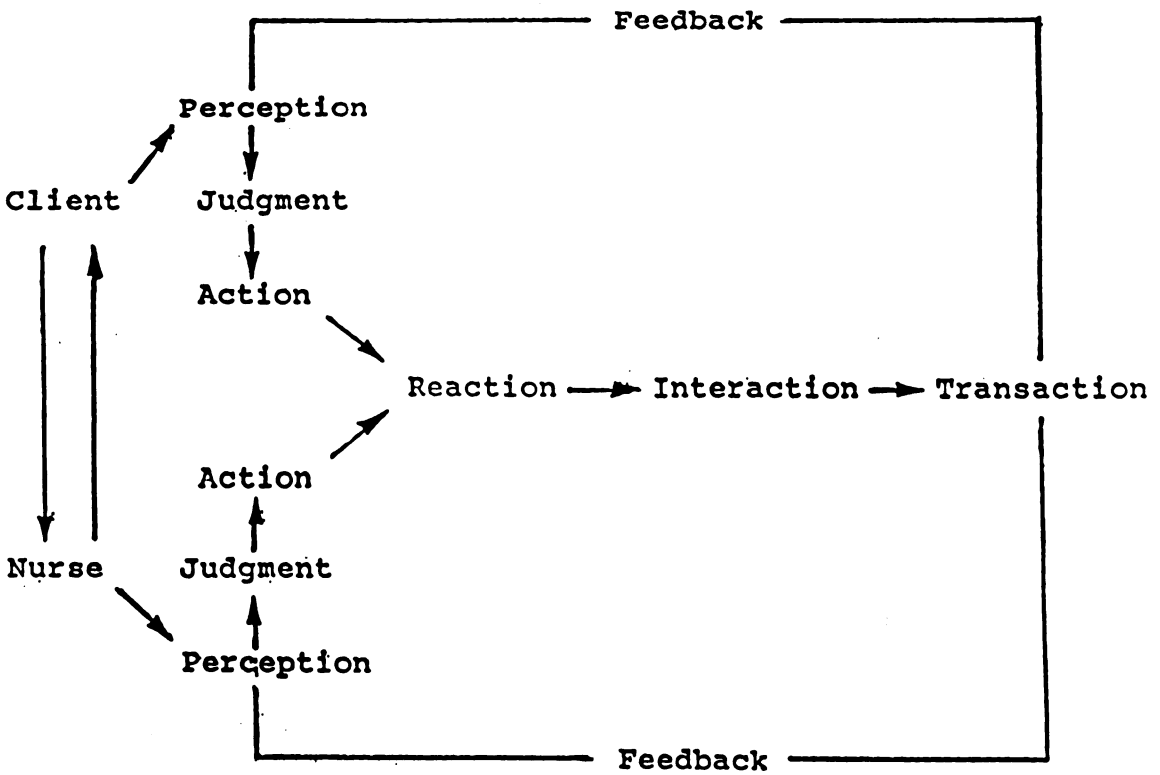

Figure 1. A process for human interaction (King, 1981).

Interaction which follows the step of reaction can be directly observed. At the step of interaction, goals are mutually identified by the two parties in the process. As these individuals develop the means to achieve their mutual goals, they move closer to the step of transaction, where

mutually defined goals are actively attained. Feedback of the process then occurs back to each individual, adding further to their pool of perception.

The above process of human interaction is utilized by nurses as they work within various personal, interpersonal and social systems. King defines social system as "an organized boundary system of social roles, behaviors and practices developed to maintain values and the mechanisms to regulate the practices and rules" (1981, p. 115). Nurses must be able to interact with individuals in a variety of systems such as family systems and health care systems. To be able to interact effectively in these systems, King states that nurses must possess knowledge about the concepts of organization, authority, power, status and decision making.

King's framework and model for human interaction can be very helpful to nurses caring for expectant parents. In King's framework, man is understood to be a reacting, time-oriented social being. Based on King's theory, expectant parents can be viewed as reacting beings who are aware of the second pregnancy and how this event relates to the people around them, particularly their spouse and first-born child. This awareness, in turn, leads to certain perceptions, expectations and needs. As time-oriented beings, the expectant parents may recall past events (birth of first-born child) to influence present circumstances (second pregnancy and expected birth of second child) to

plan for future goals (the acceptance and integration of the second child into the family unit). As social beings, the expectant parents will be exchanging with persons in their environment (spouse, first-born child, health care providers) and can interact with others and thus communicate their thoughts, feelings and perceptions (King, 1981).

A family unit can also be viewed as a small group or social system. There are values and norms that guide members of a family unit. Each member has a certain role (father, mother, spouse, child, sibling). Each role is accompanied by the status and authority awarded it, or the behavior expected of it, which affects the interpersonal relationships or interactions within the family unit (King, 1981).

Each member of the family unit has certain perceptions of the pregnancy and how the addition of the second child may affect them or other members of the family unit. Each family member's perceptions are their interpretations of what goes on in their environment. The nurse working with the family also has certain perceptions of the family and the effects of a second child on that family unit. Optimally, the nurse will base her actions on perceptions which are similar to those of the family. At the very least, the perceptions of the nurse should not be in direct conflict with those of the family (George, 1980). The nurse who misinterprets the perceptions of the family will not be able to address concerns or help to develop goals

which are mutually satisfying for that family.

King describes health as being a dynamic process. To maintain health, one must respond to stressors in the environment and utilize resources to adapt successfully so that one's maximum potential for living can be met. Since pregnancy and the childbearing period is a time of stress for the expectant parents and their first-born child, the nurse must be able to help the family to adapt to this challenging period in order to maintain the maximum potential level of health of the family unit (King, 1981).

King's concept of human interaction or interpersonal relationships is based on the six phases of perception, judgment, action, reaction, interaction and transaction (King, 1981). When a family member interacts with another member of the family unit or with the nurse, each brings certain perception to that interaction on which judgments are made. Either verbal or nonverbal actions follow. The nurse or family member then reacts to indicate their perception and action to the other. The interaction that follows includes not just the exchange of ideas and feelings but also one person doing something for another (George, 1980). Transaction then occurs when family members, or a family member, and the nurse are actively working at attaining their common goal. When the nurse is working with expectant parents, her efforts may be directed by utilizing King's process of action-reaction-interaction-transaction to promote the health of the family as it

adopts to the birth of the second child.

Figure 2 is a diagram of how King's framework and model relate to this study. By means of a self-administered questionnaire developed for this study, the investigator studied the perceived childbearing, childrearing, and marital concerns of fathers and mothers expecting their second child. Concerns studied were based on the investigator's personal clinical experiences and also on a review of past and current literature. Childbearing, childrearing and marital concerns were investigated as they related to the seven sub-concept areas of self, spouse, marital relationship, firstborn child, expected baby, childbirth experience, and household and finances.

Extraneous variables (sociodemographic, modifying, and action), implicated in the literature as possibly influencing concerns perceived by expectant parents, are represented in the model. Sociodemographic variables (age, education, income, ethic background, religion, employment) along with various modifying variables (age and sex of firstborn child, previous pregnancy, labor and birth experiences) have been implicated in the literature as factors which could effect the concerns perceived by expectant parents. Therefore, information on these socio-demographic and modifying variables was also collected. In Figure 2, the influence of these sociodemographic and modifying variables, relating to previous life experiences

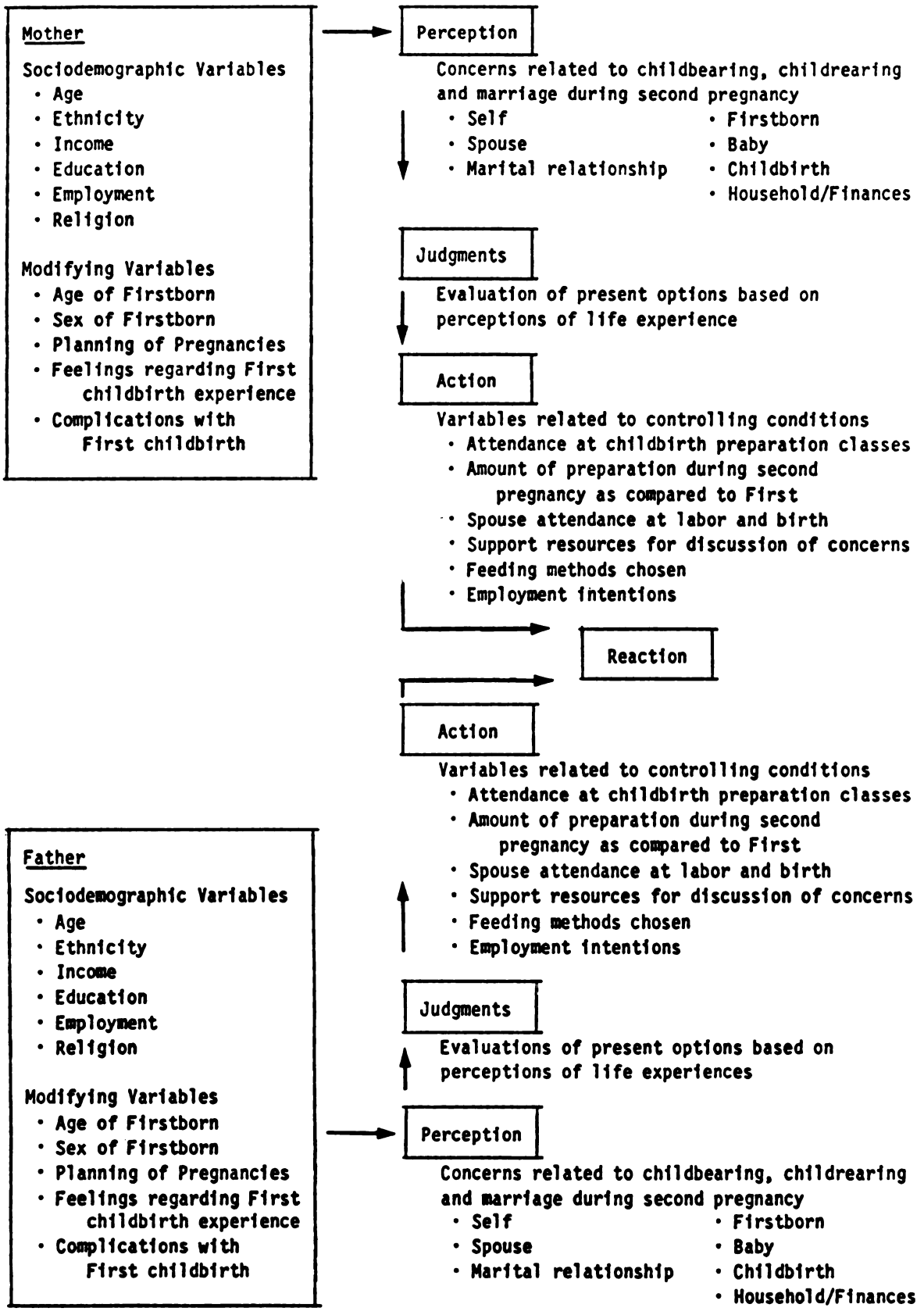

Figure 2. Application of King's Theory to the Study Concepts

on the parents' perceptions of current life events is demonstrated. Concerns relating to self, spouse, marital relationship, firstborn, expected baby, childbirth and household and finances during the second pregnancy are naturally influenced by sociodemographic and modifying variables from previous life experiences.

Evaluative processes occuring during the judgment phase were not specifically addressed in this study. But judgments made by expectant parents are influenced by their perceptions of the second pregnancy and will, in turn, influence their mental and physical actions. These actions taken by expectant parents to control their present situation were also investigated. These actions included such areas as preparation for childbirth, plans for attendance of father at the labor and delivery, choice of feeding for the new baby, use of support resources, and intentions for employment after the baby's birth.

Following King's framework, actions of the expectant parents would then influence their reactions, regarding the second pregnancy, to their spouse. Since it was not the intent of the investigator, nor the purpose of this study, to study the reactions, interactions and transactions which occur between mothers and fathers expecting their second child, the model for this study (Figure 2) stops after the action phase. A more complete demonstration of how King's framework and model for interaction would relate more fully to nurses involved with fathers and mothers expecting their

second child is contained in Figure 3. A brief overview of King's model, as adapted for nurses caring for expectant parents, will be described below. A fuller description of King's model will follow in Chapter six.

Based on previous life experiences, fathers and mothers expecting their second child perceive various concerns during a second pregnancy. Based on their previous clinical experiences, nurses caring for expectant parents also perceive various concerns which these parents may experience during a second pregnancy. Based on their perceptions, the expectant parents and their nurse will have certain judgments or evaluations of the meaning of these concerns as related to the second pregnancy. Certain physical or mental actions may be taken by the expectant parents or their nurse to control certain events related to that second pregnancy. In the clinical setting, the nurse will be able to react to the perceptions of the expectant parents and they in turn will be able to react to her perceptions. Communication will optimally lead to an interactive process where nurse, father, and mother will be able to identify mutual goals during a second pregnancy and also the interventions needed to achieve these goals. During transaction, mutually identified goals are attained. A feedback system is present in the model indicating that even after transaction, new perceptions may evolve based on further life experiences promoting continuing communication to mutually modify goals as needed.

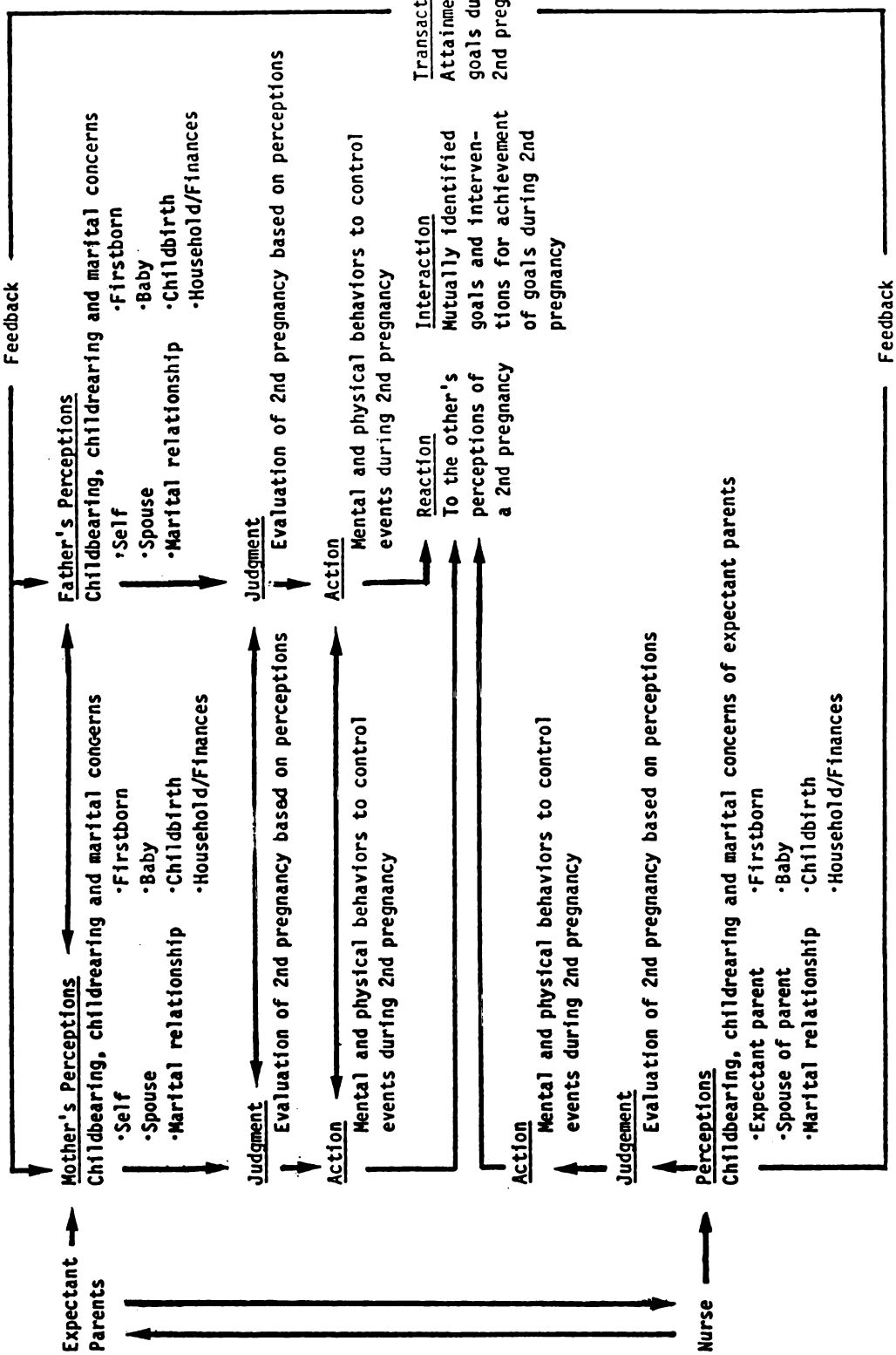

Figure 3. Proposed Adaptation of King's model to the process of interaction between nurse and parents expecting their second child (King, 1981).

In utilizing King's theory when working with expectant parents during a second pregnancy, the nurse will be challenged to identify concerns of both the mother and the father which are similar, or not, to each other's and to her own. The nurse will be reacting to the perceptions, judgments and actions of each parent as an individual, but also to both parents as a couple. With King's framework as guide, the nurse should be able to maintain a relationship with expectant parents which allows for reactions and interactions to occur leading to the attainment of individual and family goals which are able to be modified as needed based on feedback.

The closer the perceptions of the nurse to those of parents expecting their second child, the more likely that mutual goals will be identified and attained. If the nurse's perceptions are in conflict with those of the parents, then mutual goals will not be identified or met. For example, if the expectant mother only wants to gain 18 pounds during her second pregnancy, the father feels 40 pounds will assure a healthy baby and the nurse perceives 25-30 pounds as a safe weight gain, then this nurse will have difficulty in attaining a mutually set goal with this family unless perceptions of the mother, father and nurse are modified. Through King's process of feedback and further action, reaction and transaction, the nurse and expectant parents may be able to identify a goal for weight gain which is mutually satisfying.

Application For Nursing

Since the perceived concerns of both the mother and father who are expecting their second child have not been given adequate attention by the health care system, this study proposed to identify these concerns. Since knowledge of the client's perceptions is necessary for mutual goal setting (King, 1981) and appropriate interventions by nurses, then this study should expand the knowledge base of the nursing profession and assist nurses in their care of parents expecting a second child.

As Kunst-Wilson and Cronenwett (1981) suggest, "interventions aimed at establishing healthy early family relationships can be the unique contribution of nursing as distinguished from the focus of medicine [i.e., the delivery of a physically healthy mother and infant]" (p. 208). Therefore, expanding the nurse's knowledge regarding the concerns of parents expecting their second child can increase the effectiveness of the nurse's anticipatory guidance with these parents and establish the nursing profession's unique contribution to this aspect of the health care of families.

Nurses and other health care professionals caring for families during their childbearing years can be a tremendous resource and can assist families in identifying and utilizing further internal and external resources. A starting point in promoting the health of parents expecting their second child is to identify and acknowledge their

perceived concerns. King's (1981) process of human interaction demonstrates how individuals mutually identify goals and the means to achieve them.

The culmination of positive interactions will be the attainment of goals or what King refers to as transaction. The process of transaction can only be achieved after the perceptions, judgments and actions of each person have been clearly exchanged through the processes of reaction and interaction. Therefore, health care professionals interacting with parents expecting their second child must first understand the concerns perceived by these parents in order to effectively work with them in promoting and maintaining their family's health. King's conceptual framework for nursing interaction can supply the framework needed to direct the care of nurses interacting with parents during their childbearing years.

Included in chapter three will be a review of the literature pertaining to concerns identified by parents during the childbearing period.

CHAPTER III

REVIEW OF THE LITERATURE

Introduction

In this chapter a discussion of research studies relevant to concerns of expectant parents will be discussed. The literature review will be presented in reference to the seven sub-concept areas of concerns related to self, spouse, the marital relationship, the first-born child, the expected baby, the upcoming childbirth experience, and the household and finances. Major research findings relative to the concepts under investigation will be presented as well as strengths and weaknesses of the studies examined. Although the time focus for this study is the prenatal period, literature pertaining to both the prenatal and postnatal periods will be reviewed to insure a complete overview of all possible parental concerns since some concerns may be present in both periods. Since there has been less research done on parents expecting their second child, particularly fathers, literature relevant to both primiparous and multiparous mothers and fathers will be presented.

Concerns Related to Self

LeMaster (1957) was the first researcher to conclude that the addition of the first child constituted a crisis event. His conclusion was based on a retrospective,

exploratory study of 46 couples who had delivered their first child within five years of the date interviewed. LeMaster utilized Hill's (1949) definition for crisis, which is "any sharp or decisive change for which old patterns are inadequate" (p. 51). The couples were all middle-class, married and between the ages of 25 and 35. In addition, the wife was not employed outside the home after the first child's birth and the husband was a college graduate. Both husband and wife were interviewed together by LeMaster. A five-point Likert scale was utilized in coding the interview data. Crisis scores were arrived at by agreement between LeMaster and the couple interviewed.

The hypotheses tested were that, (a) the addition of a new member to a family system would force a reorganization, and that (b) if the previous hypothesis is true, that the arrival of the first child could be construed as a crisis or critical event. LeMaster concluded that the hypotheses were supported since 38 of the 46 couples (83 percent) reported extensive or severe crisis in adjusting to their first child and the remaining eight couples (17 percent) reported relatively mild crisis. Thirty-four of the 38 couples in the crisis group (89 percent) rated their marriages as good or better, and 35 of the 38 pregnancies in the crisis group were planned. This data supported the belief that crisis patterns occur even when the pregnancy was planned or the marriage was good. The majority of the concerns and feelings reported by mothers centered on self,

such as: exhaustion; curtailment of social contacts; satisfaction and income of outside employment; additional housework; being a better mother; time required in caring for an infant; decline in housekeeping standards; and worry over their appearance. Fathers' concerns echoed those of their wives but also included: decline in sexual response of wife; decreased income and economic pressures; interference with social life; worry about a second pregnancy; and disenchantment with the paternal role.

LeMaster's study has several limitations. The sample of couples was non-random limiting the generalizability of the findings. Joint interviewing of couples may have altered their honest reporting of perceived changes. Frequency distribution by children's ages for crisis scores were not reported. LeMaster does not provide any information about the scale item construction utilized in interpreting the interviews. Since this was a retrospective study, the accuracy of the parents' recall of the crisis is questionable. The children's ages and developmental levels may have had an effect on the parents' recall of the extent of the crisis experienced.

One very positive outcome of LeMaster's research is the question it raised that, can even the most "normal" of changes in the family be perceived as stressful. In summary, LeMaster concluded that the addition of the first child constituted a crisis event forcing reorganization of the family system. LeMaster's study has important

implications for the present study, since the assumption that the addition of a child to a family causes reorganization can also be applied to families expecting a second child.

In 1963, Dyer closely replicated LeMaster's (1957) study on the effects of the arrival of the first child upon family roles and relationships. A convenience sample of 32 couples was chosen and was very similar to LeMaster's sample except that Dyer limited the timing of the interview to within two years of the couples' first child's birth. Dyer utilized a Likert-type crisis scale to determine the level of crisis for each couple. The reliability of the scale ($r = 0.84$) was tested by the split-half method, which, when corrected by the Spearman-Brown formula, gave a reliability coefficient of ($r = 0.94$). Face validity of the scale was supported by a jury of six young married couples having one or more small children. Dyer found that the state of the marriage and family organization prior to the first child's arrival was average or above average for a majority of the couples in his sample. The distribution of families as to crisis scores were: (a) no crisis - none; (b) slight crisis - 9 percent; (c) moderate crisis - 38 percent; (d) extensive crisis - 28 percent; and (e) severe crisis - 25 percent. By comparison, LeMaster found only 17 percent of his families in the first three categories, and the remaining 83 percent in the extensive and severe crisis categories.

Dyer concluded that, for his sample, the addition of the first child did constitute a considerable crisis for the couple. For new mothers, the most frequent areas of concern were: (a) tiredness and exhaustion (87 percent); (b) loss of sleep (87 percent); (c) feelings of neglecting husband (67 percent); and (d) feelings of inadequacy in fulfilling the mother role (58 percent).

The most frequently reported problem areas for new fathers included: (a) loss of sleep (50 percent); (b) adjusting to new responsibilities and routines (50 percent); and (c) upset daily routines (37 percent). The most severe problems reported by 87 percent of the wives were: (a) adjusting to being tied down; (b) getting accustomed to being up at all hours; (c) inability to keep up with housework; and (d) feeling of anti-climax, or letdown, after baby's birth. Eighty percent of the fathers admitted to the following severe problems: (a) adjusting to one income; (b) adjusting to new demands of parenthood; (c) getting used to new routines; and (d) sharing with grandparents and other relatives.

Testing by Chi-square revealed significant negative relationships ($P < 0.05$) between the degree of crisis and the following variables: (a) marital adjustment ratings after the baby's birth; (b) preparation for marriage courses taken in school; (c) length of marriage greater than three years; (d) college education of husband; (e) a planned pregnancy; and (e) first child being older than six

months of age.

The generalizability of Dyer's study is somewhat limited by the smaller sample size being solely urban middle-class in nature. Dyer did improve on LeMaster's study by utilizing a questionnaire based on LeMaster's findings which was answered separately by both husband and wife. Doing so, Dyer was able to collect individual perceptions of the husband and wife which were less likely to be influenced by either the interviewer or the presence of the spouse. In summary, Dyer's findings were similar to those of LeMaster's supporting the hypothesis that the addition of the first child does create changes which can be interpreted as a crisis experience. Dyer's findings have implications for the present study, since it may be assumed that the addition of a second child to the family may also create changes which may be interpreted as being stressful.

Hobbs (1965) carried out a retrospective study of first-time parents in an attempt to learn if earlier findings by LeMaster (1957) and Dyer (1963) with middle-class subjects would generalize to a probability sample of first-time parents' adjustment to parenthood. A random sample of 53 white, urban, first-time parents was drawn from public birth records. A 23 item checklist was administered to the couples whose first child had been born within the previous 3 to 18 weeks. Crisis scores of fathers and mothers were separately analyzed. Over 90

percent of the subjects of both mothers and fathers rated their marriages as being happy and satisfying prior to their first child's birth.

By examining the percentage of fathers who indicated that a given item bothered them either "somewhat" or "very much", Hobbs found that 75 percent of fathers were bothered by interruption of routine habits such as sleeping and going places, and 60 percent of the fathers were bothered by increased money problems. In comparison, 74 percent of mothers were bothered by interruption of routine habits, 68 percent were bothered by fatigue, 66 percent were bothered by increased money problems, and 60 percent were bothered by feeling emotionally upset. Discrimination index values for items ranged from 0.20 to 1.00, with a mean value of 0.48 for fathers and 0.55 for mothers. A split-half reliability coefficient of $r = 0.62$ was obtained for each sex.

The ten most discriminating items for fathers were: increased money problems; feeling emotionally upset; additional amount of work; physical fatigue; having to change plans made before baby's birth; interruption of routine habits; housekeeping not as neat as it should be; decreased contact with friends; and decreased sexual responsiveness of wife. In contrast, the ten most discriminating items for mothers were: interference from in-laws; decreased sexual responsiveness of self; physical fatigue; feeling emotionally upset; decreased contact with

persons at work; worry about loss of figure; worry about personal appearance in general; interruption of routine habits; housekeeping not as neat as it should be; and doubting one's worth as a parent.

Review of the percentage distribution of couples by crisis category reveals that 86.8 percent of the sample in Hobbs' study reported only "slight" crisis, whereas in comparison, LeMaster (1957) reported 83 percent and Dyer (1963) reported 53 percent in the "extensive" and "severe" categories.

Fifteen variables were investigated to search for those that could be predictive of crisis. Only four of the variables departed from chance distribution to a statistically significant degree at the $P < 0.05$ level. Hobbs reported the following findings for first-time parents: (a) for fathers, family income and crisis scores were negatively correlated ($P < 0.01$); (b) for father, infant's age and crisis scores were positively correlated ($P < 0.01$); (c) none of the correlation coefficients for mothers was significant.

The design of Hobbs' study improved on LeMaster's (1957) and Dyer's (1963) studies through utilization of a random sample of parents and limitation of their first child's age to a period within 3 to 18 weeks. Findings of Hobbs' study diverged sharply from those of LeMaster and Dyer, both in the distribution of couples according to the degree of difficulty reported and with regard to variables

differentiating couples who have little difficulty with the first child from those who have greater difficulty. Furthermore, Hobbs questioned the wisdom of combining husband and wife crisis scores to get crisis scores for couples since the fathers and mothers in his sample differed significantly on the crisis variable, their crisis scores were not correlated and they differed on individual items. Hobbs study is limited by the small sample size and failure to address the reliability of the instrument used.

In summary, Hobbs found adaptation to parenthood to be only slightly to moderately difficult for new parents, and also that concern over income to be the only variable which might be used to predict difficulty with the first child. Hobbs study is relevant to the present study, since the variable of concern over income may have even greater implications for the expanding family who is expecting the second child. By studies such as Hobbs', this researcher was directed to investigate extraneous variables, such as income, which might correlate with concerns of expectant parents.

One decade later, Hobbs (1976) replicated his study on 65 couples randomly chosen from the same city as in his 1965 study. Hobbs' sample had similar characteristics to the 53 couples studied in 1965 except that the mean age of their infant was 25.9 weeks rather than 9.8 weeks as in his initial study. The 23 item checklist was identical to the one utilized in 1965. The mean difficulty scores were 5.9

for fathers and 9.7 for mothers, a difference which was significant at the $P < 0.001$ level. The differences between the means for fathers and mothers in 1965 as compared to 1976 were not statistically significant. As in the 1965 study, variables were sought which differentiated between parents on the amount of difficulty they reported in adjusting to the first child. Chi-square scores were computed for 14 selected variables. None of the variables studied were found to be statistically reliable for mothers. Four of the chi-square values were statistically reliable for fathers at the $P < 0.05$ level: health of baby; pre-birth and post-birth ratings of marriage; and the number of additional children desired. Computation of a Pearson product moment correlation coefficient between difficulty score and five variables yielded two significant results. The father's age and difficulty score correlation was $r = 0.41$, significant at the $P < 0.01$ level. The parents' income and difficulty score correlation was $r = 0.27$, significant at the $P < 0.05$ level. In the 1965 study, fathers's difficulty scores were significantly correlated with babies' ages ($r = 0.59$) and income ($r = -0.37$); none of the correlation coefficients for mothers were significant.

Five of the ten most discriminating items of difficulty found for men were identical to the 1965 study. Seven out of ten items were the same for women in the two studies. The rank order of the items varied considerably

for the same sex samples in the two studies and between the sexes in both studies. The top three discriminating items for fathers were: increased money problems, decreased sexual responsiveness of wife, and decreased contact with friends. The top three discriminating items for mothers were: feeling emotionally upset, increased money problems, and housekeeping not as neat as it should be.

The main weakness in Hobbs' restudy is the utilization of a checklist which, by the researcher's own admission, contains items which lack discriminatory power in measuring the difficulty experienced by new parents. In addition, the sample size was small and the mean age of the infants the time of the study (25.9 weeks) was greater than the mean age of the infants (9.8 weeks) at the time of Hobbs' 1965 study. Positive aspects of Hobbs' study included studying parents within a defined time span from their first child's birth and obtaining separate difficulty scores for fathers and mothers.

In summary, findings of Hobbs' (1976) study confirmed his earlier research from 1965. Hobbs again found only slight to moderate levels of difficulty experienced by new parents with mothers experiencing slightly more difficulty than fathers. Again, Hobbs concluded that the period following the birth of the first child is one of transition, not crisis as previously felt by LeMaster (1957) and Dyer (1963). Hobbs finding that mothers may experience slightly more difficulty than fathers after the

birth of a child is important to the present study since concerns experienced by both fathers and mothers during a second pregnancy will be investigated and compared.

In 1974, Russell extended the focus of parenthood research to study both positive and negative outcomes of becoming a parent for the first time. Questionnaires mailed to a random sample of new parents in a large metropolitan area yielded 296 returned questionnaires from mothers and 272 returned questionnaires from fathers. The ages of the babies ranged from 6 to 56 weeks at the time of the study, the mean age being 29 weeks. Marital adjustment was measured by the Locke-Wallace short form, degree of crisis was measured by Hobbs' (1965) checklist, and positive aspects of parenting were measured by means of a gratification checklist devised by Russell and fashioned after Hobbs' crisis checklist. The 12-item checklist was limited to face validity since more highly-educated respondents tended to check fewer gratification items. The reliability of the gratification checklist as computed by the split-half method was 0.93.

The mothers' mean score was 1.45 and the fathers' mean score was 1.27. The difference was found to be significant at the $P < 0.001$ level using a two-tailed t-test. There was also a difference in the items most frequently checked as problem areas by sex. Mothers tended to check items which clustered around the emotional and physical self, such as: worry about personal appearance, fatigue,

interrupted sleep, loss of figure, and feeling emotionally upset. Fathers checked items more external to their physical or emotional self, such as: interrupted sleep and rest, suggestions from in-laws, baby increased money problems, baby's birth caused change in plans, and the additional amount of work required by baby. Although parents indicated the above items to be bothersome, evaluation of crisis scores indicated that the majority of both mothers (96.6 percent) and fathers (91.9 percent) fell in the slight to moderate level of crisis category.

Of the 28 independent variables tested, eight were found to be significantly related to crisis scores for mothers, and nine variables were found to be significantly related to father's crisis scores. Chi-square was used as the test of independence with $P < 0.05$ as the minimum acceptable significance level. Level of crisis experienced was inversely and significantly related to the following variables for mothers: months married, planned pregnancy, conception after marriage, marital adjustment, health, ease of pregnancy, ease of delivery, and having a "quiet" baby. For fathers, level of crisis experienced was inversely and significantly related to the following variables: planned pregnancy, conception after marriage, marital adjustment, wanting more children, wife's ease of delivery, age, prestige, saliency of father role, and having a "quiet" baby.

Russell's findings are hampered by the use of a new

gratification checklist which lacked validity since it appeared to measure sophistication more than gratification. At the same time, Russell should be commended for initiating the construction of an instrument to measure the positive aspects of parenting, not simply the negative. With further use and testing, the gratification checklist may become a valid tool for measuring new parents' positive experiences.

In summary, Russell's findings are similar to Hobbs' (1965) indicating that new parents perceive the first year of parenthood as only moderately stressful and one that is also supplied with rewards. Again, mothers were found to have more difficulty than fathers after the first child's birth. Russell's findings are useful to the present study. Since Russell, like Hobbs (1965), found that mothers perceived more difficulty after the birth of a child than fathers, it becomes necessary to investigate and compare concerns of mothers and fathers to gather a realistic perception of parental concerns.

In 1983, Curry carried out a descriptive study of normal primiparous women in order to examine which variables are related to adaptation to motherhood. A convenience sample of 20 middle-class women, drawn from the obstetrical clinic of a large university teaching hospital, was recruited. Data were collected at three intervals. During the third trimester of the pregnancy, demographic data was obtained and the Tennessee Self-Concept (TSCS) was

administered. The TSCS has content, criterion, and construct validity along with sub-scale test-retest reliabilities ranging from 0.60 to 0.92. The second data collection occurred approximately 36 hours after delivery. While the mother was breast feeding, Curry utilized an observational checklist developed by de Chauteau to record mother and infant behaviors and maternal attachment behaviors. The final data collection took place three months after delivery in the mothers' homes. The de Chauteau observational checklist was used again, the mothers were interviewed and the TSCS was readministered. Content analysis of the audio taped three-month interviews was used to identify mothers who reported either easy or difficult adaptations to motherhood. The mothers self-concept scores, income and educational background were analyzed by t-test, the remainder of the selected variables were analyzed by descriptive data. Additional variables that might have influenced adaptation, such as length of labor, were analyzed by t-test and chi-square to determine if there were any significant differences between the two groups (easy or difficult adapter).

Fifteen mothers were found to be easy adapters and five mothers were having difficulty adapting after their first child's birth. There were no significant differences between the two groups in age, income, educational background, length of labor or in the planning of the pregnancy. Nine of the fifteen easy adapters raised their

total positive scores on the TSCS between the prenatal testing and post-testing (average increase of 25.44 points). Six of the easy adapters scored lower postnatally (average decrease of 12.33 points). All but one of the mothers experiencing difficulty had a decrease in her total positive score on the TSCS between the two testing periods (average decrease of 23.5 points). Of the five women who were having difficulty adjusting to parenthood, three had negative comments about the help they received from nurses in the postpartum period, and four perceived their husbands as busier and less helpful than the easy adapters.

The small convenience sample and narrow generalizability of the findings are obvious limitations of Curry's study. Validity and reliability of the de Chauteau checklist is not addressed. A positive aspect of Curry's study is the comparison of both prenatal and postnatal self-concept scores by use of the TSCS.

In summary, Curry found that 25 percent of the healthy, normal, primiparous women in her study experienced difficult adaptation to parenthood, which supports previous findings by LeMaster (1957) and Dyer (1963). Support from postpartum nurses and husbands along with postpartum self-concept were found to be related to adaptation in her sample. Curry's findings are relevant to the present study and reinforce the need to study concerns of, not only women experiencing a high risk pregnancy but also, those women experiencing a normal pregnancy.

In 1976, Fein conducted an exploratory study of 30 couples who were expecting their first child in order to understand men's perinatal experiences. The middle-income couples were recruited from childbirth preparation classes in the Boston area. Husbands and wives were interviewed together approximately four weeks before and six weeks after the birth of their first child. Both before and after the birth, study participants completed the Rotter Incomplete Sentences Blank (projective story task designed for the study), a modification of the Truax Relationship Questionnaire, a household tasks sharing form, three self-report "feeling" forms, a sharing of feelings form, and (after the birth) a parent-infant interaction questionnaire. The men and women were interviewed together but separate copies of the instruments were completed.

Validity and reliability of the instruments was not addressed by Fein. Statistical analysis of the data was not described. Major findings of the study were that: (a) men decreased significantly in their level of wishes for emotional support, general anxiety and infant-related anxiety from before to after the births, but not in their concerns about emotional support; and (b) men who reported doing more infant care together with their wives and greater willingness to share infant care decreased significantly more in infant-related anxiety than other men.

Fein interpreted that effective postpartum concerns

mentioned by fathers in pre-birth interviews included those related to: labor and delivery, parenting, the emotional support they would be able to give and receive in the weeks after the birth, and possible long-term changes in their marriage. Lifestyle adjustment in men was related to the development of some kind of coherent role rather than any particular role. Most of the nineteen men who appeared to adjust to postpartum life with relatively little difficulty were seen as adopting one of two roles: bread-winner or non-traditional father. The other eleven men in the study seen as having relatively more difficulty adjusting to life with their wives and babies seemed generally unsure of how much they wanted to be involved with their infants as non-traditional fathers or how much they wanted to adopt breadwinner roles.

Fein's study complements the findings of Curry (1983) in one dimension. Both researchers indentified the relationship between perceived emotional support of spouse and expectations of parental role by spouse as they affect adaptation after the first child's birth.

Since Fein's sample was relatively homogeneous and chosen non-randomly, generalizability of the findings is limited. Failure to address the validity and reliability of the instruments used along with absence of the statistical analysis of the data leaves the reader unable to fully appreciate the study results. Fein's study does highlight the concerns and experiences of fathers expecting

their first child and generates questions for further research.

In summary, Fein concluded that developing some kind of a coherent role was more important to men's adjustment to being a father than was developing any particular role. Prenatal concerns of fathers focused on the ability to give and receive emotional support, the ability to parent, and the childbirth process. Fein's research supports the inclusion of fathers in the study sample.

Fishbein (1984) also studied couples expecting their first child focusing on the relationship between stress in prospective fathers and congruence of attitudes between husbands and wives regarding the projected role of the fathers with their newborns. A nonprobability sample of 103 couples was recruited between their sixth and eighth prenatal months from parents attending hospital tours in preparation for childbirth classes. The anticipated male parenting behavior by expectant couples was measured by independent variable of Alter's Projected Paternal Behavior Scale. The Spielberger State Anxiety Inventory measured the dependent variable of anxiety in the father. In addition, a demographic questionnaire was administered in order to identify other variables that could affect those variables under the study.

Analysis of the data supported Fishbein's major prediction at $P < 0.01$: parental agreement regarding the projected paternal role was associated with lower anxiety

in the father. In addition, further analysis of the Projected Paternal Behavior Scale revealed that both increased age and combined family income were related to more agreement with one's spouse.

Validity and reliability of the instruments used were not addressed by Fishbein. The non-probability sample drawn from parents enrolled in childbirth classes limits the generalizability of the findings. Fishbein further supports the findings of Fein and expands on them by adding the dimension of mothers' expectations in fathers adapting to their paternal role.

In summary, Fishbein concluded that: (a) assumption of the paternal role can cause significant anxiety in the new father; and (b) similarity and consistency of attitudes and expectations between mother and father appears to be important in facilitating the socialization of the man for the new role of father. By Fishbein's study, the usefulness of studying similarities and differences in attitudes of fathers and mothers, as in the present study, is supported.

Hangsleben (1983) also found the early days of fathering to be stressful and disruptive for new fathers. Hangsleben's exploratory study focused on transition to fatherhood for 50 first-time fathers. The subjects were given a series of questionnaires to complete within three weeks of their baby's expected birth and within three to five weeks after their baby's birth. Inventories

administered prenatally measured marital adjustment, depression, activities with own father, and activities with own child. Minus the marital adjustment inventory, the above inventories were repeated postnatally along with the lifestyle changes inventory.

Pearson correlation coefficients were computed on all variables against all other variables. In general, Hangsleben found the correlations to be low but statistically significant at $P < 0.001$. Postnatally, fathers with more signs of depression also tended to report greater lifestyle changes ($r = .35$), a sex preference for a baby boy ($r = -.41$), and an unplanned pregnancy ($r = .24$). Fathers who reported more lifestyle changes and greater involvement in baby care also reported more signs of depression, such as irritability, fatigability and sleep disturbance, although new fathers reported doing fewer baby care activities than they had projected prenatally.

Considering 52.8 percent of the subjects gave their religious affiliation as Church of Jesus Christ of Latter-Day Saints, generalizability of the findings from the non-random sample is further impaired. Reliability for the multiple inventories used was not established. Hangsleben's study is valuable in that it focuses on the transition of men into their new paternal role by studying them during both the prenatal and postnatal periods. With further testing, the instruments employed by Hangsleben may be reliable measurement tools for future research. In

summary, Hangsleben found that transition to fatherhood is complex with many variables such as marital adjustment, baby care activities, and depression impacting on the experience.

Glazer (1980) and Stark and Carrico (1983) studied the concerns of primigravidas and multiparas during the prenatal period. These authors found no significant difference in the amount of concerns expressed by primigravidas as compared to multiparas.

Glazer (1980) randomly selected 100 pregnant women from private physicians' offices and the outpatient prenatal clinic of a private university-affiliated hospital. The sample subjects ranged from one to nine months pregnant. Along with completion of a demographic information sheet, the subjects completed the Taylor Manifest Anxiety Scale (test-retest reliability > .80) and a 62-item concerns questionnaire adapted for the study. The number of expressed concerns showed a statistically significant correlation with anxiety level ($r = 0.5678$; $P < .001$), with clinic patients having significantly higher anxiety levels than private patients.

The greatest number of concerns were expressed by women in their third trimester of pregnancy. Major concerns expressed were those related to the baby, childbirth, and self. Personal appearance was a major concern for 91 percent of the women.

Glazer did not compare the primigravidas in her sample

to the multiparas as to differences or similarities in the types of concerns expressed. Reliability for the 62-item concerns questionnaire was not indicated. Glazer was one of the first investigators to study the level of anxiety in relation to concerns expressed by both primigravidas and multiparas during pregnancy. In summary, Glazer found the greatest number of concerns expressed in the third trimester of pregnancy and a positive correlation between number of expressed concerns and anxiety level. Glazer's finding that the third trimester of pregnancy may be the most critical time period for obtaining concerns of expectant mothers is useful in directing the time frame for collection of data in the present study.

Stark and Carrico (1983) utilized a convenience sample of 40 multiparas and 28 primigravidas in their third trimester of pregnancy and enrolled in childbirth preparation classes in two cities. Multiparas completed an instrument developed by Humenick and Bugen to measure a woman's perception of control during labor and delivery. Inter-item reliabilities for the sub-scales resulted in Cronbach's Alpha's > 0.83. Both primigravidas and multiparas completed a questionnaire to obtain demographic data. Primigravidas also completed a 40-item concerns questionnaire while multiparas completed a 50-item concerns questionnaire. Items on the two questionnaires were matched excluding the ten additional items on the multiparas' questionnaire related to siblings and past

childbirth experiences not applicable to primigravidas. Test-retest reliability for the sub-scales on the concerns questionnaire was > 0.83.

Items on the concerns questionnaire were ranked by the percentage of women who indicated they more frequently had that concern. Regaining their pre-pregnancy weight was a frequent concern for 45 percent of the multiparas and 53.6 percent of the primigravidas. While primigravidas indicated more frequent concerns about adjustments in lifestyle and complications in childbirth, multiparas were more frequently concerned with the adjustment and preparation of their children. Analysis of total scores for the Humenick and Bugen labor and delivery scales indicated that multiparas whose previous labors were less than eight hours had a significantly greater sense of control when remembering their previous labor and were more likely to positively anticipate their upcoming labor and delivery experience.

Since a significant difference was found in the income levels of the subjects taken from the two different locales, and since all subjects were enrolled in childbirth classes, the convenience sample has obvious biases. Nonetheless, Stark and Carrico concluded that, although primigravidas and multiparas may differ in the types of concerns experienced during pregnancy, concerns of multiparas are not significantly less than those of primigravidas during the third trimester of pregnancy. The

findings of Stark and Carrico support the need for further investigation of concerns of multiparous women during pregnancy.

Larsen (1966) explored stresses experienced by primigravidas and multiparas during the childbearing years. The retrospective study included 33 women with one child and 40 women with two children who had all attended childbirth preparation classes. Participants responded to open-ended questions directed at problems experienced as stressful during pregnancy, labor and delivery, and the postpartum period. Fatigue was stressful to 32 percent of the women pregnant with their second child as compared to 18 percent of the primigravidas. Primigravidas (67 percent) experienced greater stress from physical discomforts during pregnancy than women expecting their second child (33 percent). Multiparas recalled being more irritable, fatigued, and depressed than primiparas.

The non-probability sample limits generalizability of the findings. The sample was also biased since only mothers who had attended prenatal classes were included. Larsen's findings are reflected by Glazer (1980) and Stark and Carrico (1983): Concerns of multiparas are not significantly less than primiparas, but may be different. In summary, Larsen found that concerns related to the mother herself apparently increase with each successive pregnancy.

Light and Fenster (1974) found the opposite to be true

and concluded that primiparas have more concerns than multiparas. Light and Fenster's 60-item concerns questionnaire was administered to 202 randomly selected women while hospitalized during the postpartum period. The 93 primiparas and 109 multiparas responded yes (did worry) or no (did not worry) to items related to the ten categories of concern chosen for investigation. Nine items of concerns were significantly higher for primiparas than multiparas. Concerns of multiparas differed. The two concerns of multiparas with the highest statistical differences ($P < 0.001$; $x^2 = 41.591$; df=1) were: (a) the multipara being able to care for her family, and (b) the type of contraceptive the multipara would use after the baby was born.

The title "Maternal concerns during pregnancy" used by Light and Fenster for their article is somewhat deceptive since the women in their study complete the concerns questionnaire during the postpartum period and not while pregnant. The validity and reliability of the study and questionnaire used are not addressed by the authors. The large sample size and inclusion of both primiparas and multiparas does result in findings that incite further research in the area of maternal concerns. In summary, Light and Fenster found primiparas to have more concerns than multiparas during the postpartum period, specifically in the areas concerning childbirth and caring for a new baby. The findings of Light and Fenster are useful in directing further investigation of multiparous women's concerns.

Both Gruis (1977) and Strang and Sullivan (1985) found concerns regarding return of the recently pregnant figure to normal important to both primiparas and multiparas. Strang and Sullivan questioned whether "concern with return of figure to normal" meant the same as "poor body image".

Gruis (1977) sent a questionnaire to a non-random sample of women one month after their delivery. Forty mothers (17 primiparas and 23 multiparas) returned the questionnaire. Return of their figures to normal was a major concern for 95 percent of the women. This was followed closely by regulating demands of husband, housework and children, emotional tension, and fatigue. The primiparas' concerns focused on the newborn (infant behavior and feeding), while the multiparas' concerns focused on the strain felt by the entire family. Regulating family demands and finding time for self shared second place as concerns expressed by 21 of the 23 multiparas.

The small sample size of primiparas and multiparas in Gruis' study reduce generalizability of the findings. Bias is introduced since all participants were under the care of obstetricians in private practice and were also recruited non-randomly. By her study, however, Gruis does help support the need for more research into the concerns of both primiparas and multiparas during pregnancy and the postpartum period. In summary, Gruis found return of their figure to normal to be a major concern for both primiparas and multiparas in the postpartum period. The inclusion of

the concern regarding return of figure to normal was relevant to the present study.

Strang and Sullivan (1985) studied body image attitudes during pregnancy and the early postpartum period from a non-random sample of 30 primiparas and 33 multiparas. A repeated time measure design was used, with data collected at two and six weeks postpartum. Pregnant and pre-pregnant attitudes were collected retrospectively. The ten-item Attitude to Body Image Scale was adopted from Jourard's Body Cathexis Scale and content validity and reliability (Spearman r = 0.71 and 0.89) were determined. Participants indicated their attitude toward their bodies by rating each of the ten body parts on seven point Likert-type scale.

The majority of subjects (71.4 percent) in the study had a slightly positive attitude toward their bodies in the postpartum period. A significant difference ($P < 0.03$) was found in attitude toward body image between primiparas and multiparas with multiparas indicating a more positive attitude toward their body image then did primiparas.

The non-probability sample limits generalizability of the findings. One has to question the method of obtaining pre-pregnant and pregnant body image attitude scores retrospectively during the postpartum period. Strang and Sullivan successfully question Gruis' (1977) interpretation that "concern for return of figure to normal" be equated with a negative body image attitude. In summary, Strang

and Sullivan found women felt more positive about their postpartum body image than their pregnant body image with multiparas feeling more positive about their postpartum body image than primiparas. By their study, Strang and Sullivan encourage this researcher to include concerns related to body image in the present study.

Studies done by Knox and Wilson (1978) and Moss (1981) focus on changes and concerns perceived by multiparas after their second child was born. The authors of both studies indicate that having two children brings its own set of unique concerns and problems.

Knox and Wilson (1978) utilized a 49-item questionnaire to measure the motivation for and complications of having a second child. The questionnaire was given to a non-random sample of 144 mothers who had two children, the second child being less than five years old.

Although the mothers reported their first child had a greater personal effect on them than the second; 76.6 percent of the mothers reported having less time for themselves after the second child was born. In addition, 75.7 percent of the mothers reported an increase in noise and fewer than 4 percent reported that "two are as easy as one". Even in light of the above, most of the mothers (93.1 percent) said that they never wished that they could return to a one-child family.

Both validity and reliability of the questionnaire used in the study were not addressed by the authors. The

non-probability sample comprised of mostly white (96.6 percent), Protestant (72.0 percent), and highly educated, middle-class (72.7 percent) subjects restricts the ability to generalize the study results. Knox and Wilson reinforce the need to further investigate the unique problems and concerns of families with more than one child. In summary, Knox and Wilson found that although the impact of the first child was greater than the second, the latter involved less time for self, more work, and more noise for the mother.

Moss (1981) found multiparas in her study to be not so concerned about themselves or their infants as about family relationships. Moss utilized a 61-item card-sort instrument to elicit the concerns (interests and worries) of 56 multiparas on their third postpartum day. The mothers sorted the 61 index cards into three stacks labeled "interests", "worries", and "not of concern". Use of the Spearman-Brown Prophesy Formula on three pairs of similar items yielded split-half reliabilities of .84, .86 and .89.

Results indicated multiparas were not as preoccupied with themselves or their newborns as with relationships within the family. Concern with "weight" and "return of figure to normal" were ranked third and sixth highest respectively by multiparas, whereas "how children at home will act toward baby" and "meeting the needs of everyone at home" were the top two highest ranking concerns among new multiparas. In addition, the most numerous interests and worries were exhibited by three groups of mothers: those

having one other child at home; those under 20 years of age; and those delivering male infants.

Generalizability of the findings is limited by use of the non-probability sample. Moss' study is particularly enlightening since mothers were able to classify concerns as to those that were of interest and those that caused them to worry. Moss' finding that mothers who delivered male infants were one of the groups that exhibited the most concerns is very interesting, yet she does not attempt to discuss this, particularly in relationship to the first child's sex. In summary, Moss found multiparas to be more concerned with family relationships and less concerned about themselves or their newborn.

In summarizing the research related to concerns about self, it is evident that both primiparas and multiparas, and mothers and fathers, may experience a variety of concerns related to self while expecting, or after delivering their child. Some authors feel the childbearing period is stressful (Hobb, 1976), others have called it a period of crisis (LeMaster, 1957; Dyer, 1963). Through their research, the above authors have indicated that, whether greater or less, concerns related to self are felt by mothers and fathers expecting a first child, and by mothers expecting their second child. The lack of research specific to fathers expecting their second child indicates the need for further research in this area. In addition, it is evident that the perceptions of the researchers vary

among each other and also their perceptions vary from those of the parents. Whereas some researchers found the concerns of primiparas to be greater (Light & Fenster, 1974), others (Glazer, 1980; Stark & Carrica, 1983) found the concerns of multiparas to be just as significant as those of primiparas.

Concerns Related to Spouse

Leifer (1977) carried out a descriptive, exploratory study of nineteen primigravidas during pregnancy and the postpartum period to examine the psychological changes accompanying pregnancy and motherhood. Twelve different instruments along with interviews were utilized to collect data during each trimester of pregnancy, the third postpartum day, at two months postpartum, and at seven months postpartum. To obtain reliability, interviews were evaluated independently by two raters until the percentage of agreement was at least 80 percent. Analysis of the characteristics shown in early pregnancy, throughout the pregnancy, and in the postpartum period indicated that the degree of personality integration achieved by early pregnancy was predictive of the extent to which psychological growth was experienced throughout pregnancy and early parenthood.

One very interesting finding of Leifer was that in the last trimester of pregnancy, fear of loss of the husband (either to another woman or by accidental death) was

commonly expressed. Therefore, the primigravidas' increased anxiety during the third trimester was reflected, not only by fear for self and the developing fetus, but also by increased fears for their spouse.

Because of the small non-probability sample, generalizability of the findings is limited. In addition, although multiple instruments were utilized, their validity and reliability are not addressed by the author. Leifer's study is helpful in revealing some of the psychological changes that may occur over time during pregnancy and which warrant further research. In summary, Leifer found that the degree of personality integration in early pregnancy was predictive of the extent of psychological growth experienced by primigravidas throughout pregnancy and early parenthood. Concern for the health and safety of one's spouse was a common concern of primigravidas during the third trimester.

Light and Fenster (1974), whose study was discussed previously, also found that the primiparas and multiparas in their study had concerns related to their spouses. Multiparas reported a higher incidence of concerns related to family than did primiparas. Both primiparas and multiparas (31.44 percent) expressed concern about: (a) their husband's reaction to their pregnancy, and (b) whether or not their husband would accept and love the baby.

In summary, primigravidas may be concerned with the health and welfare of their husbands during their pregnancy

and both primiparas and multiparas may be concerned about their husband's reaction to the pregnancy and his ability to love the new baby. Again, more research of fathers' concerns related to spouse is needed as evidenced by the few studies cited and the obvious lack of research in this area generated by nurses and social scientists.

Concerns Related to the Marital Relationship

Both mothers and fathers, first-time parents or second-time parents, may have concerns related to their marital relationship during pregnancy. As described earlier, LeMaster (1957) found that decline in the sexual response of their wives was worrisome to first-time fathers. Since 89 percent of the couples in the crisis group rated their marriages as good or better than average, LeMaster concluded that the addition of children to the family stresses the marital dyad. LeMaster's study is limited by the use of a non-random sample, information obtained retrospectively, and lack of control set on the age of the children of parents included in the study.

Rollins and Feldman (1970) studied general and specific aspects of marital satisfaction over the family life cycle. A questionnaire was utilized to survey 799 couples who were then classified as belonging to one of eight stages of the family life cycle. Data on marital satisfaction was taken from four questions on the questionnaire. Chi square was computed from the cross tabulation

frequencies on the response categories for each of the four questions. Rollins and Feldman found a steady decline in "general marital satisfaction" for wives from the "beginning" to the "school-age" stage (x^2 = 55.8). For husbands, there was a slight decrease in marital satisfaction over the first five stages with a continuous increase in the "empty nest" and "retirement" stages (x^2 = 32.5). In addition, 47 percent of the wives recognized the more frequent occurrence of specific aspects of marital dissatisfaction, such as: feelings of resentment, feelings of not being needed and feelings of being misunderstood. Only 37 percent of the husbands had such feelings. Rollins and Feldman concluded that the presence of dependent children ("infant" through "school-age" stages) in the home appears to be related to a high level of negative feelings in the wife from her interaction with her husband.

Since Rollins and Feldman's sample was drawn from predominantly Caucasian, well-educated, middle and upper-class persons in their first marriage with the wife not working outside the home, their findings can only be generalized to this population. Classification of couples into the eight stages of the family life cycle does not allow for comparisons of couples with one, two or more children. Positive aspects of their study were the collection of data from both husbands and wives, and analysis drawn over eight stages of the family life cycle. In summary, Rollins and Feldman found that the dependent

stages of the family life cycle were associated with negative evaluations of the marriage by the wife.

Burr (1970) also studied various aspects of marriage over the life cycle. Utilizing a lengthy questionnaire and interview conducted in the home, Burr randomly sampled 116 couples who were in one of seven stages of the family life cycle. Because the number of couples in several categories was small, the childbearing and preschool stages were collapsed and labeled the young children stage. The degree of satisfaction was operationalized by having subjects respond to three questions in regard to each of the six areas of marital interaction: 1) handling of finances, 2) social activities, 3) task performance, 4) companionship, 5) sex, and 6) relationship with children. Unlike Rollins and Feldman (1970), Burr did not find any type of gradual trend in satisfaction. Rather, Burr found the most abrupt overall change to be from the preschool stage to the school-age stage. The lowest satisfaction scores for both husbands and wives occured during the school-age stage and were related to finances, task performance, companionship, sex and relationships with children.

In analyzing Burr's findings, it is unfortunate that he made no attempt to assess the statistical significance of the inter-stage variations found. The findings relied solely on the reporting of raw scores. The generalizability of his findings is further limited to well-educated, Mid- western, middle-class population.

Burr's findings somewhat reinforce those of Rollins and Feldman (1970) by indicating a general decline in marital satisfaction after the arrival of children. In summary, Burr found the lowest level of marital satisfaction for both husbands and wives to be the school-age stage, but the findings are severely limited by failure to present the statistical analysis of the raw data. However limited, this information prompted the author of the present study to set no limitations on the age of the firstborn child of parents in this study.

Studies by Ryder (1973), Glenn and Weaver (1978), and Belsky, Spanier and Rovine (1983) echo the findings of both Rollins and Feldman (1970) and Burr (1970). There is a general decrease in marital satisfaction after the arrival of children.

Ryder (1973) utilized the Marriage Dissatisfaction Scale and the Lovesickness Scale to initially test three groups of couples in various stages of marriage and to retest them one to two years later. The 112 couples included in the research were divided into three categories: 1) childless, 2) child couples, who were not knowingly pregnant at pretest but had their first child by the post-test, and 3) pregnant cases, in which the wife was knowingly pregnant at the pretest. Pre-post change scores were computed for each spouse and t-tests were used to compare the groups. The only significant correlate ($p < .05$) of having a child was that wives became more likely to

report that their husbands were not paying enough attention to them.

Ryder's (1973) findings are limited by a non-probability sample of young couples, in their first year of marriage, who were essentially white and middle-class. Reliability and validity of the instruments used were not addressed. In summary, Ryder found that women who have a child are more likely to report that their husbands are not paying enough attention to them.

Glenn and Weaver (1978) used data gathered over three years from U. S. national surveys to estimate the direct effect of each of ten independent variables on the reported marital happiness of white males and females ages 18 through 59. Face to face interviews were conducted with modified probability samples of over 400 civilians during each of the three years. The method of analysis used was linear correlation and multiple regression. The only statistically significant ($p < .001$) relationship was for women and for a child or children under age six, for which the mean (-.113) was the second highest of all the partial coefficients reported.

Glenn and Weaver (1978) do not address the reliability or validity of the instrument used, nor do they describe how their modified probability sample was obtained. Their findings do support those of Rollins and Feldman (1970) and Ryder (1973) and indicate decreased marital happiness in wives with young children. The age of the firstborn child

of parents in the present study was not controlled in order to investigate possible correlations with concerns identified by fathers and mothers in the study.

Belsky, Spanier and Rovine (1983) studied 41 primiparas and 31 multiparous couples from their last trimester of pregnancy through their infant's first year. Joint couple interviews, individual spousal questionnaires and in-home behavioral observations were utilized to assess marital adjustment, marital functioning, and changes in marital interaction. Analysis of mean scores indicated a significant change in marital adjustment, functioning, and interaction after the baby's birth. In addition, wives reported significantly more marital adjustment than husbands ($p < 0.05$), and primiparous couples reported significantly more marital adjustment than multiparous couples ($p < 0.01$).

The generalizability of Belsky, Spanier and Rovine's (1983) findings are limited by use of a non-probability sample. Their study contributes further to research on childbearing families since they utilized a longitudinal design that included both primiparous and multiparous couples allowing for comparisons of these groups over time. In summary, Belsky, Spanier and Rovine (1983) found that marital quality declines following the transition to parenthood and this decline continues as additional children are added to the family. Although the present study was not longitudinal in design, concerns related to

the marital relationship were investigated to further expand on information obtained from previous research described above.

Mermin (1982) also found a greater decrease in marital satisfaction and satisfaction with home life in multiparous couples. Mermin longitudinally studied 18 primiparous couples and 14 multiparous couples during their third trimester of pregnancy through 18 weeks postpartum. Through the use of an adjective checklist, four variables were studied to assess the degree of negative impact of adjustment to the new baby: anxiety, marital satisfaction, satisfaction with home life in general, and discrepancy between global self-description and description of one's aspired parental identity. In addition, two variables on the adjective checklist measured personality change: nurturance and aspired nurturance. Alpha coefficients of internal consistency for the adjective checklist scales ranged from 0.56 to 0.95 for males (Median = .76), and from 0.53 to 0.94 for females (Median = .75).

Multivariate analysis of variance revealed a main effect of parity such that multiparous couples experienced more disequilibrium or strain after their baby's birth than primiparous couples. This difference was principally due to multiparous couples' greater dissatisfaction with both marriage and home life which was stable over all three testing periods.

The generalizability of Mermin's findings is limited

by the use of a small, non-probability sample which was totally Caucasian and middle to upper-middle class. By longitudinally investigating both primiparous and multiparous couples, Mermin allows for comparisons of these groups over time. Like Belsky, Spanier and Rovine (1983), Mermin found a greater decrease in marital satisfaction among multiparous couples and questions the need for further research regarding the adjustments required by parents expecting a second child. Studies such as Mermin's were influential in directing the focus of the present study to include multiparous mothers and fathers.

Broom (1984) studied 22 couples expecting their first child to investigate consensus about the marital relationship during transition to parenthood. The couples were randomly assigned to the prenatal or postpartum test groups. Husbands and wives individually rank-ordered 35 concerns from Most Important to Least Important and then estimated how their spouses would rank the same concerns. Estimates of reliability for procedure ranged from 0.78 to 0.94. Husbands and wives were also asked to indicate the three concerns they discussed the most and the three concerns they discussed the least.

In order of rank importance, prenatal concerns of husbands were: 1) less time for shared leisure activity with spouse; 2) balancing demands of spouse, job, and child; 3) time and energy required to care for baby; 4) less time to be alone with spouse; and 5) little

time/energy to devote to giving special attention to spouse. Prenatal concerns of wives in order of rank importance were: 1) amount of time/energy required to care for baby; 2) balancing demands of spouse, housework/job, and child; 3) feeling too busy; 4) less time for shared leisure activity with spouse; and 5) emotional tension. For both the prenatal and postpartum groups, husbands were significantly more accurate then their wives in their estimation of their wives' views on the importance of concerns ($P < 0.05$). In addition, both prenatal husbands and wives perceived significantly more agreement on the importance of concerns than actually existed ($P < 0.01$).

Generalizability of Broom's findings is limited since the small sample was chosen non-randomly, and consisted of very well-educated couples attending childbirth education classes. The relatively high level of estimated reliability of Broom's instrument warrants consideration of its use in future research endeavors. By studying couples in both the prenatal and postpartum periods, Broom allows for comparisons between these groups. Expanding the study to include multiparous couples would be a positive addition for future research. Broom found that agreement between husbands and wives about the importance of concerns is not high. Furthermore, with the exception of postpartum wives, individuals perceived greater agreement than actually existed. Based on the above findings, Broom challenges health care providers to direct more effort to working with

couples in order to facilitate communication within the dyad.

In summary, multiple researchers have indicated that marital satisfaction decreases after the addition of children (Belsky, Spanier & Rovine, 1983; Burr, 1970; Glenn & Weaver, 1978; Mermin, 1982). The stage of dependent children may cause the greatest disruption in the marital relationship, particularly for the mothers. In addition, couples with more than one child may experience greater changes in their marital relationship than couples with only one child. To complicate matters even further, although parents individually recognize concerns during pregnancy, they perceive greater agreement with their spouses about the importance of these concerns than actually exists.

Although couples may have concerns about their marital relationship during pregnancy and the postpartum period, they may be communicating less with their spouses about these concerns since they incorrectly perceive agreement that does not exist. These findings indicate the need for further research regarding concerns of both primigravida and multigravida couples during both the prenatal and postpartum periods.

Concerns Related to the Firstborn Child

Kendrick and Dunn (1980) observed and interviewed 40 families one to three months before and two to three weeks

after the birth of the second child. The direct effects of the mother's attention to the second child on her interaction with the first child were studied by comparing three situations: mother 1) feeding the second child, 2) holding/care-giving the second child, and 3) not involved with the second child. The age range of the firstborn children was from 18 to 43 months at the birth of the sibling. Assessment of inter-observer reliability based on the range of ratio of agreement to agreement plus disagreement resulted in a mean of 0.84. Agreement on the coding of the transcribed conversational episodes for eight cases ranged from 0.85 to 1.00, with a mean of 0.91.

Results from the Wilcoxon matched pair tests indicated a significant decrease from the presib-birth to the post-sib birth observations in the amount of time mother and child spent in joint attention and joint play ($P < 0.05$). Additional comparisons showed that measures of positive interaction between mother and firstborn child increased during times when the mother was feeding the baby. There were, however, also more negative interactions between the mother and the firstborn in the feed context than in the not-with-baby context. Based on results from the Wilcoxon matched pairs test, comparisons of the pre-sib birth to post-sib birth observations showed that there was a significant increase in the number of incidents of deliberate naughtiness ($z = 3.29$, $P < 0.001$) after the birth of the sibling. There was a nonsignificant trend for

the firstborn boys to be deliberately naughty more frequently than the girls ($z = 1.5$, $P < 0.12$), and to show a greater increase in the frequency of incidents of deliberate naughtiness from the pre-sib birth to post-sib birth observations ($z = 1.8$, $P < 0.07$). There were also more incidents of deliberate naughtiness during bottle than during breast feeding (Mann-Whitney U test, Mdn number of incidents per 100 10-sec units on breast feedings = 0.44, bottle feedings = 3.40; $z = 2.74$, $P < 0.02$). In addition, in all three contexts, 1) mother feeding, 2) holding, and 3) not with baby), the younger firstborn children were more likely to spend more time being held ($r = -.52$, $P < 0.001$) and staying close to their mother ($r = -.51$, $P < 0.001$) than the older firstborn children.

Through their study, Kendrick and Dunn (1980) revealed findings regarding changes in family interactions after the addition of the child which are valuable to all professionals working with families in the childbearing years. Findings based on comparisons of younger to older firstborn children are confusing since the authors do not indicate the age criteria used to separate these groups. Although their study is limited by the use of a non-probability sample, Kendrick and Dunn inspire more research into the area of family adaptation to the birth of a second child.

In summary, Kendrick and Dunn found both an increase in confrontation and positive involvement between the mother and firstborn child when the mother was occupied

with the second child. The decrease in maternal attention after the sibling birth occurred in contexts in which the mother was not occupied with the baby. With younger firstborns, the above effects were particularly marked. Confrontation between mother and firstborn child was higher in bottle-feeding than in breast feeding situations. Based on the findings of Kendrick and Dunn, this researcher investigated concerns related to both the firstborn child and the expected baby in the present study.

Grubbs' (1980) descriptive study of mothers' perceptions of time in relation to themselves and others during the postpartum period supports the findings of Kendrick and Dunn (1980). Four unstructured and non-directive interviews were conducted weekly with eight multiparous women. Written accounts of the interviews were content analyzed for the theme of time revealing two dimensions; time was either a commodity or it was a criterion. Analysis of the written protocols revealed postpartal mothers referred to time in relation to themselves, their babies and older children, their husbands, persons who were not members of the nuclear family, and their household responsibilities. The data was classified with the dimensions of time as the dependent variable and the referents as the independent variable. The Analysis of Variance was used to examine the relative effects of change over the four weeks on the frequencies of data. The chi square test for significance of differences

between sample proportions was used to test for the effects of the intervening variables of method of infant feeding, the number of children, and the health or illness of the infant.

The mothers' statements indicating they felt pressured for enough time (as a commodity) to adequately meet their older children's needs accounted for over two-tenths of their references to their decreased amount of time (242/1151). No significant differences were found between bottle and breast feeding mothers in relation to time as a commonodity. The mothers expressed concern that they would not have enough time to meet their older child's needs in a manner to which the child and mother had been accustomed. Mothers related not having enough time to give their older children their undivided attention and believed they were depriving them of adequate mothering. By the third week, mothers expressed being distressed by their older children engaging in acting-out behavior.

When viewing time as a criterion, the four breast feeding mothers made significantly more statements than did the four bottle feeding mothers ($\tilde{x}$ = 287:233, x^2 = 8,03, df = 1, $P < 0.01$). During the first postpartal week, mothers made slightly more statements using time to orient to their older children than to their babies. Breast feeding mothers made considerably more statements in which they used time to orient to information about their offspring than did bottle feeding mothers ($\tilde{x}$ = 149:79, x^2 = 21.49,

$P < 0.01$). Women who had given birth to their third or fourth babies made more statements using time to orient to their children than did mothers who had given birth to their second babies ($\tilde{x}$ = 158:106, x^2 = 10.24, $P < 0.01$). The mothers' second greatest use of time to orient themselves was in relation to their older children (332/1268, by week; 95, 67, 111, 59). Mothers related using time to adapt themselves to the new role of the older child who was no longer the baby of the family. The mothers' third most frequent use of time to compare characteristics and capabilities concerned their older children (105/457, by week: 28, 17, 41, 19). Mothers used time to compare alterations in their expectations of the role and behavior of the older children and also changes in the older children's role within the family.

Considering the extremely small sample which was chosen non-randomly, the generalizability of Grubb's findings is limited. Bias may have been introduced into the study since the author gave direct nursing care to the subjects in the clinical setting. In addition, the ages of the older children was not controlled and had a large range from 17 months to 14 years of age. Grubb's findings offered direction to this researcher to investigate parental perceptions of possible concerns with their relationships to both their firstborn child and the expected baby. In addition, the study instrument included items which addressed the concept of time for self and

family members.

In summary, Grubbs found that women's perceptions of time during the first postpartal month may be used as an indicator of the personal and family stress and disorganization they experience. Multiparous women have concerns related to their older child/children as these mothers attempt to rework their relationship with these children in light of their new position in the family. Kendrick and Dunn (1980) found that mothers give less time and attention to their firstborn child after the baby is born.

Fishbein (1981) and Kreppner, Paulsen and Schuetze (1982) have studied changes in the family system after the addition of a second or third child. Their findings add credence to the concerns expressed by parents in the studies previously discussed.

Fishbein (1981) studied two and three-child families to determine whether family dysfunction is affected by the sex and birth order of the children. Subjects were selected from the entire pool of approximately 3100 families seeking treatment at the Philadelphia Child Guidance Clinic. After application of the selection criteria, 209 single parent families and 279 two-parent families were included in the study. For each child admitted to the child guidance clinic, two factors were noted: 1) the number of natural parents the child was currently living with, and 2) the sex and birth order of the sibling set of which the child was a member. Chi

square analyses were carried out using the frequency of occurrence of the various possible sibling set compositions as the target of the analyses. Chi square analyses indicated that the likelihood of a family seeking treatment for one of their children was lowest for all girl sibling sets in both two-child and three-child families. The sibling sets associated with the highest degree of family dysfunction in both two-child and three-child families were those in which at least one boy precedes one girl. Intermediate levels of family dysfunction were found associated with sibling sets in which girls precede boys or boys precede boys. The above patterns were found to be stronger for two-parent than single-parent families.

Fishbein (1981) does not indicate the demographic data for the subjects in his study nor does he consider the possible relationships of education, income, or other variables to family dysfunction when discussing his findings. Although his sample size is large, subjects were chosen non-randomly from only one clinic in one geographic area. Duplication of Fishbein's study in a variety of geographic areas would add further to the knowledge base on family functioning after the addition of children.

To summarize, Fishbein (1981) found that the likelihood of a family seeking treatment for one of their children was lowest with all girl sibling sets and highest with sibling sets in which at least one boy was older than one girl. These patterns were found to be strongest in

two-parent families. In the present study, information on the variable of the firstborn child's sex along with concern for a desired sex in the expected baby was obtained to be able to investigate possible correlations with concerns perceived by expectant parents.

Kreppner, Paulsen, and Schuetze (1982) carried out a longitudinal-observational study in the homes of 16 families who were followed during pregnancy with the second child through that child's first two years of age. The purpose of their research was to study the family system as it changed with the arrival and development of a second child. In addition to observations made in the home, parental interviews dealing with biographical and child-rearing information were conducted. Data analysis involved the use of hermeneutic techniques with an emphasis on data fit and holistic interpretation. The families were balanced according to social class and sex of the first child, but these aspects were not considered in the analysis. The age of the firstborn children at the birth of the second child was four years or less.

Through their study, Kreppner, Paulsen and Schuetze (1982) discovered a three-phase process through which families progress as they change from a triadic to a tetradic system. The phases were viewed by the authors as resulting from the interaction of structural features within the family and developmental changes in the second child. The major task in Phase 1 (0-8 months) was learning

to care for a second child while not neglecting the first one at the same time. During Phase 1, firstborn children responded to the birth of their sibling by either requiring greater interaction with their parents or by turning to their own activities, leaving their parents and the second child alone. Fathers were seen as playing a crucial role in this phase by helping relieve the mothers of certain child care and household responsibilities. In Phase 2 (9-16 months), as the second child becomes more active, he begins to be perceived as a rival by the firstborn child. During this phase, firstborn children were often seen as behaving disruptively in order to regain parental attention being shown to the younger sibling. At the beginning of Phase 3 (17-24 months), the authors found that positions between siblings began to be settled. Although rivalries between siblings still occurred, they were less fierce and more symbolic in nature. Two subsystems, "parents" and "children", were seen by the authors as arising in Phase 3. Parents no longer experienced interacting with an "older child" or "younger infant", but rather parents had the experience of interacting with "children" which changed their perception of themselves as being "parents".

The small non-probability sample limits the generalizability of the findings. Analyses are based solely on case studies of individual families and comparison of patterns across families. The formative analysis is helpful in generating data for further research

in the area of changes in family interactions after the addition of a second child.

In summary, Kreppner, Paulsen and Schuetze (1982) concluded that, with the addition of the second child, the family is constantly finding a balance between the integration of the new member and the change of old interaction patterns of problem-solving strategies. A three-phase model was developed by the authors to describe the turning points affecting family interaction as the second child develops. Learning to care for the new baby while not ignoring the firstborn child, and managing sibling rivalry were tasks confronting the parents. In the present study, data on the variables of sex and age of the firstborn child was obtained to investigate possible correlations with concerns identified by expectant parents, thereby adding to previous information obtained in this area by authors such as Kreppner, Paulsen and Schuetze (1982).

In summary of the above studies, not only do parents have concerns regarding their firstborn child, but researchers have found stresses on/changes in family function with the addition of a second or third child (Fishbein, 1981; Kreppner, Paulsen & Schuetze, 1982). Whereas parents may wonder how they will give their firstborn child the necessary attention after the second child is born, researchers have found the mothers do, in fact, give their firstborn child less attention after the

second child is born. Parents may worry about their firstborn child regressing or acting aggressively after the second child is born. Researchers have found that increased negative demands for parental attention and sibling rivalry are oftentimes present after the birth of a second child. More research needs to be done which includes fathers' concerns regarding the firstborn child while expecting, or after the birth of the second child.

Concerns Related to the Baby

Jacobs and Moss (1976) compared mother-infant interactions on 32 first and second-born siblings when each was three months old. The sample consisted of four equal-size subgroups of same and opposite sex sibling pairs. Data were collected during two six-hour observations on nonconsecutive days for each mother-infant pair and then coded by a modified time-sampling technique. Each of the groups were observed when the infants were above 90 days old, with the firstborn children ranging between 17 and 35 months of age. Variables observed included both maternal, infant and older sibling behaviors. The mean inter-observation reliability based on computation of product-moment correlation coefficients was 0.77 for the firstborn study and 0.79 for the second-born study. For the main analysis, t-tests for correlated means were performed on the 41 home observation variables comparing firstborns and second borns. The t-tests were computed for the total sample as

well as the four sibling-sex subgroups.

Through their investigation of mother-infant interactions, Jacobs and Moss (1976) found that mothers spent less time in social ($t = 7.28$, $P < 0.001$), affectionate ($t = 3.70$, $P < 0.001$), and caretaking ($t = 4.36$, $P < 0.001$) activities with their second borns than they had with their first-borns. Comparisons of sex to birth order revealed that the decrease in maternal interactions with second borns was greatest for females with older sisters and next greatest for females with older brothers. Maternal behavior toward second-born boys decreased less than that toward second-born girls. Boys with older brothers received less maternal attention than their firstborn siblings, but this decrease was smaller than in the comparisons involving the female second-born subgroups. No decrease occurred in maternal attention for males who had firstborn sisters. No significant effect on the study results was found based on maternal age. There was, however, a strong correlation between demands of the firstborn for attention and the mother's behavior. Demands of the firstborn were associated with the mother being in close physical contact with the younger sibling, particularly when the firstborn was a male (mother attending baby, $t = .76$, $P < 0.001$).

The relatively small, stratified non-probability sample limits the generalizability of the study findings. In addition, mothers in the study were all white, well-

educated women living in the same metropolitan area. The authors did not indicate whether any of the mothers in their study were working outside the home. By repeating the same study on second borns, Jacobs and Moss (1976) were able to uncover some very interesting data on differences in maternal interaction with firstborns as compared to second borns. Replication of studies such as this is needed for fathers and remains a challenge for future researchers.

In summary, Jacobs and Moss (1976) found that interactions between mothers and their babies varied depending on the birth order and gender of the infant. Mothers spent significantly less time in social, affectionate, and caretaking activities (except for feeding activities) with their second borns than they had with their firstborns; this difference was greatest when the second born was female. The findings of Jacobs and Moss directed this researcher in the present study to gather concerns of mothers and fathers in relationship to the sex and age of their firstborn child while expecting their second child.

Findings by Jacobs and Moss (1976) related to mother-infant interaction, and echoed in the concerns of mothers in Grubbs' (1980) study, were previously discussed. The mothers' statements about their lack of time to meet all of the needs of the new baby accounted for 28 percent of their statements about not enough time, making new babies the

mothers' second greatest concern about not having enough time. Mothers expressed concern that they could not offer their new baby the time they had with their older children when those older children were babies.

In a poll taken by Parents Magazine, Yarrow (1983), over 14,000 fathers spoke out on their feelings about fatherhood. As in Jacobs and Moss' (1976) study, the response of the fathers varied with the sex of their children. Although validity and reliability of the questionnaire utilized in the poll were not addressed in the article and the sample taken from subscribers/readers is biased, the results are very interesting. Although 45 percent of the fathers said they had no preference for a boy or girl as their first child, an almost equal proportion (42 percent) said they had wanted a boy. Only 13 percent of the fathers polled wanted a girl. The article did not address the fathers' preference for a boy or girl with their second child. This information would have been interesting, particularly for fathers whose firstborn child was not the sex they had preferred. When fathers did not get their choice, the majority (75 percent) said it did not affect their relationship with their child. In addition, 60 percent of the fathers said that if they could change any part of their role, it would be to spend more time with their children. This concept of needing more time is congruent with findings by Grubbs (1980) which indicated that mothers of two children felt they lacked the

necessary time for both their new babies and their firstborn children.

Sumner and Fritsch (1977) investigated concerns of mothers in the first six weeks after the baby's birth. Their descriptive survey was carried out to document the spontaneous requests by new parents for information and support as evidenced by their telephone calls to the health care facility. Calls were recorded by nurses in various area health care facilities and coded as to the number of calls and the types of questions asked. Reliability and validity of the study were not addressed in the article.

Of the 270 calls received, 62 percent were made by primiparas and 38 percent were made by multiparas. Twenty-five percent of the multiparous women eligible to call did so, while 88 percent of the primiparous women eligible to call did. Although primiparous women called more often than multiparous women, the multiparous women asked more questions per call. Regardless of parity, mothers of male infants asked more questions about "feeding" than did mothers of females.

Although the authors describe the percent of mothers in the study who made telephone calls seeking help, the authors did not clearly indicate how their sample was obtained nor the total number of mothers who were considered eligible to call. Although Sumner and Fritsch (1977) found that mothers of firstborn or male infants have a higher rate of questions, the authors stated surprise

that 25 percent of the multiparas called and had more questions per phone call than primiparas.

In summary, parents may have many concerns related to their second child. Parents may be concerned about having enough time to spend with their second born. This concern appears to be valid since researchers have found that mothers do interact less with their second borns than they did with their firstborns, and mother-infant interactions may differ based on the sex of the child (Jacobs & Moss, 1976). In addition, some parents have a preference for a particular sex for their child. Although multiparas may have less questions than primiparas regarding caring for their new babies, these "experienced" mothers may still need the support of nurses in adjusting to caring for their second borns. Since the majority of the above studies involved mothers during the postpartal period, more research needs to be done to investigate concerns of fathers regarding their first and second borns, particularly during the prenatal period.

Concerns Related to the Childbirth Experience

Research done over the past four decades, in relation to parental perceptions of the childbearing experience, has revealed many interesting findings. Winokur and Werboff (1956) and Larsen (1966) investigated maternal attitudes in relation to the labor and delivery experience.

Utilizing an eight-item questionnaire developed for their exploratory study, Winokur and Werboff (1956) surveyed attitudes of 69 primigravidas and 55 multigravidas during their third trimester of pregnancy. All of the women were wives of United States Air Force personnel and were receiving their prenatal care in the military clinic. Reliability and validity of the instrument were not addressed by the authors.

Analysis of variance and correlational studies were performed on the collected data. Winokur and Werboff (1956) found that the more children a woman had, the less likely it was that she wanted her present baby at the time of conception ($r=.4461$, $P < 0.01$). In addition, a greater percentage of primigravidas wanted their babies at the time of conception than multigravidas (primigravidas 83%, multigravidas 62%). Also, primigravidas tended to be less apprehensive about their upcoming childbirth experience than multigravidas (primigravidas = 17% apprehensive, multigravidas = 29% apprehensive).

The methodology utilized in Winokur and Werboff's (1956) study is lacking in many areas. The nonprobability sample was drawn from an isolated population of military wives. The authors did not indicate that the women in their study gave their consent to participate nor fully understood that they were partaking in the research. No attempts were made to pilot-test the very brief questionnaire and obtain a reliability index. But, Winokur and

Werboff were two of the first researchers to compare attitudes of both primigravidas and multigravidas during pregnancy and their study does promote further interest in this area. In summary, Winokur and Werboff concluded that multigravidas are less likely to want their children at the time of conception as compared to primigravidas, and multigravidas are more apprehensive about pregnancy and delivery than primigravidas.

Larsen (1966), described previously, also studied maternal attitudes of primigravidas and multigravidas during the childbearing period. Larsen surmised that with each successive pregnancy, fears for the unborn baby and fears for the mother herself appeared to increase. In addition, Larsen also found that multigravidas perceive more distress than primigravidas over the lack of support from the nursing personnel during successive labor experiences. Therefore, both Winokur and Werboff (1956) and Larsen (1966) found that multigravidas experience more stress and apprehension about their childbirth experience than primigravidas. These findings were useful in directing this researcher to include questions related to childbearing concerns in the present study.

Studies focusing on parental expectations regarding the childbirth experience were done by May (1982) and Pridham and Schutz (1983). Although Pridham and Schutz collected data from mothers after the child's birth and May collected data from fathers prenatally, through their

studies these authors reveal new information regarding parental expectation about the birth experience.

May (1982) studied men's experiences of first-time expectant parenthood by carrying out intensive interviews with 20 expectant couples. Short field interviews were also done with 80 additional fathers at various stages of their partners' pregnancies. Data were analyzed using comparative analytic techniques for qualitative data.

May identified three phases in the development of father involvement in pregnancy among first-time expectant fathers: 1) announcement, 2) moratorium, and 3) focusing. The third phase, focusing, occurs in approximation with the third trimester. During the focusing phase, a recurrent theme identified by May was the men's fear of the upcoming birth experience. May found that this fear might be intensified among men who have prepared to support their spouses during labor and birth, and who feel responsible for a successful birth.

The small, nonprobability sample limits the generalizability of May's findings. Since comparative analyses were made of the qualitative data, no attempts were made to statistically analyze the findings. Reliability and validity of the study were not addressed. The method used for collection of data was not consistently employed across the sample. Further research is needed, with a more diverse group of fathers, to determine the validity and usefulness of May's findings. In summary, May

proposed that there are three phases of father involvement in pregnancy and birth. During the third phase, focusing, fathers may feel isolated or fearful as they anticipate the childbirth experience and begin to redefine themselves in terms of their new role of father.

Pridham and Schutz (1983) carried out a descriptive study utilizing a mailed questionnaire to survey the accomplishment of childbirth goals by 91 families (53% primiparas, 47% multiparas) after their child's birth. Content validity for the 158-item questionnaire was obtained. The majority of items were either in a checklist or a Likert-type scale. An intercoder agreement of 89.6% was obtained for responses to open-ended items on the questionnaire.

Analysis of data relevant to accomplishment of plans for the labor and delivery experience indicated that 13% of the parents had planned on the father holding the baby in the recovery room but were unable to meet this goal. The following parental goals for the postpartum period were planned by the parents, but not accomplished: 1) 47% of the parents had wanted the sibling to visit the mother in the hospital room, 2) 30% of the parents had planned on the sibling holding the infant in the hospital, and 3) 26% of the parents had planned on the sibling seeing the infant in the nursery. Medical complications were most frequently cited by parents as interfering with achievement of their goals. Pridham and Schutz did find that almost one third

of the reasons given for not fulfilling a desired goal involved hospital practices assumed to be policy by the parents.

Since the study sample was nonrandomly obtained from family practice residency program clinics at a midwestern university hospital, the generalizability of the findings is limited. Although the authors repeatedly refer to parental goals, they indicate that the questionnaires were mailed only to mothers. It is unclear whether only mothers responded to the questionnaire or whether both mothers and fathers jointly completed the questionnaire. In addition, parents were asked to recall their experiences up to thirteen months after their child's birth. What Pridham and Schutz do reveal is the need for nurses to identify parental expectations for their childbirth experience since these parental goals might not always be fulfilled.

Both May (1982) and Pridham and Schutz (1983) identified the importance of considering parental goals for their birth experience. May found that fathers who feel responsible for assisting their wives through a successful childbirth experience might feel fear about the birth, particularly during the third trimester. Pridham and Schutz surmised that certain parental goals for the childbirth experience might not be met, therefore, nurses must be aware of the parents' goals to be able to promote their goals, or assist the parents in dealing with their possible disappointment if their goals were not accomplished. The

above findings proved useful to this researcher since, in the present study, information on variables such as the father's plans to be with his wife during labor and birth was obtained.

Butani and Hodnett (1980) described fifty mothers' perceptions of their labor experiences based on interviews obtained within 48 hours of the mothers' delivery. Interviews with the 29 primiparas and 21 multiparas consisted of both structured and open-ended questions. Findings were grouped according to four areas: 1) preparation, control, and attitudes about self in labor; 2) expectations of labor; 3) perceptions of specific aspects of labor; and 4) overall subjective evaluation of the labor experience.

No correlation was found between attendance at prenatal classes and a positive attitude about the labor experience. Both primiparas (38%) and multiparas (24%) expressed regrets about their behavior during labor. Loss of control was the reason given by all of them. Degree of difficulty of labor and amount of pain experienced were reasons given by primiparas (72%) and multiparas (52%) for feeling that their labor expectations were not met. Fetal monitoring and oxytocin inductions produced negative reactions in some subjects (47% of those induced). Responses of mothers indicated that they felt the nurses needed to give more attention to them as a person instead of to the machines! When asked what measures helped them to

cope with pain, the most frequently occurring responses were: breathing techniques (24), epidural (15), and encouragement from husband (10). When asked what they like most about their childbirth experience, 21 of the mothers listed the care and concern of others (husbands, nurses, students, doctors) as being very gratifying to them.

The nonprobability sample utilized in this study limits the generalazibility of the findings. Reliability and validity of the study were not addressed by the authors. Neither the interview schedule nor the statistical findings were clearly presented in the article. Butani and Hodnett do raise questions for further research. In summary, they found that over two-thirds of both primiparas and multiparas expressed regret over their behavior during labor and felt that their expectations were not met. Like May (1982) and Pridham and Schutz (1983), Butani and Hodnett (1980) challenged nurses to identify and promote parental goals for their childbirth experience.

Both Westbrook (1978) and Norr et al. (1980) investigated childbirth experiences of primiparas and multiparas during the postpartum period. These authors found that multiparas worried more about their labor than primiparas.

Westbrook (1978) carried out a descriptive, retrospective study on 200 women within two to seven months following the birth of their child. Ninety-two of the women in the sample had their first child, 58 their second,

32 their third, and 18 a fourth or later child. Their reactions to childbearing were measured by their responses to 18 attitude items, and the application of 12 content analysis affect scales to their recollections which were activated by a pictorial stimulus. An intercoder agreement of 96 percent was obtained for assessment of the maternal recollections.

Six of the thirty experiential variables studied showed significant effects ($P < 0.05$) due to parity of the birth. They were: mutilation anxiety, negative attitudes regarding rejection, physical problems, baby care problems, feelings of well-being, and wider family satisfactions. Westbrook found that women having their first child suffered significantly ($P < 0.05$) less mutilation anxiety than those having second or fourth babies. Westbrook recognized that although later births are considered easier from an obstetric point of view, the multiparous women in her study were more anxious concerning physical injury with childbirth than the primiparas. Although multiparas indicated greater mutilation anxiety, no relationship was found between parity of the birth and proportion of mothers expressing maternal warmth in their recollections ($x^2 = 0.8$, $df = 3$, $P < .05$).

The nonprobability sample drawn from a large metropolitan (Sydney, Australia) area may limit the generalizability of the findings. In addition, information recalled by mothers up to seven months after the childbirth

experience may have been distorted by time. The strong reliability indexes obtained for scales utilized in the study support the argument for future replication of this study. By including both primiparas and multiparas in their study, Westbrook (1978) adds important information to the knowledge base regarding maternal perceptions of childbirth. Westbrook surmised that there tended to be greater mutilation anxiety, a more negative and less positive attitude with increasing parity but similar affective arousal (anxiety, hostility, and positive feelings). Westbrook concludes that disproportionate emphasis has been given to the problems of primiparous women.

Norr et al., (1980) also investigated birth experiences of primiparas (n = 118) and multiparas (n = 131) and found information similar to that of Westbrook's (1978). The 249 women, randomly chosen from maternity floors in a large teaching hospital, were interviewed and also completed a self-administered questionnaire within one to three days postpartum. Data were compiled to examine the effects of parity on three areas: the pregnancy experience; the birth itself; and interaction with the baby during the immediate postpartum period.

Half of the multiparas, but more than two-thirds of the primiparas, reported some serious worries during pregnancy. Primiparas were more likely to worry about baby care, husband's feelings, continuing social activities, and gaining weight. Out of eleven concerns indicated on the

questionnaire, the one checked more often by multiparas was worrying about what childbirth would be like. Multiparas were found to have more physical discomfort ($P < 0.01$), but fewer worries during pregnancy than primiparas. In addition, multiparas worried about labor more ($P < 0.01$) but prepared for childbirth less ($P < 0.05$) than primiparas.

Since the sample was drawn from maternity patients in one hospital, and had a higher than average social status and educational background, the sample is not representative of a cross-section of women delivering babies. In addition, reliability and validity of the instruments used were not addressed by the authors and the instrument and scoring system were not made available. Considering the large sample size and the study findings, replication of the study with subjects drawn from a more diverse population seems warranted. In summary, Norr's et al. (1980) findings are supportive of those of Westbrook (1978) indicating that multiparas may experience greater anxiety about their childbirth experience than primiparas. These findings were useful to this researcher when developing a study instrument that addressed childbearing concerns of mothers and fathers.

From the above research it is evident that both first time mothers and fathers, and multiparas may have certain expectations for their childbirth experience. Since oftentimes these goals or expectations might not be met,

nurses must first identify parental childbirth goals so that they can either better assist parents in meeting these goals when possible, or help parents deal with possible feelings of disappointment when goals are not met. In addition, some researchers have found that multiparas may have greater mutilation anxiety and worry more about their childbirth experiences than primiparas. The lack of information relevant to the childbirth concerns of fathers expecting their second or more children warrants focusing future research endeavors towards this area.

Concerns Related to the Household and Finances

Many of the authors, whose studies' were previously reviewed, have found that both first-time parents and parents expecting their second, or more, child have concerns related to the areas of household and finances during their pregnancy and the postpartum period (LeMaster, 1957; Hobbs, 1965; Grubbs, 1980). In their studies on transition to parenthood, Dyer (1963), Hobbs (1965), Russell (1974), and Hobbs (1976) found financial worries to be a concern of first-time mothers and particularly of first-time fathers. In addition, many of the first-time mothers were bothered by concerns related to the management of the household.

Dyer (1963) found "financial worries" to be the fifth most frequently mentioned concern among the 32 new fathers in his study, and the concern identified as "severe" by

more than 80 percent of the fathers. Fathers related concerns in adjusting from two incomes before the child's birth to one income after the child's birth. Sixty-two percent of the wives in Dyer's study had been employed before the child's birth. In comparison, the fifth most frequently mentioned concern of the wives in Dyers study was their inability to keep up with the housework. Eighty-seven percent of the wives identified this to be a "severe" problem. Concern regarding finances was not included in the top six most frequently mentioned concerns of the wives. In summary, Dyer found financial concerns to be more prevalent among the first-time fathers, whereas, concerns related to the household were identified more frequently by the first-time mothers.

In 1965, and then again in 1976 in a replication of his first study, Hobbs found concerns related to finances and the household to be present in both first-time fathers and mothers in his studies. In his study of fifty-three couples in 1965, Hobbs found 60 percent of the fathers bothered "somewhat" or "very much" buy increased money problems. When concerns were listed in rank order by the fathers, "increased money problems" was the first most discriminating item identified by fathers, "housekeeping not as neat" was the seventh most discriminating item admitted to by new fathers. In comparison, sixty-six percent of new mothers were "somewhat" or "very much" bothered by increased money problems. Financial concerns

were not ranked as one of the top ten most discriminating items by new mothers. "Housekeeping not as neat as it could be" was ranked ninth by the mothers.

Hobbs (1976) replicated his study a decade later with 65 couples. The main difference between the two studies was the mean age of the children at the time the parents responded to the questionnaires. In Hobbs study in 1965 the children averaged 9.8 weeks of age compared to 25.9 weeks of age in 1976. Rank order of possible items for concern revealed that "increased money problems" was ranked first by fathers and second by mothers. "Housekeeping not as neat" was ranked third by mothers and did not fall in the top ten most discriminating items ranked by fathers.

One-half of the ten most discriminating items for men were the same in Hobb's (1965, 1976) two studies. A similar pattern was found for the females. Rank order of items varied considerably for the same sex samples in the two studies and between the sexes in both studies. Hobbs (1976) does not discuss possible reasons for the differences found. Historical considerations, such as the oil embargo and economic recession in the early 1970's and more women joining the work force, could have been addressed by the author.

In summary, Hobbs found concerns related to finances and household to be identified by both first-time fathers and mothers in his studies done in 1965 and 1976. "Increased money problems" was ranked highest by fathers in

both studies; whereas, its ranking by mothers changed, from not being included in the top ten, to the second highest most discriminating item. "Housekeeping not as neat as it should be" was ranked sixth by fathers in the 1965 study and was not ranked in the top ten in the 1976 study. "Housekeeping not as neat as it should be" changed from the ninth highest item ranked by mothers in the 1965 study to the third highest item ranked by mothers in the 1976 study.

Russell's (1974) findings are somewhat similar to those of Dyer (1963) and Hobbs (1965, 1976) for first-time parents. The third highest item most frequently identified by fathers (47 percent somewhat, 6 percent very much) as being "bothersome" was that the arrival of the baby increased money problems. The mothers in Russell's study more frequently identified items that were interpreted by the author as clustering around the emotional and physical self. Concerns related to the household or finances were not admitted to by the mothers in this study. In summary, Russell found financial problems to be a concern for fathers but not for mothers. Concerns related to the household were not found to be significant for fathers or mothers.

In her study of women's perception of time with eight primiparas and eight multiparas Grubbs (1980) found that the women's fourth greatest concern about time was in relation to household maintenance (184/1296 responses). These new mothers expressed frustration that they were not

able to keep up with the minimal housekeeping, laundry, grocery shopping, and preparation of meals. Unlike concerns related to self, children, or baby, concerns related to the household increased during the third and fourth weeks. In summary, Grubbs found that concern about time, in relation to household maintenance, was the fourth greatest concern of primiparas and multiparas in her study. In addition, concern about time in relation to the household increased with time.

From review of the above studies, it is apparent that concerns related to finances can be experienced by first-time mothers and fathers. First-time fathers are more likely to be concerned with finances than first-time mothers. In contrast, first-time mothers are more likely to be concerned with household management than first-time fathers. Both primipara and multipara may be concerned about the time needed to maintain their households as they would like. Further research is needed to identify concerns related to finances and the household of parents during the prenatal period, and particularly concerns of fathers expecting their second, or more, children. The above research findings were helpful to this researcher since concerns related to both income and household management were included in the study instrument.

In conclusion, the above review of the literature related to parenthood indicates that both mothers and fathers may experience concerns related to self, spouse,

their marital relationship, their firstborn child, the baby, their childbirth experience and the household and finances. These concerns may be present in both the prenatal and postpartum period. Further research, utilizing data collected longitudinally from the prenatal through the first years postpartum, needs to be done to identify how parental concerns remain the same or change with time. In addition, further research needs to be done to be able to compare and contrast the concern of mothers to fathers, and those of first-time parents to parents expecting their second, third, or more child. The authors mentioned above have drawn conclusions, sometimes contrasting, based on their perceptions of their studies' findings. Some authors found that first-time parents had a more difficult time adjusting to parenthood, others found that parents of two or more children had similar concerns which were equally significant to those of first-time parents, or possibly had different concerns from first-time parents.

Considering the above variety of findings, nurses must continue to investigate the concerns of all parents related to their transition to parenthood. So as to base their nursing care on a strong knowledge base, concerns of both mothers and fathers, or first-time (and greater) parents must be investigated. Nursing interventions should not be based on the issue of "who has the most or the greatest concerns?" As seen by the variety of findings described in the review of literature, all expectant parents and new

parents deserve attention to their concerns. In order to be able to deliver the most comprehensive nursing care to expectant couples and families, their perceptions must be known. This will be possible through further research which focuses, not only on the concerns of mothers or first-time parents, but on all parents in the childbearing years.

Included in Chapter four is an overview of the methodology of the study. Study variables will be operationally defined followed by a description of the sample, instrumentation and scoring, data collection procedures and data analysis.

CHAPTER IV

METHODOLOGY

Overview

This was a descriptive study designed to examine the perceived concerns of expectant parents during the third trimester of their pregnancy with their second child. A questionnaire developed especially for this study was used to measure expectant parents' perceptions of their concerns during the third trimester of pregnancy with their second child. In addition to questions about their concerns, sociodemographic information about the subjects was collected to characterize the study sample. The exact research questions to be studied will be described in Chapter IV along with operational definitions of the concepts. Next, the sample selection will be described. Finally, instrumentation and scoring, human rights protection procedures, reliability and validity of the instrument, and data collection and analysis procedures to be used will be described.

Research Questions

The following research questions were addressed in this study:

1. What are the perceived childbearing, childrearing, and marital concerns of mothers during the third trimester of their second pregnancy?

2. What are the perceived childbearing, childrearing, and marital concerns of fathers during the third trimester of their wife's second pregnancy?

3. Are there differences in the perceived childbearing, childrearing and marital concerns of mothers when compared to the perceived childbearing, childrearing, and marital concerns of fathers during the third trimester of their second pregnancy?

Operationalization of Concepts

Perception

In this study, perception was understood to mean the father's or mother's "image of reality" which gives meaning to their pregnancy and childbirth experience and influences their behavior. This process of organizing, interpreting, and transforming information from their sensory data and memories was demonstrated by their responses on the concerns questionnaire during the third trimester of pregnancy (King, 1981, p. 24).

Concerns

Concerns were defined as those issues of interest viewed as important by the expectant parent or those issues seen as occupying his/her thoughts (Bull, 1981; Glazer, 1980). Forty-eight items on the concerns questionnaire were designed to uncover concerns of parents related to self, spouse, the marital relationship, the firstborn child, the expected baby, the childbirth experience, and

the household and finances. Concerns were measured by the parents' response to each of the 48 Likert-Scale items on the concerns questionnaire. The parents were asked to indicate whether they strongly agreed, agreed, disagreed or strongly disagreed to each of the statements.

Expectant Parent

The term expectant parent potentially encompasses the time frame from the very moment of conception to the birth of the baby. Parent can further be described by the method of conception (biologic or artificial insemination), or assumption (adoptive or through re-marriage). Furthermore, being married is not a pre-requisite for parenthood. In order to limit the scope of the term expectant parent, the more traditional description was used. Parents were married and experiencing the third trimester of a normal pregnancy with their second child. Expectant parents were referred to as mothers and fathers when the mother was pregnant with their second child.

Mother

The term mother potentially refers to any female who has conceived a child. For the purpose of this study, mother referred to the female spouse who had biologically conceived one normal child with her present husband and who was presently in her third trimester of pregnancy with their second child by the same father.

Father

In this study, father was defined as "the male who shared the (second) pregnancy with the female in the

psychosocial as well as the biologic sense" and was also the biologic father of the firstborn child. (Jensen, Benson & Bobak, 1981, p. 221).

Third Trimester

It is possible that both fathers and mothers experience certain concerns during each trimester of their pregnancy. In her study of both primiparas and multiparas, Glazer (1980) found the greatest number of concerns expressed during the third trimester. Taking into consideration Glazer's findings, that the third trimester is the most critical time period, then, expectant parents in this study were asked to complete the concerns questionnaire during the third trimester of their second pregnancy. Third trimester was defined as the last three, full calendar months of the pregnancy or an estimated gestation of 27 weeks or more as calculated by the expected date of confinement (Clark & Affonsa, 1976).

Second Pregnancy

It is possible that the birth of a second child is not the result of a second pregnancy since abortions or miscarriages may have been experienced by the parents. To limit these variables and for the purpose of this study, second pregnancy, denoted that the mother was a gravida 2; para 1 (Ruder, Mastroianni & Martin, 1980) who was experiencing a normal pregnancy or one that was not at high-risk.

High-risk pregnancy was defined as "one in which the life or health of the mother or offspring was jeopardized

by a disorder coincidental with or unique to pregnancy" (Jensen, Benson & Bobak, 1981, p. 315).

Criteria for Inclusion in Study

Mother

To be eligible for inclusion in the study, mothers had to meet the following criteria:

1) adult female 21 years of age or older;
2) expecting her second child or gravida II para 1, and in her third trimester of pregnancy;
3) married to the expected baby's father;
4) living in a household with father which included one other child by the same father;
5) experiencing a normal pregnancy without high-risk complications.

Father

To be eligible for inclusion in the study, fathers had to meet the following criteria:

1) an adult male 21 years of age or older;
2) the father of the firstborn child and the expected baby;
3) married to the expected baby's mother;
4) without children from a previous marriage;
5) living with expected baby's mother.

Firstborn

In addition, the firstborn child of the mother and father had to be:

1) essentially healthy without severe or life-threatening congenital defects or acquired diseases.

Sample

The study participants were taken from fathers and mothers expecting their second child. Participants for the study were obtained from a mixed urban/rural community in a midwestern area with a population of approximately 200,000. Private doctors' offices, a certified nurse midwife's office and area childbirth and sibling preparation classes were utilized to locate the sample. Because the sample was chosen by convenience and was not random, the results of the study cannot be generalized beyond the sample.

Data Collection Procedure

Personal contact was made by telephone with area physicians and a certified nurse midwife in private practice, and childbirth and sibling preparation educators in order to explain the purpose of the study and receive permission to approach their clients for inclusion in the study. Following the physicians', certified nurse midwife's or childbirth and sibling preparation educators' stated permission to allow their clients to be approached to participate in the study, a letter documenting their agreement was sent (See Appendix C). An appointment was then scheduled at the convenience of the office staff to explain the purpose of the study and the criteria for the

sample. Letters to parents explaining the purpose of the study, potential health risks/benefits, and assurance of confidentiality were left at each office/clinic (See Appendix D). The office staff or childbirth educator then distributed the letter to parents expecting their second child and in their third trimester of pregnancy. The second page of the letter included a section for parents to leave their name, address, and phone number at the facility if they were interested in participating in the study. The second page was then torn off and left with the office staff or childbirth educator so that the parents could keep the top section of the letter for their own information. Sample participants were recruited over a four month period in 1987.

Upon collection by the investigator of the names, addresses, and phone numbers of interested parents from each facility each couple was contacted by the investigator by telephone. A standard format (See Telephone Screening Tool in Appendix E) was used for each telephone contact which included the following information: an introduction of the investigator by name and title, the purpose of the study, perceived willingness to take part in study and general criteria for inclusion in the study. Based on the parents' answers, second-time parents were asked to participate in the study if they qualified according to the criteria outlined above. Parents were informed that participation in the study would require approximately twenty minutes of their time to complete the questionnaire.

Parents were assured that all information would remain confidential.

An opportunity was provided for parents to ask any questions they might have had. Parents were assured that they could withdraw from the study at anytime without penalty. Any parent who seemed hesitant or wanted more time to discuss their involvement in the study with their spouse was recontacted within 3-5 days to obtain their response. If refusal to participate in the study occured during the initial or follow-up phone contacts, the parents were thanked for their time and communication with them was terminated.

When second-time parents agreed to participate in the study the following process was implemented. A cover letter with general directions, (See Appendix G) the consent forms (See Appendix F) and questionnaires for each parent (See Appendices A and B), and a self-addressed stamped envelope was mailed to the participants within three days. Participants were requested to complete their questionnaire alone and to return both questionnaires within one week. Once the questionnaires were returned, the participants' code numbers were assigned and the questionnaires were prepared for data analysis.

Human Rights Protection

Specific procedures were followed to assure that the rights of the study participants were not violated. These procedures were required and approved by the Michigan State

University Committee on Research Involving Human Subjects (UCRIHS) (see Appendix H). Participation in the study was voluntary and participants could withdraw from the study at any time without penalty. Return of the completed questionnaire was accepted as consent by the participant to partake in the study (see Consent Form, Appendix F). A code number was assigned to each returned questionnaire since the participant's name was never on the questionnaire.

The introductory letter and general directions explaining the purpose of the research study, the approximate time required to complete the questionnaire, and promise of anonymity were given to each participant (see Appendices D and G). Some of the information about the study contained in the introductory letter was restated in the general directions enclosed with each questionnaire (see Appendices A, B, and G).

Instrument

In the following section, operational definitions of the study variables will be discussed. In addition, the development of the instrument to be utilized for this study will be described. Since the study instrument had not been previously utilized, reliability analyses for the seven sub-scales proposed by the investigator will be addressed.

Parental Concerns Questionnaire

The instruments utilized in the study were self-

administered questionnaires for mothers and fathers developed by the author (see Appendices A and B). The questionnaires answered by mothers and fathers in the study were very similar in content, but the format was changed so as to be appropriately worded for the parent answering the questionnaire. The development of the instruments was based on a review of the literature (Bull, 1981; Glazer, 1980; Gruis, 1977; Stark & Carrico, 1983), interviews with family child health nurses and nursing educators, and from personal experiences of the author while a professional nurse caring for expectant couples. The instruments were set up into two parts.

The first part of each instrument was designed to collect sociodemographic data on the sample and also to elicit information about modifying and action variables that might influence the expectant parents' perceptions of concerns during the pregnancy (see Appendices A and B, 1 through 26).

The second part of each questionnaire included 48 items which proposed to address specific concerns expectant parents may have (see Appendices A and B, 27 through 74). The last 48 items on the questionnaire were designed to describe childbearing, childrearing and marital concerns as measured by the seven sub-concepts previously identified and itemized: concerns related to self, spouse, the marital relationship, the firstborn child, the expected baby, the childbirth experience, and the household and finances (see Appendices A and B, 27 through 74).

A four-point Likert scale was utilized to record responses to the 48 items (27 through 74). The 48 items of concern (27 through 74) were very similar for both the mother's questionnaire and father's questionnaire, but their sequence was randomized separately and some items were reworded so as to be appropriate for the parent (mother or father) answering the questionnaire. Answers were recorded on a four-point Likert scale which ranged from strongly agree to strongly disagree, with a category titled not-applicable available. For the purpose of analysis, responses were recorded in such a way that endorsement of positively worded statements, and non-endorsement of negatively-worded statements were assigned a higher number (Strongly Agree = 4, Agree = 3, Disagree = 2, Strongly Disagree = 1).

The last question (#75) on the questionnaires was an open-ended question which allowed parents to write in any additional concerns they had which were not addressed in items 27 through 74. The additional concerns were then categorized into the seven subscale areas of self, spouse, marital, firstborn, expected baby, childbirth experience, and household and finances.

Extraneous Variables

A review of the literature indicated that various extraneous variables may influence concerns perceived by expectant parents during a pregnancy. Data were collected on these sociodemographic, modifying, and action variables

through questions 1 through 26 on the concerns questionnaires. Operational definitions of these variables follow.

Sociodemographic variables

There were six items which requested information concerning the age of the respondent, ethnic background, religious affiliation, education, family income, and present employment status.

Modifying variables

There were eleven items which requested information regarding previous labor and birth experiences, age and sex of firstborn, and planning of pregnancies.

Action variables

There were eight items which requested information regarding mental or physical actions decided upon during this pregnancy in order to control situations. These included plans for the father's attendance at the labor and birth, method of feeding baby, attendance at childbirth preparation classes, preparation for childbirth, and sources for discussion of concerns.

Operational Definitions of Variables

The seven subscales described under the broader categories of childbearing, childrearing and marital concerns will not be combined for analyses, rather, these seven subscales will be treated individually in the data analysis.

Concerns Related to Self

These were operationalized by seven items for the mothers and six items for the fathers which proposed to address concerns during pregnancy related to themselves. Items covered such areas as time for self (Appendix A, 61; Appendix B, 35), thoughts about own health (Appendix A, 44; Appendix B, 55), happiness about pregnancy (Appendix A, 49; Appendix B, 61), meeting the needs of the family (Appendix A, 67; Appendix B, 59), career goals (Appendix A, 33; Appendix B, 51), and support of family and friends (Appendix A, 66; Appendix B, 56). The additional question for mothers focused on their concern about their figures (Appendix A, 27).

Concerns Related to Spouse

These were operationalized by six items for mothers and seven items for fathers which proposed to address their concerns related to their spouse. Items included such areas as career goals of spouse, (Appendix A, 40; Appendix B, 53), spouse's health, (Appendix A, 37; Appendix B, 34), spouse's happiness about the pregnancy (Appendix A, 51; Appendix B, 31), spouse's ability to pursue own interests (Appendix A, 50; Appendix B, 49), support of spouse (Appendix A, 28; Appendix B, 64), and spouse feeling stifled after second child's birth (Appendix A, 71; Appendix B, 73). The additional question for fathers focused on the concern that their wife's figure would not return to normal after the second child's birth (Appendix B, 43).

Concern Related to the Marital Relationship

These were operationalized by eight items for both mothers and father proposed to address concerns they had related to their marital relationship. The focus of these items was on shared leisure activity (Appendix A, 65; Appendix B, 66), the sexual relationship (Appendix A, 42; Appendix B, 41), attention from spouse (Appendix A, 54; Appendix B, 32), contraception (Appendix A, 39; Appendix B, 63), sexual attractiveness (Appendix A, 59; Appendix B, 69), changes in own sex drive (Appendix A, 35; Appendix B, 52), changes in spouse's sex drive (Appendix A, 31; Appendix B, 65), and possible consideration of sterilization (Appendix A, 36; Appendix B, 47).

Concerns Related to the Firstborn Child

These were operationalized by seven items for both mothers and fathers which proposed to focus on concerns they had related to their firstborn child during their pregnancy. Items concentrated on such areas as their firstborn child loving the new baby (Appendix A, 46; Appendix B, 30), possible aggression towards the new baby (Appendix A, 64; Appendix B, 48), loss of their special relationship with their firstborn after the baby's birth (Appendix A, 34; Appendix B, 74), care of firstborn while mother is hospitalized (Appendix A, 38; Appendix B, 72), attention for firstborn after baby is born (Appendix A, 68; Appendix B, 46), regression of skills (Appendix A, 72; Appendix B, 27), and lack of energy for firstborn during

pregnancy (Appendix A, 29; Appendix B, 42).

Concerns Related to the Expected Baby

These were operationalized by six items for both mothers and fathers which proposed to address concerns they had related to the expected second child. Items in this area focused on the health of the baby (Appendix A, 52; Appendix B, 40), ability to love the second child as much as the firstborn child (Appendix A, 47; Appendix B, 67), desired sex of the baby (Appendix A, 63; Appendix B, 36), time and attention for second child (Appendix A, 62; Appendix B, 38), ability to care for a baby (Appendix A, 41; Appendix B, 33), and ability of spouse to love second child as much as first (Appendix A, 45; Appendix B, 29).

Concerns Related to the Childbirth Experience

These were operationalized by eight items for both mothers and fathers which proposed to focus on concerns they had related to the upcoming labor and delivery experience. Such items as difficulty of labor (Appendix A, 30; Appendix B, 50), control during labor (Appendix A, 73; Appendix B, 71), preparation for labor and delivery (Appendix A, 58; Appendix B, 70), physical care received from doctors and nurses (Appendix A, 70; Appendix B, 39), safety of mother during labor and delivery (Appendix A, 43; Appendix B, 54), emotional support of doctors and nurses (Appendix A, 48; Appendix B, 60), support by father during labor and delivery (Appendix A, 57; Appendix B, 58) and flexibility of visitation while hospitalized (Appendix A,

55; Appendix B, 28) were included in this area.

Concerns Related to the Household and Finances

These were operationalized by six items for both mothers and fathers which proposed to focus on concerns they had related to the family household and finances as they awaited the arrival of a second child. Items in this area included health care costs (Appendix A, 74; Appendix B, 68), possible career changes decreasing income (Appendix A, 69; Appendix B, 57), general upkeep of the house as desired (Appendix A, 32; Appendix B, 37), being able to afford to raise a second child (Appendix A, 60; Appendix B, 44), available space in house (Appendix A, 56; Appendix B, 62), and having enough money to meet the needs of the family (Appendix A, 53; Appendix B, 45).

Extraneous Variables

The instruments were designed to elicit information about variables (sociodemographic, modifying, action) that could influence the concerns perceived by parents expecting their second child (see Appendices A and B, 1 through 26). The decision to include the following items in the questionnaires was made after review of previous research indicated that these variables may influence concerns perceived by parents during pregnancy.

Sociodemographic

AGE OF THE PARENT: The respondent's age in years at the time of the study (Appendices A and B, 3).

RACE/ETHNICITY: Response categories for racial background were White, Black, American Indian, Mexican American, Oriental, or Other (Appendices A and B, 4).

RELIGION: Response categories for religious preference were Catholic, Jewish, Protestant, None, or Other (Appendices A and B, 5).

LEVEL OF EDUCATION: Response categories for highest level of education attained ranged from grade school to beyond four years of college (Appendices A and B, 6).

ANNUAL FAMILY INCOME: Respondents were asked to indicate their annual family income. Response categories ranged from $9,999 and under to above $50,000 (Appendices A and B, 7).

PRESENT EMPLOYMENT STATUS: Respondents were asked to indicate their current employment status, which included the option of homemaker. Response categories were Employed Full Time (40 hours/week), Employed Part Time (less than 40 hours/week), Homemaker, or Unemployed (Appendices A and B, 8).

Modifying Variables

GESTATION: Elicited by two questions which asked the respondent to record today's date (#1) and the baby's expected due date (#2). For the purpose of calculation, the difference between the two dates represented the number of weeks remaining to reach 40 weeks of gestation. Therefore, 40 minus the difference was the number of weeks of gestation at the time the questionnaire was completed.

FEELINGS REGARDING FIRST LABOR AND BIRTH EXPERIENCE: Response categories were Positive, Neutral, or Negative regarding respondent's first labor and birth experience. (See question #17.)

PLANNING OF PREGNANCIES: Response categories were Yes or No regarding planning of present and previous pregnancy. (See questions #10 and #18.)

COMPLICATIONS IN LABOR/BIRTH: Elicited by two questions asking if there were major complications during the first labor and birth experience. Responses were Yes and No. Space was provided for the respondent to describe the complication experienced. (See questions #11 and #14.)

AGE OF FIRSTBORN CHILD: This question asked the age of respondent's firstborn child at the time the questionnaire was completed in years and months. (See question #16.)

SEX OF FIRSTBORN CHILD: Responses were Male or Female regarding sex of respondent's firstborn child. (See question #15.)

Action Variables

PLANS FOR HUSBAND TO ATTEND LABOR AND BIRTH: Response categories were Yes or No regarding plans for father to be present during the mother's labor and birth with the second child. (See questions #19 and #20.)

ATTENDANCE AT CHILDBIRTH PREPARATION CLASSES: Response categories were Yes, No or Undecided regarding attendance at childbirth preparation classes during second

pregnancy. (See question #22.)

METHOD OF FEEDING: Response categories for method of feeding the new baby were Breast, Bottle, Breast and Bottle, or Undecided. (See question #21.)

COMPARISON OF CURRENT PREPARATION FOR CHILDBIRTH TO FIRST PREGNANCY: Response categories regarding the amount of childbirth preparation taken during the present pregnancy as compared to the first pregnancy were About the Same, More with this Pregnancy, or Less with this Pregnancy. (See question #23.)

SOURCES FOR INFORMATION: Response categories for sources of information regarding childbirth and children were Books, Magazines, Newspaper Articles, Pamphlets from Doctors' offices, Television Programs, Personal Experience, Family and Friends, Doctors, Certified Nurse Midwife, Nurses, Instructor in Childbirth Preparation Classes. (See question #24.)

DISCUSSION OF CONCERNS: Response categories were Yes or No as to discussion of concerns regarding current pregnancy with others. (See question #25.)

SOURCES FOR DISCUSSION OF CONCERNS: Response categories for sources utilized for discussion of concerns during present pregnancy were Spouse, Relatives, Friends, Doctors, Certified Nurse Midwife, Nurses, Instructor or Parents in Childbirth Preparation Classes, and Other. (See question #26.)

FUTURE EMPLOYMENT INTENTIONS: Response categories for intentions for employment after baby's birth were Full-time

Employment (40 hours/week), Part-time Employment (less than 40 hours/week), and No Plans to Work Outside the Home. (See question #9.)

Pre-Test of the Instrument

Three couples expecting their second child who were not participants in the study were asked to criticize the instrument for ease of readability, suitability of the questions, ability to comprehend the directions, and the amount of time needed to complete each section of the questionnaire. The researcher was available by telephone to answer any questions or concerns about the instrument that couples in the pilot study had. Upon completion of the questionnaires, the researcher met with each couple to review their suggestions for the questionnaires. Based on input by the couples, the addition of the choice "Certified Nurse Midwife" was made in questions #24 and #26.

Reliability and Validity of the Instrument

The first part of each questionnaire surveys socio-demographic, modifying and action variables that may influence concerns experienced by expectant parents. The second part of each questionnaire, items 26 through 74, addresses 48 specific concerns that expectant parents may experience. These items were developed by the investigator based on a review of the literature. The 48 items of concern resulted from expanding the seven broad sub-concept categories of self, spouse, the marital relationship, firstborn child, expected baby, childbirth experience, and

household and finances. The study participants were asked to identify on a four-point scale their level of agreement that each item was or was not a concern experienced by them during their present pregnancy.

Reliability and validity for the concerns questionnaires had not been established prior to this study. Establishment of these qualities was crucial for interpretation of the data because the researcher needed to find out whether the dimensions of concerns actually exhibited by respondents did correspond to the classification proposed by the researcher. The following will describe techniques utilized in this study to establish reliability and validity of the concerns questionnaire.

"Reliability is the degree of consistency or dependability with which an instrument measures the attribute it is designed to measure" (Polit & Hungler, 1987, p. 316). The reliability of an instrument can be assessed by utilizing a measure of internal consistency. An instrument is understood to be internally consistent to the extent that all of the items within each sub-scale measures the same characteristic and the sub-scales themselves are interrelated. To determine the degree to which all of the 48 items within each of the seven sub-scales on the concerns questionnaire were internally consistent, construct grouping of items into sub-scales was computed using coefficient alpha (Cronbach's alpha). To determine the internal consistency of the seven sub-scales, Cronbach's alpha was computed for each sub-scale utilizing

the items originally proposed by the researcher. If and when items did not meet the minimum criteria for inclusion in the sub-scale, they were excluded until the alpha value for the sub-scale reached at least .60. The actual sub-scales were established by averaging the scores of each individual over all items remaining in the sub-scale. To determine the relationships between the seven sub-scales, the Pearson r was computed between all pairs of sub-scales. Reliability coefficients range between 0.0 and 1.00. The higher the coefficient, the more stable the measure. For the purpose of this study, reliability coefficients above .70 were considered very highly correlated (Polit & Hungler, 1987). Sub-scales with intercorrelation levels above .70 would have been considered to be lacking in independence from the other sub-scales. Reliability coefficients for the concerns questionnaire are reported in Chapter V with the data analysis.

Validity of a scale is defined by Polit and Hungler (1987) as the degree to which an instrument measures what it is supposed to be measuring. The different types of validity include: content, criterion-related, and construct validity. Based on the purpose of this study, a discussion of content validity seems appropriate.

Content validity is based on judgment and concerns itself with the sampling adequacy of the content area being measured. No objective measures exist for assuring adequate content coverage of an instrument. The evaluation of content validity is a subjective measure often based on

the judgment of experts in a field or careful planning by the researcher. For this study, content validity of the instrument was based on review by experts in the area of parent-child nursing. In addition, careful planning by the investigator was done to assure that concerns of expectant parents reflected in the literature were included in the instrument.

Threats to validity which were pertinent to this study include selection bias, social desirability, and the wording of response items on the questionnaire. Since the study sample was drawn from a convenience population, selection bias was introduced into the study. Expectant parents may have responded to the items on the concerns questionnaire in a manner they felt was socially acceptable rather than relating their honest opinions. Subjects were asked to respond to an equal number of positively and negatively worded items on the concerns questionnaire in order to control for response set selection.

Scoring

As already mentioned, the raw score is derived from a four-point Likert scale for each item (27 through 74). The score of four indicated the subject strongly agreed the item was a concern. A score of one indicated the subject strongly disagreed the item was a concern. For the purpose of analysis, responses were recorded in such a way that endorsement of positively worded items and non-endorsement of negatively worded items were assigned a higher number.

Items left unanswered or marked non-applicable were assigned a different score and deleted from data analyses.

Following construct grouping of the 48 items (27 through 74), the mean score for each subject on each of the seven sub-scales was computed and is reported in Chapter V. The total mean score could range from 1.0 = no concern to 4.0 = strong concern. A total mean score of 2.5 or above for each sub-scale reflected agreement that the area of concern addressed by the sub-scale was of importance. Total mean scores below 2.5 indicated disagreement that the sub-scale area was of importance.

Information obtained from the last question, #75, which allowed for an open-ended response regarding concerns of the subject, was categorized by the investigator according to the seven sub-concept areas of: self, spouse, marital relationship, firstborn, baby, childbirth, and household and finances.

Data Analysis Procedures

The major research questions for this study and the statistical procedures utilized to analyze the data obtained from the study follow.

Research Questions I and II

1. What are the perceived childbearing, child rearing and marital concerns of mothers during the third trimester of their second pregnancy?

2. What are the perceived childbearing, child rearing and marital concerns of fathers during the third trimester of their wife's second pregnancy?

The mean scores for each of the seven sub-scale areas were computed separately for mothers and fathers. The mean scores were then compared with each other to find out what areas of concern were most important to either mothers or fathers. In addition, independent of the established scales, it was also thought relevant to rank individual items according to their importance to mothers and fathers. Importance was measured in two steps: 1) all items were rank ordered according to their mean response, and 2) items with mean scores exceeding 2.5 were then rank ordered according to the frequency with which subjects considered them important.

Research Question III

3. Are there differences in the perceived childbearing, childrearing, and marital concerns of mothers when compared to the perceived childbearing, child rearing and marital concerns of fathers during the third trimester of their second pregnancy?

This question was answered by computing the variance of a difference score in order to examine the degree of relationship between the concerns perceived by mothers and fathers. This measure was computed as follows:

A pair-wise comparison of couples for all seven sub-scales was done by computing a difference-score for each

couple. The difference score was based on the subtraction of the father's scores from the mother's scores. Positive scores indicated greater concerns by mothers and negative scores indicated greater concerns by fathers. The computation of the variance of this difference score could range from zero (indicating no difference in concerns between mothers and fathers) to a maximum of 9 (indicating maximum disagreement for couples).

Extraneous Variables

Data related to the various extraneous variables (sociodemographic, modifying, and action variables) were presented using descriptive statistics in order to characterize the sample. Frequencies, means and percentages were computed as needed.

In the case of nominal level extraneous variables, e.g. (religion, ethnic background), an analysis of variance was employed to examine mean differences between the categorical groups. In the case of interval level extraneous variables e.g. (age of firstborn, income), the Pearson product-moment correlation coefficient was used to analyze the relationship.

The relationships between extraneous variables and the seven concerns sub-scales were examined by utilizing the Pearson r. If there was a perfect positive correlation, the value of Pearson r obtained would be +1. A Pearson r of -1 would indicate a perfectly negative correlation. The correlation was near zero when there was little correlation

between variables. The researcher viewed a value of r = .2 as a weak correlation, values of .2 to .4 as moderate in strength, and anything above .4 as highly correlated.

Summary

Included in Chapter IV were the research questions, and the operational definitions of the study variables and other extraneous variables. Also discussed were the criteria for inclusion of subjects in the study, data collection procedures, instrumentation, human rights procedures, techniques for data analysis, scoring, and reliability and validity of the instrument. Chapter V will include a presentation of the results of the data analysis in relation to the research questions to be studied.

CHAPTER V

DATA PRESENTATION AND ANALYSIS

Overview

A description of the study sample is presented in this chapter. A discussion of the reliability measures established for each of the sub-scales will be included. Data analysis which answer the major research questions of this study are presented. Additional study findings relating to extraneous variables (sociodemographic, modifying, action) will be reviewed. Prior to presenting the data, changes made in the study instrument as a result of the pilot study will be discussed.

Results of Pilot Study

A pilot study was conducted with three couples expecting their second child who met the same criteria for couples to be included in the study. The purpose of the pilot study was to test the study instruments for readability, suitability of the questions, and clarity of directions. These three couples were not included in the study sample, nor were their responses included in the data analysis of the research questions.

Based on the pilot study, the following changes were made:

1. Certified nurse midwives were added as a response choice in questions #24 and #26.

2. Certified nurse midwives were indicated, along with doctors and nurses, in Likert-scale items 39 and 60 on the father's questionnaire and items 70 and 48 on the mother's questionnaire.

Description of the Study Sample

Meeting the criteria for sample selection, 48 couples were mailed study questionnaires. A total of 37 couples returned completed questionnaires. Questionnaires returned from one couple were deleted from the study sample since the questionnaires were damaged in mailing. The final acceptable responses from 36 couples represented a 75 percent response rate. This amounted to a total sample size of 72 individual participants equally representing mothers and fathers.

Extraneous Variables

Data collected on extraneous variables represented the three areas of sociodemographic, modifying, and action. The descriptive statistics are presented below for these variables.

Sociodemographic Variables

Data obtained specific to sociodemographics of the study subjects, included age, education, religion and family income. These data will be presented below.

The thirty-six mothers ranged in age from 22 to 37 years, with a mean age of 30.2 years and a S.D. of 3.4.

The thirty-six fathers ranged in age from 21 to 42 years, with a mean age of 31.6 years and a S.D. of 4.4. In addition all of the study sample, both husbands and wives (N = 72), was caucasian.

The religious backgrounds of the thirty-six mothers in the study were: 1) Protestant 44.4% (n=16); 2) Catholic 36.1% (n=13); 3) Other 11.1% (n=4); 4) Jewish 5.6% (n=2); and, 5) None 2.8% (n=1). The other religious choices indicated by mothers included: Mormon, Non-Denominational, Unitarian, and Christian. The religious backgrounds of the thirty-six fathers in the study were: 1) Protestant 50% (n=18); 2) Catholic 19.4% (n=7); 3) None 13.9% (n=5); 4) Other 8.3% (n=3); 5) Jewish 5.6% (n=2); and, 6) No Answer 2.8% (n=1). The other religious choices indicated by fathers included Pentecostal, Methodist, and Christian.

The educational backgrounds for the thirty-six mothers in the group were: 1) college graduate 36.1% (n=13); 2) some college courses taken 30.6% (n=11); 3) beyond four years of college 25% (n=9); and, 4) high school graduate 8.3% (n=3). The educational backgrounds for the thirty-six fathers in the study were: 1) beyond four years of college 41.7% (n=15); 2) college graduate 22.2% (n=8); 3) some college courses taken 22.2% (n=8); 4) high school graduate 11.1% (n=4); and, 5) some high school 2.8% (n=1).

The yearly family incomes reported for the 72 participants were; 1) greater than $50,000 (n=25, 34.7%); 2) $40,000 to $49,999 (n=15, 20.8%); 3) $30,000 to $39,999

(n=19, 26.4%); 4) $20,000 to $29,999 (n=11, 15.3%); 5) $10,000 to $19,999 (n=1, 1.4%); and 6) $9,999 and less (n=1, 1.4%).

The employment status of the thirty-six mothers in the study was: 1) employed full-time 41.7% (n=15); 2) employed part-time 13.9% (n=5); and 3) homemaker 44.4% (n=16). The employment status of the thirty-six fathers in the study was: 1) employed full-time 94.4% (n=34); 2) employed part-time 2.8% (n=1); and, 3) unemployed 2.8% (n=1). See Table 1 for a summary of the sociodemographic variables.

Modifying Variables

Data collected regarding experience which could possibly modify perceptions by parents of their present pregnancy included the age and sex of the firstborn child and aspects of the parent's previous childbirth experience. These data are presented below.

Of the 36 mothers in the sample, 80.6% (n=29) reported that their first pregnancy was planned and 19.4% (n=7) reported that it was not. From the sample of 36 fathers, 88.9% (n=32) felt that their first pregnancy was planned and 11.1% (n=4) felt that it was not.

Three of the mothers (8.3%) reported having major complications with their first pregnancy and 33 mothers (91.7%) did not report any major complications. Complications indicated by mothers included hypertension, skin disorder and hemorrhoidectomy. Only one of the fathers (2.8%) thought his wife had major complications during

Table 1

Sociodemographics on the Study Sample

	Mothers	Fathers
Number of Participants	36	36
Participant Age	x = 30.2 years	x = 31.6 years
Ethnic Background	100% Caucasian	100% Caucasian
Religion		
Protestant	44.4% (n = 16)	50.0% (n = 18)
Catholic	36.1% (n = 13)	5.6% (n = 7)
Jewish	5.6% (n = 2)	5.6% (n = 2)
Other	11.1% (n = 4)	8.3% (n = 3)
None	2.8% (n = 1)	13.9% (n = 5)
Education		
Beyond Four Years of College	25.0% (n = 9)	41.7% (n = 15)
College Graduate	36.1% (n = 13)	22.2% (n = 8)
Some College Courses Taken	30.6% (n = 11)	22.2% (n = 8)
High School Graduate	8.3% (n = 3)	11.1% (n = 4)
High School Not Completed		2.8% (n = 1)
Present Employment		
Full-time	41.7% (n = 15)	94.4% (n = 34)
Part-time	13.9% (n = 5)	2.8% (n = 1)
Homemaker	44.4% (n = 16)	
Unemployed		2.8% (n = 1)
	Family	
Combined Family Income per Year		
Greater than $50,000	34.7% (n = 25)	
$40,000 to $49,999	20.8% (n = 15)	
$30,000 to $39,999	26.4% (n = 19	
$20,000 to $29,999	15.3% (n = 11)	
$10,000 to $19,999	1.4% (n = 1)	
$9,999 and less	1.4% (n = 1)	

their first pregnancy, while 35 fathers (97.2%) felt their wives did not have major complications. The complication indicated by the one father was toxemia.

The length of first labor as reported by mothers was: 1) five hours or less, 30.6% (n=11); 2) 6 to 10 hours, 33.3% (n=12); 3) 11 to 15 hours, 19.4% (n=7); 4) 16 to 20 hours, 5.6% (n=2); 5) 21 to 24 hours, 5.6% (n=2); and 6) greater than 24 hours, 5.6% (n=2). The length of their wife's first labor as reported by fathers was: 1) 5 hours or less, 27.8% (n=10); 2) 6 to 10 hours, 36.1% (n=13); 3) 11 to 15 hours, 19.4% (n=7); 4) 16 to 20 hours, 5.6% (n=2); 5) 21 to 24 hours, 2.8% (n=1); and 6) greater than 24 hours, 8.3% (n=3).

The type of delivery experienced with the first child's birth was reported by mothers as: 1) vaginal, 58.3% (n=21); 2)vaginal with forceps, 27.8% (n=10), and 3) Cesarean section, 13.9% (n=5). The type of delivery reported by fathers was: 1) vaginal, 52.8% (n=9), 2) vaginal with forceps, 33.3% (n=12); and 3) Cesarean section, 13.9% (n=5).

Of the 36 mothers in the sample, eight (22.2%) perceived having had major complications with their first birth experience and 28 (77.8%) reported they did not experience major complications. Complications with their previous birth experience included an emergency Cesarean section (n=3), broken tailbone, extensive lacerations (n=2), fetal distress, and cord wrapped around baby's neck.

Four (11.1%) of the 36 fathers reported their wives had major complications during their first child's birth and 32 fathers (88.9%) reported no major complications. Complications with their first birth experience cited by fathers were induction of labor, severe blood loss, prolonged labor and emergency Cesarean section.

The sex of the couples' firstborn children was equally divided. Eighteen (50%) of the couples' firstborn children were male and 18 (50%) of the couples' firstborn children were female.

The ages of the firstborn children of couples in the study ranged from seven months to nine years-ten months of age. The mean age for the 36 firstborn children was two years-seven months with a S.D. of 1.8. The median and mode for the firstborn's age were both two years-nine months. Seven (19.4%) of the mothers felt negative regarding their first labor and birth experience, five mothers (13.9%) reported neutral feelings and 24 mothers (66.7%) reported feeling positive. Of the fathers, three fathers (8.3%) reported negative feelings regarding their first birth experience, three fathers (8.3%) reported neutral feelings, and 30 fathers (83.3%) reported feeling positive.

Ten of the mothers (27.8%) reported not planning their second pregnancy, and 26 (72.2%) reported they did plan their second pregnancy. Nine of the fathers (25%) reported not planning their second pregnancy, and 27 (75%) reported they did plan the second pregnancy. The gestation of their

second pregnancy at the time the thirty-six mothers and fathers answered the questionnaire ranged from 27 to 40 weeks with a mean of 34.7 weeks and a S.D. of 3.2.

Action Variables

Data was obtained on areas reflecting decisions made by parents regarding future employment, feeding methods, future childbirth experience and sources chosen for childbearing and childrearing information. These data are presented below.

All 72 mothers and fathers (100%) planned on being together with their spouse during labor and birth with their second child. Sixteen of the mothers (44.4%) planned on breastfeeding their second child, 14 mothers (38.9%) planned to combine bottle and breastfeeding, five mothers (13.9%) planned to bottle feed only, and one mother (2.8%) was undecided regarding the feeding method. Eighteen of the fathers (50%) favored breastfeeding alone for their second child, 11 fathers (30.6%) favored bottle and breastfeeding, six fathers (16.7%) favored bottle feeding alone, and one father (2.8%) was undecided.

When questioned as to whether they were attending or planned on attending childbirth preparation classes during their second pregnancy, 31 of the mothers (86.1%) indicated they would attend, three (8.3%) chose not to attend, and two mothers (5.6%) were undecided. Thirty of the fathers (83.3%) indicated they were attending or planned on

attending childbirth preparation classes, five (13.9%) chose not to attend, and one father (2.8%) was undecided.

Thirty of the mothers (83.3%) felt they prepared less during their second pregnancy as compared to their first, five mothers (13.9%) felt they prepared about the same, and one mother (2.8%) felt she prepared more with the second pregnancy than with her first pregnancy. Twenty-eight of the fathers (77.8%) indicated preparing less with the second pregnancy than with their first, and eight fathers (22.2%) indicated their amount of preparation was about the same.

Mothers' sources for childbirth and child-related information during their second pregnancy were as follows: 1) 77.8% (n=28) of the mothers obtained information from books, magazines or personal experience; 2) 69.4% (n=25) felt their childbirth class instructor was a source for information; 3) 63.9% (n=23) sought information from their doctor or their family and friends; 4) 61.1% (n=22) obtained information from pamphlets given out by their doctors; 5) 30.6% (n=11) viewed nurses as a source of information; 6) 22.2% (n=8) felt television programs were sources for information; 7) 16.7% (n=6) chose the newspaper as a source of information; and 8) 2.8% (n=1) viewed their certified nurse midwife as a source of information. Fathers' sources for childbirth and child-related information during pregnancy were as follows: 1)childbirth class instructor, 72.2% (n=26); 2) personal experience, 66.7% (n=24); 3) family and friends/books, both 55.6% (n=20); 4) magazines, 50% (n=18);

5) pamphlets from doctors, 41.7% (n=15); 6) doctors, 36.1% (n=13); 7) newspapers, 27.8% (n=10); 8) nurses, 16.7% (n=6); and 9) programs, 11.1% (n=4). Sources utilized by mothers and fathers for childbearing and childrearing information are shown in Table 2.

Table 2

Percent of Mother's and Fathers Utilization of Sources for Childbearing and Childrearing Information

	Mothers	Fathers
Books	77.8	55.6
Magazines	77.8	50.0
Pamphlets from doctor's office	61.1	41.7
Television programs	22.2	11.1
Newspapers	16.7	27.8
Personal experience	77.8	66.7
Family and friends	63.9	55.6
Doctor	63.9	36.1
Childbirth class instructor	69.4	72.2
Nurses	30.6	16.7
Certified nurse midwife	2.8	0.0

Of the mothers, 35 (97.2%) indicated they did discuss their childbirth-related concerns with others and one (2.8%) indicated she did not discuss her concerns with others. Twenty-nine of the fathers (80.6%) indicated they did discuss their concerns with others while seven fathers

(19.4%) indicated they did not discuss their concerns with others.

For the 35 mothers who indicated they did discuss their concerns with others, their resources for discussion of their concerns were as follows: 1) spouse, 100% (n=35).; 2) doctors, 77.1% (n=27); 3) friends, 74.3% (n=26); 4) relatives, 68.6% (n=24); 5) childbirth class instructor, 37.1% (n=13); 6) nurses, 22.9% (n=8); and 7) certified nurse midwives and the choice "other" were both 5.7% (n=2). One mother cited discussing her concerns with other mothers in her prenatal swim class. For the twenty-nine fathers who indicated they did discuss their concerns with others, their resources for discussion of their concerns were as follows: 1) spouse, 89.7% (n=26); 2) friends, 69% (n=20); 3) relatives, 55.2% (n=16); 4) doctors, 37.9% (n=11); 5) childbirth class instructor, 27.6% (n=8); 6) nurses, 13.8% (n=4); and 7) the choice "other", 3.4% (n=1). One father cited discussing his concerns with his coworkers.

Of the 35 mothers who indicated their plans for employment after their second child was born, 36.1% (n=13) said they would work full-time, 22.8% (n=8) planned to work part-time, and 38.9% (n=14) would be homemakers. For the fathers, 97.2% (n=35) planned to work full-time after their second child's birth and 2.8% (n=1) planned to work part-time.

In summary, all couples planned on being together during the labor and birth of their second child and the

majority planned on attending childbirth preparation classes during their second pregnancy. The majority of mothers and fathers felt they prepared less for childbearing and childrearing during their second pregnancy but the majority of parents, mothers more so than fathers, did discuss their concerns with their spouse. In general, the study sample was highly educated with higher family incomes and had experienced shorter labors and less complications during their first childbirth experience.

Reliability of the Study Instrument

Reliability scores for the seven sub-scales initially proposed by the author were computed using coefficient alpha (Cronbach's alpha) as indicated in Chapter IV. Items on each sub-scale were excluded until the highest possible alpha level was reached. Sub-scales with alpha levels of .60 and above for either fathers, mothers, or fathers and mothers combined were retained. Two of the sub-scales initially proposed by the author were deleted because they did not turn out to be sufficiently reliable. The deleted sub-scales were Concerns Related to Self and Concerns Related to Spouse. Refer to Table 3 for the alphas obtained on the five retained sub-scales. Refer to Appendix I for retained or deleted sub-scales and sub-scale items.

Table 3

Alpha Coefficients on Retained Sub-scales of Parental Concerns Questionnaire

	Mothers & Fathers	Mothers	Fathers
Concerns Related to the Marital Relationship	.72	.55	.81
Concerns Related to Firstborn Child	.71	.67	.68
Concerns Related to the Expected Baby	.65	.63	.56
Concerns Related to the Childbirth Experience	.70	.67	.71
Concerns Related to Finances	.64	.59	.60

The figures in Table 3 represent a low to moderate degree of internal consistency among the items on each of the sub-scales. In view of the above alpha levels, a factor analysis of the 48 individual items of concern was performed. Since the factor groupings of the measures identified by factor analysis did not make any conceptual sense, the author chose to accept the alpha levels on the five retained sub-scales shown above in Table 3. As supported by Polit and Hungler (1987), alpha levels in the vicinity of .60 are minimally sufficient when only interested in making group level comparisons. This criterion is relevant to the present study where the concerns of fathers as a group and mothers as a group were compared.

In order to examine relationships between the five retained sub-scales, the Pearson r was computed. As seen in

Table 4, all five sub-scales were positively correlated to a moderate to high degree suggesting a significant relationship between self reported concerns during a second pregnancy on all five sub-scales. In addition, the null hypothesis inferring no relationship between the sub-scales was rejected at $\leq .001$. The high levels of intercorrelation ($> .56$) found between the expected baby, firstborn and childbirth sub-scales warrant further attention in regards to the independence of each sub-scale. The sub-scales were retained for this preliminary study and no further analysis of the sub-scales was made. However, before future study replications are executed, the high intercorrelations of the expected baby, firstborn and childbirth sub-scales would need to be re-evaluated.

Table 4

Pearson Correlation Coefficients Among Subscales

	Childbirth	Marital	Firstchild	Expected Baby	Finances
Childbirth	1.0000	.3774*	.6927*	.5614*	.4824*
Marital		1.0000	.4498*	.4980*	.4048*
Firstchild			1.0000	.6826*	.3713*
Expected Baby				1.0000	.3941*
Finances					1.0000

*P = _ .001

Analysis Pertinent to Study Questions

Data which answers the study questions will be presented in the following section. Each question will be analyzed as outlined in Chapter IV.

Question I.

What are the perceived childbearing, childrearing, and marital concerns of mothers during the third trimester of their second pregnancy?

The mean scores of mothers on the five retained sub-scales are shown in Table 5. The mothers mean scores for all five sub-scales were below 2.5 indicating that the five sub-scales did not represent areas of concern for the majority of mothers in the study. The percent of mothers who did indicate levels of concern greater than 2.5 on each of the sub-scales follows: childbirth 25% (n=9); marital 47% (n=16); firstborn 39% (n=14); expected baby 33% (n=12); and, finances 29% (n=10). The greatest number of concerns reported by mothers were related to the marital relationship followed by concerns related to their firstborn child, then the expected baby and finances, and finally the area of childbirth.

The Pearson r was computed on the five sub-scales to investigate the degree of relationship between the sub-scales for mothers. The correlations of the sub-scales for mothers are shown in Table 6.

Table 5

Mean Results and Stdandard Deviations of Mothers and Fathers on Five Sub-Scales of Concern

	Mean Scores			
	Mothers		Fathers	
	Mean	SD	Mean	SD
Retained Sub-scales				
Childbirth	N=36 2.15	.36	N=36 1.88	.35
Marital	N=36 2.44	.48	N=36 2.14	.60
Firstborn	N=36 2.30	.45	N=36 1.95	.43
Expected Baby	N=36 2.24	.53	N=36 1.98	.55
Finances	N=35 2.24	.52	N=36 1.92	.53

Table 6

Intercorrelations of Mothers' Five Sub-scale Concern Scores

Sub-scale	Child-birth	Marital	Firstborn	Expected Baby	Finances
Childbirth	___	.17 P=.16	.60 P=.000	.55 P=.000	.37 P=.01
Marital	.17 P=.16	___	.29 P=.05	.29 P=.04	.30 P=.04
Firstborn	.60 P=.000	.29 P=.05	___	.67 P=.000	.22 P=.11
Expected Baby	.55 P=.000	.29 P=.04	.67 P=.000	___	.31 P=.04
Finances	.37 P=.01	.30 P=.04	.22 P=.11	.31 P=.04	___

As seen in Table 6, correlations between all sub-scales for mothers were positive. Strongest relationships were found between the firstborn and expected baby sub-scales ($r=.67$, $P<.001$), between the firstborn and childbirth sub-scales ($r=.60$, $P<.001$), and between childbirth and expected baby sub-scales ($r=.55$, $P<.001$). Moderate correlations were found between the marital sub-scale and firstborn ($r=.29$, $P<.05$), expected baby ($r=.29$, $P<.04$), and finances ($r=.30$, $P<.04$). The weakest relationships were found between the marital and childbirth ($r=.17$, $p=.16$) sub-scales, and between the firstborn and finances ($r=.22$, $p=.11$) sub-scales. Although the five sub-scales did not represent areas of concern for the majority of mothers in the study, those mothers who reported more concerns related to their firstborn child also reported more concerns related to their expected baby and the upcoming childbirth experience. The higher correlations ($r = .55$, $p \leq .001$) found for mothers between the firstborn, expected baby and childbirth sub-scales warrant further attention before future study replications are attempted. Higher intercorrelations for these three scales could indicate a relationship requiring consideration of the fusion of the childbirth, firstborn and expected baby sub-scales into one scale for measuring childbearing and childrearing concerns in general.

In addition to the above analysis, the individual 48 items of concern were ranked according to values of mean

responses greater than 2.5, and also by the frequency of items assigned the highest Likert scores. This data is presented in Table 7 along with comparable data from the fathers. Items not included in the five retained sub-scales are indicated. In Table 7 the number of items with mean scores > 2.5 and those most frequently assigned the higher Likert score is greater for mothers as compared to fathers. Furthermore, about half of the items receiving higher or more frequent concern scores by mothers were not included in the five study sub-scales due to low inter-item correlations with other items on the assigned scale. Therefore many of the individual items of concern initially proposed by the investigator, and found to individually indicate areas of concern for mothers, were not included in the final, retained study sub-scales. The significance of these individual items of concern was not tapped by the present study but indicate areas for further research. It could be that the individual items were poorly constructed in relation to the initially proposed sub-scales, or it could be that the individual items which had higher concern scores represented a dimension of concern not tapped by the initially proposed sub-scales. In addition, these individual items of concern, not retained in a sub-scale, may have been so common among mothers that the varying degrees of concern regarding the item could not be discriminated by the study instrument.

Table 7

Individual Items of Concern Ranked by Mean Response and Frequency for Mothers and Fathers

Mothers N = 36	Mean	Fathers N = 36	Mean
Maintaining Control in Labor	3.15	*Time for Spouse to Pursue Her Personal Interests	2.72
*Time for Personal Interests	3.00	Time for Shared Leisure Activities with Spouse	2.64
*Maintaining Household	3.00	*Desire Child of Opposite Sex than Firstborn	2.57
Time for Second Child	2.92	*Time for Personal Interests	2.53
Time for Shared Leisure Activities with Spouse	2.92		
*Having a Healthy Baby	2.71		
*Balancing Needs of Family with Other Commitments	2.69		
Loss of Special Relationship with Firstborn	2.67		
Difficulty of Labor and Birth	2.66		
*Receiving Enough Attention From Spouse	2.58		
Children Interfering with Sexual Relationship	2.54		
*Thoughts About Spouse's Health or Death	2.53		

Mothers N = 36	Frequency	Fathers N = 36	Frequency
*Time for personal interests	31	*Time for Spouse to Pursue Her Personal Interests	26
Maintaining Control in Labor	29	Time for Shared Leisure Activities with Spouse	20
Time for Second Child	28	*Time for Personal Interests	19
*Maintaining Household	27	*Considering Sterilization	18
Time for Shared Leisure Activities with Spouse	27	*Thoughts About Own Health or Death	18
*Having a Healthy Baby	24		
*Balancing Needs of Family with Other Commitments	22		
Loss of Special Relationship with Firstborn	22		
Difficulty of Labor and Birth	22		
*Receiving Enough Attention From Spouse	22		
Children Interfering with Sexual Relationship	20		
Having Enough Money to Meet Needs of Family	19		

* Indicates items not included in five retained study sub-scales.

Question #75 on the study instrument allowed for mothers to write in additional comments regarding their concerns during pregnancy. Additional concerns related to the initially proposed sub-scales follow: 1) self: managing visiting relatives, time away from career, patience needed to deal with two young children, emotional drain of caring for two young children, 2) marital: wanting more children when husband doesn't, time left over for husband after being drained by two children, 3) firstborn: having to leave firstborn with neighbors while in hospital since no family live near, firstborn suffering from lack of attention, 4) expected baby: fear of delivering a handicapped child, managing breastfeeding baby when returning to work, decreased positive response by family and friends if baby is the same sex as the firstborn child, 5) childbirth: hoping to gain better control during second labor, requiring a cesarean section (first baby born vaginally with forceps), problems breastfeeding, developing preeclampsia again, recovering from a repeat cesarean section, and 6) finances and household: financially caring for family, childcare arrangements for returning to work, working to support decreased family income since husband is in graduate school.

In summary, although the five sub-scales did not represent areas of concern for the majority of mothers in the study, the marital relationship sub-scale had the highest mean score and stronger relationships were found

between the firstborn sub-scale and the expected baby and childbirth sub-scales. In addition, many items deleted from the study sub-scales were individually ranked by mothers as being frequent areas of concern.

Question II.

What are the perceived childbearing, childrearing, and marital concerns of fathers during the third trimester of their wife's second pregnancy?

The mean scores of fathers on the five retained sub-scales are shown in Table 5 along with those of mothers. The fathers' mean scores for all five sub-scales were well below 2.5 indicating that the five sub-scales did not represent areas of concern for the majority of fathers in the study. The percent of fathers who did indicate levels of concern greater than 2.5 on each of the sub-scales follows: childbirth 3% (n=1); marital 28% (n=10); firstborn 6% (n=2); expected baby 8% (n=3); and finances 11% (n=4). As seen in Table 5, the overall mean scores of fathers on the five sub-scales was lower than mothers indicating even lower levels of concerns related to these areas. As with mothers, though, the sub-scale with the highest mean score for fathers was that of concerns related to the marital relationship. The remaining sub-scale areas of concern for fathers in descending order by mean score were: expected baby, firstborn, finances, and childbirth. In comparison, after marital concerns the remaining sub-scale areas of concern for mothers in descending order by mean score were:

firstborn, expected baby and finances (both $\bar{x}$ = 2.24), and childbirth. As seen above, the order of the sub-scales by mean response were similar for mothers and fathers but there was a difference in the mean level of concern between mothers and fathers on each sub-scale.

The Pearson r was also computed on the five sub-scales to investigate the degree of relationship between the sub-scales for fathers. The correlations of the sub-scales for fathers are shown in Table 8.

As seen in Table 8, correlations between all sub-scales were positive for the fathers in this study. Strongest relationship were found between the firstborn and childbirth sub-scales (r=.69, P<.00), firstborn and expected baby sub-scales (r=.59, P<.00), and marital and expected baby sub-scales (r=.56, P<.00). Correlations between the childbirth and firstborn sub-scales were higher for fathers (r = .69, P$\leq$.000) than mothers (r = .60, P$\leq$.000), whereas correlations between the firstborn and expected baby sub-scales were higher for mothers (r = .67, P$\leq$.00) than fathers (r = .59, P$\leq$.000). Childbirth and expected baby sub-scale correlations were also higher for mothers (r = .55, P$\leq$.00) than fathers (r = .44, P$\leq$.00). Although all correlations between sub-scales were positive, indicating a similar direction of concern on the sub-scales, the level of correlation between sub-scales differed for mothers and fathers. Higher correlations between the firstborn and expected baby sub-scales for

mothers indicates less distinction by mothers between concerns for their children in general. Moderate correlations were found between the remaining sub-scales all at significant levels of .03 or less. As with mothers, the higher correlations found for fathers between the firstborn sub-scale and the expected baby and childbirth sub-scales ($r \geq .59$, $P \leq .00$) should be addressed before further study replication. These higher intercorrelations may, in fact, indicate the three scales (firstborn, expected baby, childbirth) actually represent one scale for concerns.

Table 8

Intercorrelations of Fathers' Five Sub-scale Concern Scores

Sub-scale	Child-birth	Marital	Firstborn	Expected Baby	Finances
Childbirth	___	.44 P=.00	.69 P=.000	.44 P=.00	.48 P=.00
Marital	.44 P=.00	___	.48 P=.00	.56 P=.000	.41 P=.01
Firstborn	.69 P=.000	.48 P=.00	___	.59 P=.000	.37 P=.01
Expected Baby	.44 P=.00	.56 P=.000	.59 P=.000	___	.33 P=.03
Finances	.48 P=.00	.41 P=.01	.37 P=.01	.33 P=.03	___

In addition to the above analysis, the individual 48 items of concern were also ranked by mean response and frequency of highest Likert score for fathers. This data is presented in Table 7 along with comparable data from

mothers. Items not included in the five retained sub-scales are indicated. As seen in Table 7, the number of items with mean scores > 2.5 and those most frequently assigned the highest Likert score was less for fathers as compared to mothers. In addition, the majority of items receiving higher or more frequent concern scores by fathers were not included in the five study sub-scales due to low inter-item correlations with other items on the assigned scale.

Question #75 on the study instrument allowed for fathers to write in additional comments regarding their concerns during their wives pregnancy. These additional concerns were: 1) spouse: coping with mood swings of wife during pregnancy, wife feeling tied down with two children, and 2) marital: dealing with emotional stress between husband and wife when baby is unplanned, and spouses not having enough time for each other.

In summary, although the five sub-scales did not represent areas of concern for the majority of fathers in the study, the area of concerns related to the marital relationship had the highest mean score for fathers which is similar to mothers. In addition, items not retained in the final sub-scales represented the majority of items individually ranked by fathers as being frequent areas of concern. As with mothers, the reasons that individual items of higher concern were not retained in the initially proposed sub-scales could be due to poor item construction, poor sub-

scale construction which possibly ignored different dimensions of concern, or the homogeneous sample which resulted in difficulty discriminating among the varying degrees of concern on the item.

Question III

Are there differences in the perceived childbearing, childrearing and marital concerns of mothers when compared to the perceived childbearing, childrearing, and marital concerns of fathers during the third trimester of their second pregnancy?

A pair-wise comparison of couples for all sub-scales was done computing a difference-score for each couple in order to examine the degree of relationship between the concerns perceived by mothers and fathers. The difference score was based on the subtraction of the father's scores from the mother's scores. Positive scores indicated greater concerns by mothers and negative scores indicated greater concerns by fathers. In Table 9 is shown the sub-scale means obtained by computing the difference scores.

Table 9

Means of Pairwise Difference Scores Between Husbands & Wives

	N	X	SD	T-Value	P
Childbirth	36	.27	.42	3.86	.000
Marital	36	.30	.61	2.90	.010
Firstborn	36	.36	.37	5.73	.000
Expected Baby	36	.46	.68	4.03	.000
Finances	35	.31	.49	3.70	.001

As seen in Table 9, the means for all five sub-scales are positive indicating that mothers had greater concerns than fathers. The percent and number of mothers indicating greater concerns than their husbands on each of the sub-scales follows: childbirth 72% (n=26); marital 67% (n=24); firstborn 89% (n=32); expected baby 86% (n=31); and finances 86% (n=30).

The t-statistic for pairs was also computed for each couple on the five sub-scales. The difference in means for all couples was significant for the five sub-scales at $P \leq .01$ or better. Data on the paired t-tests is shown in Table 9.

The differences in the level of concerns between husbands and wives was statistically significant on all five sub-scales. The probability that the differences found between the amount of concern expressed by each mother and her spouse was a result of chance factors was less than 0.01.

The coefficient of variation was computed to compare the variability between spouses on each sub-scale. Variation measures > 1 are considered meaningful and were found for all five sub-scales as follows: marital V = 2.03, finances V = 1.58, childbirth V = 1.55, expected baby V = 1.48, and firstborn V = 1.03. Therefore, the highest variation in difference scores between spouses was on the marital sub-scale, and the lowest variance between spouses was on the firstborn sub-scale.

In summary then, mothers indicated having a greater level of concern on all five sub-scales than fathers. Computation of the difference score for pairs on all five sub-scales was positive, indicating that mothers also reported greater levels of concern on all five sub-scales than their spouses. Furthermore, the differences in means found between spouses was significant at 0.01 or better and the greatest variance between spouses was on the marital sub-scale.

Significant Findings Among the Extraneous Variables and Study Sub-Scales

Included in the final section of this chapter is a presentation of findings relating the extraneous variables (sociodemographic, modifying, action) to the study sub-scales. Data relevant to mothers and fathers as a group will be discussed.

Analysis of Variance (ANOVA) was computed for all nominal-level extraneous variables in order to examine the mean differences between mothers and fathers on the five sub-scales. The nominal-level extraneous variables examined pertained to the three areas of sociodemographics, modifying and action. Sociodemographic nominal-level variables included: 1) ethnic background, 2) religion, and 3) present employment status. Modifying nominal-level variables included: 1) planning first pregnancy, 2) complications with first pregnancy or birth, 3) type of delivery with first child, 4) firstborn child's sex, and 5)

feelings regarding first labor and birth experience. Action nominal-level variables were: 1) planning of present pregnancy, 2) plans for attendance of spouse during labor or birth, 3) planned feeding method for expected baby, 4) attendance at or plans to attend childbirth preparation classes, 5) amount of preparation during second pregnancy as compared to first, and 6) discussion of concerns during second pregnancy with others.

Data was examined for previous childbirth experiences which may have modified concerns during the second pregnancy. Mothers who reported feeling negative about their first labor and birth experience ($n=7$, $\bar{x} = 2.41$) had the highest level of childbirth concerns, followed by mothers who reported feeling neutral ($n=5$, $\bar{x} = 2.26$) and mothers who reported feeling positive ($n=24$, $\bar{x} = 2.05$). The difference in the means was significant at the 0.05 level.

Action variables data was also collected on actions or decisions taken during the present pregnancy which could relate to the concerns reported on the study sub-scales. Mothers who were undecided as to whether they would attend childbirth preparation classes ($n=2$, $\bar{x} = 2.67$) reported the highest level of financial concerns, followed by mothers who were planning on attending childbirth classes ($n=31$, $\bar{x} = 2.30$) and mothers who were not planning on attending childbirth classes ($n=2$, $\bar{x} = 1.17$). The difference in the means was significant at the 0.003 level. Differences in the mean level of concerns expressed by mothers on the five

sub-scales was significant for the extraneous variables shown in Table 10. No significant differences were found for fathers.

Table 10

Analysis of Variance for Relation of Mothers Extraneous Variables to Sub-scales

	Modifying	Action			
	Feelings Regarding First Labor & Birth	Attending Childbirth Classes	Preparation for Childbirth	Planned Feeding Method	Discussion of Concerns
Childbirth	X = 2.15 P = .05	-	-	-	-
Marital	-	-	-	X = 2.44 P = .04	-
Firstborn	-	-	X = 2.30 P = .006	-	-
Expected Baby	-	-	X = 2.24 P = .05	-	X = 2.24 P = .02
Finances	-	X = 2.24 P = .003	-	-	-

Mothers who reported preparing less for their second childbearing experience had the highest level of concerns regarding their firstborn child (n=30, x = 2.36) and concerns regarding the expected baby (n=30, x = 2.29). Mothers who reported preparing about the same for their second child caring experience as they did for their first experience had the next highest level of concern for their firstborn child and the expected baby (n=5, x = 2.2).

The mother who reported preparing more for her second childbearing experience reported the lowest level of concern on both the firstborn and expected baby sub-scales (n=1, x = 1.00). The significance levels for the

difference in means on the relation of childbearing preparation to the firstborn and expected baby sub-scales were 0.006 and 0.05, respectively.

Mothers who planned on bottle feeding their second child reported the highest level of marital concerns (n=5, $\bar{x}$ = 2.74). Mothers who planned on combining breast and bottle feeding their second child reported the next highest level of marital concerns (n=14, $\bar{x}$ = 2.61). Less marital concerns were reported by mothers who planned or only breast feeding their second child (n=16, $\bar{x}$ = 2.22). The lowest level of marital concerns were reported by the mother who was undecided as to the feeding method she would use for her second child (n=1, 2.0). The difference in means was significant at the 0.04 level.

The highest level of concerns regarding the expected baby were reported by mothers who reported they did discuss their concerns during pregnancy with others (n=35, $\bar{x}$ = 2.28). A lower level of concern regarding the expected baby (n=1, $\bar{x}$ = 1.00) was reported by the one mother who reported she did not discuss her concerns during pregnancy with others. The difference in means was significant at the 0.02 level.

In summary, the highest level of childbirth concerns was found with mothers who reported feeling negative regarding their first childbirth experience. Mothers who were undecided about whether or not they would attend childbirth preparation classes reported the highest level

of financial concerns. The highest level of concerns regarding the expected baby was reported by mothers who prepared less for their second childbearing experience than for their first, and also by mothers who reported discussing their concerns during pregnancy with others. Mothers who reported preparing less for their second childbearing experience also had the highest level of concerns regarding their firstborn child. The highest level of marital concerns was reported by mothers who planned on bottle feeding their second child. Computation of ANOVA on all nominal-level extraneous variables in search of relations to the study sub-scales resulted in no significant findings for the fathers in the study.

In the case of all interval-level extraneous variables the Pearson product-moment correlation coefficient was computed to analyze the relationship to the study sub-scales. Interval-level variables on sociodemographic data included age of parent, education and family income. Interval-level variables on modifying variables included the age of the firstborn child and the length of the first labor. Significant correlations for mothers are shown in Table 11, those for fathers are shown in Table 12.

Table 11

Correlations Between Sub-scales and Extraneous Variables for Mothers

	Sociodemographic		Modifying
	Age of Parent	Family Income	Length of First Labor
Childbirth	-	-	-
Marital	-	-	.39 P=.01
Firstborn	-	-	-
Expected Baby	-	-	-
Finances	-.35 P=.02	-.53 P=.001	-

Table 12

Correlations Between Sub-scales and Extraneous Variables for Fathers

	Sociodemographic			Modifying
	Age of Parent	Family Income	Education	Age of Firstborn
Childbirth	-	-	-	-
Marital	-	-	-	-
Firstborn	-	-	-	-.40 p=.01
Expected Baby	-	-	-	-
Finances	-.32 P=.02	-.52 P=.001	-.32 p=.03	-

Sociodemographic Variables

The age of the parent was found to be negatively correlated with financial concerns for both mothers ($r = -.35$, $p \leq .02$) and fathers ($r = -.32$, $p \leq .03$). The younger the mother or father, the greater the financial concerns. Likewise, the family income was found to be negatively correlated with financial concerns for both mothers ($r = -.53$, $p \leq .001$) and fathers ($r = -.52$, $\leq .001$). The lower the family income, the greater the financial concerns for both mothers and fathers. Education was negatively correlated with financial concerns for fathers ($r = -.32$, $p \leq .03$), but these were not found to be significantly correlated for mothers.

Modifying Variables

For fathers, concerns related to the firstborn child were negatively correlated with the age of the firstborn child ($r = -.40$, $p \leq .01$).

The younger the firstborn child the greater the concerns related to the firstborn child by fathers. For mothers, the length of their first labor and birth experience was positively correlated with marital concerns ($r = .39$, $p \leq .01$). The longer the first labor and birth experience the greater the marital concerns reported by mothers.

In summary, both mothers and fathers who were younger or had lower family incomes reported greater financial concerns. Fathers with less education also reported

greater financial concerns. The younger the firstborn child the greater the level of concerns regarding the firstborn child reported by fathers. For mothers, having a longer first labor and birth experience related to greater marital concerns.

Summary

Included in Chapter V was a descriptive analysis of the study sample, a review of the reliability indices for the study sub-scales, and answers relevant to the research questions. In addition, findings relevant to the extraneous variables were presented.

The data described in Chapter V will be summarized and interpreted in Chapter VI. Based on the study findings, and with consideration of the conceptual framework, implications for nursing practice and future research will be discussed.

CHAPTER VI

SUMMARY AND CONCLUSIONS

Overview

In Chapter VI the research findings of the descriptive study of parental concerns during a second pregnancy will be discussed. The descriptive statistics of the sample, gathered from the self-administered questionnaires developed for the study, will be presented and compared to other research samples. The inferential statistics will be drawn upon for conclusions to the research questions which focused on concerns of second-time fathers and mothers and the differences between their concerns. Based upon these conclusions, the implications for nursing practice, education and research will be addressed.

Data on Sample and Significant Inferential Statistics

Sociodemographic information for the 72 study participants included age, sex, race, religion and employment. Additional extraneous variables utilized to describe the sample included modifying and action variables. Modifying variables included the age and sex of the firstborn child, gestation of second pregnancy, and characteristics of the first pregnancy, labor, and birth experience. Action variables included attendance at childbirth preparation classes, plans to be with spouse in labor, planned feeding method for the expected baby,

preparation for second labor and birth experience, and sources for childbirth information and for discussion of childbearing and childrearing concerns.

Sociodemographic Data of the Sample

Age and Sex

The sample included 36 fathers (50%) and 36 (50%) mothers. These figures are congruent with Mermin (1982) who also studied both mothers and fathers expecting their second child. The mean age for mothers was 30.2 years which is comparable to the mean age (30.1 years) of mothers in Mermin's (1982) study and also comparable to the mean age (30.1 years) of the multiparas in Stark and Carrico's (1983) study. The mean age for fathers was 31.6 years which is congruent with the age of fathers (31.6 years) in Mermin's (1982) study who were also expecting their second child. As would be expected, the mean age for mothers and fathers in the study was older than in previous studies focusing solely on parents expecting their first child (Broom 1984; Ryder, 1973; Wandersman, 1980).

Significant differences were found between mothers and fathers in the level of concerns they reported on the five study sub-scales. The findings based on sex will be more fully discussed later in this chapter when the research questions for the study are addressed.

Age of both mothers and fathers was found to be negatively correlated with financial concerns. The younger

the mother ($r = -.35$, $p = .02$) or father ($r = -.32$, $p = .03$) the greater their financial concerns. Previous researchers have also found greater concerns reported by younger parents during pregnancy. Glazer (1980) found higher levels of anxiety and concern in the younger women in her study. Although, Russell (1974) found age to be negatively correlated with crisis levels for fathers in her study, age was unrelated to crisis for mothers. Greater financial concerns for younger mothers and fathers might be explained by the element of career status. Younger parents are likely to have been employed for fewer years in their careers therefore not yet achieving the financial status of higher level positions, which puts them at greater risk for financial concerns.

Ethnicity

All of the study sample was caucasian which is slightly more homogeneous in this area than in the study by Stark and Carrico (1983) where 64 women were white, one was black, and two women reported other racial backgrounds. Likewise, in the study by Belsky, Spanier and Rovine (1983) all but three of the 72 families were caucasian. Previous researchers have reported findings based on totally caucasian samples (Grubbs, 1980; Hobbs, 1965; Mermin, 1982). Ethnic homogeneity of the sample in the present study could be due to subject criteria which eliminated some potential participants or to the sites utilized to approach potential participants (private offices,

childbirth and sibling preparation classes) which also eliminated public clinic patients, thereby potentially skewing the demographic data.

Religion

In the present study, 44.8% of the mothers and 50% of the fathers were Protestant. Catholics represented 36.1% of the mothers and 19.4% of the fathers. No religion was chosen by 13.9% of the fathers and 2.8% of the mothers. For both mothers and fathers, 5.6% indicated Jewish for their religious choice. The choice "other" was indicated by 11.1% of the mothers and 8.3% of the fathers. These findings are similar to those of Stark and Carrico (1983) whose sample of primiparas and multiparas consisted of 46% Protestant, 38% Catholic, 2% Jewish and 3% with other religious preferences.

In their study of primiparas and multiparas, Winokur and Werboff (1956) found that there was more planning of pregnancies by Protestant women as compared to Catholic women. In the present study, no significant correlations were found between religion and the other study variables. Differences between Winokur and Werboff's (1956) study and the current study regarding religion and planning of pregnancies might be explained by historical changes which have occurred during the past thirty years. There has been greater acceptance of family planning in general along with a greater variety of birth control methods being made available for all women (Jensen, Benson & Bobak, 1981).

Education

The majority of mothers (61%) and fathers (63.9%) had graduated from college or were educated beyond their undergraduate college degree. College was attended by 30.6% of the mothers and 22.2% of the fathers without attaining a degree. These educational levels are similar to those found in Mermin's (1982) study where all of the 64 mothers and fathers in the sample were college graduates except for five mothers and four fathers.

Both Glazer (1980) and Light and Fenster (1974) found education to be negatively correlated with levels of concern reported by mothers during pregnancy. Dyer (1963) found that fathers who were not college graduates experienced greater crisis during their wives' pregnancies. It is interesting to note that Russell (1974) found that education was inversely and significantly related to gratification scores for both men and women with one child. The more educated the parent, the fewer gratification items were checked in regards to their child.

In the present study, education was found to be negatively correlated with financial concerns for fathers. The less education, the greater the father's financial concerns during his wife's pregnancy. No significant correlations with education were found for the mothers in this study. Since the percentage of fathers who worked full-time (94.4%) was much higher than mothers who worked full-time (41.7%), it might be that the main responsibility

for the "breadwinner" role fell on fathers in this study. Therefore, lower educational levels might have limited their career choices and income thus increasing financial concerns for these fathers.

Family Income

The median family income for parents in the study was in the range of $40,000 to $49,999 annually. The average family income for couples in this study was substantially higher than the median family income for all families ($27,735) in the United States in 1985, and also higher than the median family income ($29,152) for white families during the same period (U.S. Bureau of the Census, 1986).

Previous researchers, whose data was obtained from exclusively middle-class samples (Dyer, 1963; LeMasters, 1957), reported higher crisis scores in first-time parents than those researchers whose studies were based on data from a more representative sample (Hobbs, 1976; Russell, 1974). Glazer (1980) researched the prenatal concerns of primigravidas and multigravidas randomly selected from both outpatient clinics and private practice prenatal settings. Glazer found that women who expressed less concerns and anxiety had higher incomes than women who expressed more concern and anxiety. Fishbein (1984) found that an increased, combined family income was related to more argeement between mother and father regarding the father's role with the first child.

In the present study, family income was found to be negatively correlated with financial concerns for both mothers ($r = -.53$, $p < .001$) and fathers ($r = -.52$, $p < .001$). The lower the family income, the greater the financial concerns for both mothers and fathers. Although greater financial concerns were expressed by mothers and fathers with lower family incomes, the majority of parents in the study had above average family incomes. The higher than average family income for the study sample might explain why both mothers and fathers as groups did not report high levels of concern on any of the five study subscales. For, previous researchers have found less prenatal concerns (Glazer, 1980) and more role argreement between spouses (Fishbein, 1984) in families with higher incomes.

Present Employment

Thirty-four of the fathers (94.4%) and fifteen of the mothers (41.7%) were employed full-time. The remaining mothers were homemakers (n=16, 44.4%) or worked part-time (n=5, 13.9%). The employment status of the study sample differs from the employment status of couples in LeMasters (1957) study since in the latter study all fathers were employed in middle-class occupations and all mothers did not work after the birth of their first child. Knox and Wilson (1978) reported that 83.3% of their sample of mothers with two children worked part-time.

In 1984, 97.2% of married men in the 25-44 year old age group were employed, whereas 64% of 25-34 year old

married women and 66.4% of the 35-44 year old married women were employed. During the same period, 51.8% of married women with children under six years of age were employed and 65.4% of married women with children 6-17 years old were employed (U. S. Department of Labor, 1985). The percent of fathers (97.2%) and mothers (55.6%) in the present study who were employed either full or part-time is comparable to the national figures cited above. No correlations were found between the employment status of mothers or fathers and the study sub-scales.

In summary of the above sociodemographic data, the convenience sample of 36 fathers and 36 mothers was above average in education and family income and totally caucasian. The age of the mothers and fathers was congruent with previous research studies involving second-time parents, but the age of parents in the present study was older than previous studies involving only first-time parents. The religion and employment status of the sample was congruent with previous studies or recent national statistics. The study findings are thus biased by the predominantly caucasian, well-educated sample of parents with above average family incomes.

Modifying Variables of the Sample

Gestation

The mean gestation of the mother's second pregnancy at the time the thirty-six mothers and fathers answered the

concerns questionnaire was 34.7 weeks with a range of 27 to 40 weeks. This is comparable to the range of 30 to 40 weeks gestation for the primigravidas and multigravidas in Stark and Carrico's (1983) study. Although Glazer (1980) found the greatest number of concerns expressed by women during the third trimester of pregnancy, the women in the present study did not report high levels of concern on the study sub-scales during their third trimester of pregnancy. No significant correlations were found between gestation and other study variables.

Planning of Pregnancies

Of the 36 couples in the sample, 80.6% of the mothers and 88.9% of the fathers reported that their first pregnancy was planned. Seventy-five percent of the fathers reported that the second pregnancy was planned, whereas 72.2% of the mothers reported that the second pregnancy was planned. These figures are higher than found in Stark and Carrico's (1983) study where 63% of the multigravidas and only one-third of the primigravidas had planned their pregnancies. Previous researchers, studying first-time mothers and fathers have found that unplanned pregnancies correlate with higher crisis scores or increased concerns (Dyer 1963; Hangsleben, 1983; Russell, 1974).

Planning of pregnancies was not found to correlate with any of the other variables in the present study. An interesting finding for this study was that, for both first and second pregnancies, more fathers than mothers perceived

that the pregnancies were planned. Also, more first pregnancies were planned than second pregnancies. The higher percent of planned pregnancies which occurred in the present study as compared to previous research may be a factor to consider in explaining why both mothers and fathers did not report high levels of concern on the study sub-scales.

Complications with First Pregnancy

In the present study, 8.3% (n=3) of the mothers and 2.8% (n=1) of the fathers perceived the mothers having complications during their first pregnancies. These figures are much lower than those obtained by Stark and Carrico (1983) regarding the percent of multigravidas (15%) in their study sample who experienced complications during a previous pregnancy.

Both Larsen (1966) and Winokur and Werboff (1956) found that multigravidas experience more stress and apprehension about their childbirth experience than primigravidas. The lesser percent of complications during the first pregnancy experienced by mothers in the present study, as compared to multigravidas in previous studies, is another factor to consider in explaining why mothers and fathers in this study did not report high levels of concern on the study sub-scales. The number of complications during the first pregnancy did not correlate with any of the other study variables.

Length of First Labor

The average length of the first labor for women in the present study was in the range of 6 to 10 hours. Over two thirds of the women experienced a first labor of ten hours or less. The length of the first labor in the present study is somewhat less than the length of the first labor (12.8 hours) found by Stark and Carrico (1983) and also the length of first labor (13.5 hours) found by Butani and Hodnett (1980).

The slightly shorter length of the first labor for mothers in the present study might also be a factor to consider in explaining the lower levels of concern reported on the study sub-scales. There was a positive correlation ($r = .39$, $p = 0.01$) found between the length of the first labor and marital concerns for mothers in the study sample. The longer their first labor experience the greater level of marital concerns reported. It might be possible that women who experienced longer labors perceived less support or ineffective support from their husbands during labor which may have impacted on the relationship resulting in the reporting of more marital concerns. Or, as Lederman and Lederman (1981) concluded regarding the increased conflict they found in the relationship between multigravidas and their husbands, this conflict may be a reflection of the strain on the marital relationship caused by children or simply a willingness of multigravidas to express their concerns.

Type of Delivery

The percent of multigravidas experiencing previous Caesarean sections (13.9%) in the present study is substantially higher than the percent of multigravidas experiencing Cesarean sections (5%) in the study by Stark and Carrico (1983). The remaining women in the present study experienced vaginal deliveries, with or without the use of forceps. Additional concerns regarding type of delivery written in by mothers on question #75 included recovering from a repeat Cesarean section or requiring a Cesarean section with the second birth. Although there was a higher percent of multigravidas in the present study who experienced Cesarean sections, as compared to previous research, there were no correlations found between the type of delivery previously experienced and other study variables. Interestingly, more of the fathers (n=12, 33.3%) than mothers (n=10, 27.8%) reported that the first type of delivery was vaginal with forceps rather than vaginal without forceps. This difference in the perceptions of previous childbirth experiences by spouses needs to be researched further. It could be that more fathers reported more vaginal deliveries with forceps than without because they had a better view of the actual birth than the mothers who were distracted by the physical demand required of them.

Complications with First Childbirth

Twice as many mothers (n=8, 22.2%) than fathers (n=4, 11.1%) in the present study reported that there were major

complications during the first childbirth experience. In comparison, the above figures are substantially lower than those reported by the multigravidas in Stark and Carrico's (1983) study who reported that one-third experienced major complications during their first delivery. Again, the lower number of previous birth complications reported by parents in the present study may attribute to the lower levels of concern reported on the study sub-scales. Also, there are discrepancies between the perceived occurrence of birth complications reported by fathers and mothers. The greater occurrence of complications reported by mothers than fathers indicates differences in their perceptions of the first birth experience. In the present study, previous complications during birth did not correlate with the other study variables.

Feelings Regarding First Labor and Birth

Seven mothers (19.4%) and three fathers (8.3%) reported negative feelings regarding their first labor and birth experience, while 24 mothers (66.7%) and 30 fathers (83.3%) reported positive feelings. The remaining sample reported neutral feelings. Previous authors (Jimenez, Jones & Jungman, 1979; Larsen, 1956; Peterson & Mehl, 1978; Stark & Carrico, 1983; Winokur & Werboff, 1956) have addressed the potential for greater childbirth concerns by multigravidas who may have negative feelings regarding previous birth experiences. In the present study, this correlation was found to be significant ($p < .05$) for

mothers but not for fathers. Mothers who reported feeling negative about their first birth experience also reported the highest level of childbirth concerns indicating that their perceptions of a previous life event did influence their perceptions of a current experience.

Age and Sex of Firstborn

The sex of the firstborn children of parents in the study was evenly distributed between males (n=18) and females (n=18). This even distribution happens to be identical to that found in previous studies by Hobbs (1965) and Jacobs and Moss (1976). Sex of the firstborn child was not found to significantly correlate with any other study variables.

The mean age for firstborn children of parents in the study was two years - seven months with a range of seven months to nine years - ten months. Thirty-three (91.6%) of the thirty-six firstborn children were six years of age or younger, the majority (n=21, 58.3%) were three years of age or younger. The age range of firstborn children in the present study is similar to the age range (1-10 years) of firstborn children of multigravidas in Stark and Carrico's (1983) study. The age of the firstborn was negatively correlated ($r= -.40$, $p \leq .01$) with concern regarding the firstborn for fathers, but no significant relationships were found for mothers. For fathers, the younger the firstborn child the greater their concerns regarding the firstborn child. Although Kendrick and Dunn (1980) only

studied the interaction patterns between mothers and their children after the second child was born, these researchers found that younger firstborn children demanded more of their mother's direct attention than did older firstborn children. Possibly the fathers in the present study with younger children were also perceiving increased concern to meet the needs of their firstborn after the second child was born.

In summary of the above modifying variables, the mothers and fathers in the present study tended to plan their pregnancies, had less complications during their first pregnancy and birth, and experienced slightly shorter first labors but more Cesarean sections than parents in previous research studies. Although the majority of parents felt positive about their first labor and birth experience, those mothers who reported feeling negative about their first birth experience also reported greater childbirth concerns during their second pregnancy. In addition, fathers with younger firstborn children also reported greater concerns regarding their firstborn child. The study findings are biased by a sample that had predominantly positive feelings about their first pregnancies which were less complicated and their first labor and births which were shorter in length.

Action Variables of the Sample

Attendance of Spouse During Labor and Birth

All 72 mothers and fathers (100%) planned on being together with their spouse during the labor and birth for their second child. This is a much higher figure for spouse attendance than in the study by Norr, et al. (1980) where 33.3% of the multiparas were alone during labor and delivery. It is not surprising that the multigravidas in Norr's study also worried more than primigravidas about their upcoming birth experience. Likewise, Mercer, Hackley and Bostrom (1983) found that the father's emotional support during labor and delivery is more predictive of positive perceptions of the birth than other types of support. Support of spouse during labor and birth is another factor to consider in evaluating lower levels of concern reported on the sub-scales in the present study.

Feeding Method Chosen

Although the majority of mothers (83.3%) and fathers (80.6%) chose breastfeeding or combination breast and bottle feeding for their second child, there were variations between mothers and fathers in each category of choice. Again, there appears to be lack of consensus between spouses. The feeding method chosen was found to significantly relate ($p < 0.04$) to marital concerns for mothers in the present study. The greatest marital concerns were reported by mothers who chose to bottle-feed

their second child ($\bar{x}$=2.74). The least marital concerns were reported by mothers who chose to breastfeed ($\bar{x}$=2.22) or were undecided ($\bar{x}$=20) about the feeding method preferred. In her study of multiparas on the third post-partum day, Moss (1981) also found more concerns reported by mothers who chose to bottle-feed their child. In comparison, four of the eight women in Grubbs (1980) study chose to breastfeed their baby and these women commented more frequently on the dimension of time when discussing adjustment to the new baby.

The lack of consensus between spouses on the feeding method chosen and the greater marital concerns expressed by mothers in the present study who chose to bottle-feed warrants further research. Possibly, the lack of consensus between spouses on the feeding method chosen is reflected in increased marital concerns by mothers who chose to bottle-feed. Maybe mothers who chose to bottle-feed would rather breastfeed but their husbands are not in agreement, or, maybe mothers who chose to bottle-feed have husbands that would prefer they breastfeed. Either of these situations just given could impact on the marital concerns expressed by bottle-feeding mothers and possibly be reflected in feelings of guilt or marital discord requiring interventions by the clinical nurse specialist in primary care.

Attendance at Childbirth Classes

The majority of mothers (86.1%) and fathers (83.3%) reported taking or planning on taking childbirth preparation classes during the second pregnancy. Attending childbirth classes was found to significantly ($p=.003$) relate to financial concerns for mothers. Mothers who were undecided as to whether they would attend childbirth classes reported more financial concerns ($\bar{x}=2.67$). Possibly the decision of whether or not to attend classes is partially cost related. For some parents, the cost of the class fee along with the cost of providing child care for their firstborn may prohibit them from accessing these classes.

In comparison, Moss (1981) found fewer concerns reported by mothers who attended childbirth classes only during their first pregnancy, and Larsen (1966) cites that disproportionately more parents from the middle and upper classes attend childbirth preparation classes. Future researchers need to examine the financial deterrents to class attendance for expectant parents from all socioeconomic levels.

Preparation for Childbearing and Childrearing During Second Pregnancy

The majority of mothers (83.3%) and fathers (77.8%) reported preparing less during their second pregnancy than they had prepared during their first pregnancy. Norr, et al., (1980) also found less preparation reported by multigravidas during pregnancy than primigravidas. Less

preparation by mothers and fathers during their second pregnancy may occur because of the added time demands of caring for their firstborn child which allows them less time to prepare for their second childbirth experience. Mothers who reported preparing less during their second pregnancy in the present study had the highest significant level of concerns regarding their firstborn child ($x=2.36$) and their expected baby ($x=2.29$). No relationship was found for fathers between preparation during pregnancy and other study variables. Possibly mothers who prepared less during their second pregnancy felt less prepared to meet the increased needs of both their firstborn and new baby which increased their level of concern in these areas.

Resources utilized the most for information during pregnancy by mothers were personal experience, books, magazines and the childbirth class instructor. Resources utilized the most by fathers were the childbirth class instructor, personal experience, family and friends, and books. Russell (1974) found preparing for parenthood by attending classes or reading books positively associated with fathers' gratification scores regarding their firstborns, but no significant relationships were found for mothers. Whereas the percent utilization of doctors for information by mothers during pregnancy was 63.9%, utilization by fathers was 55.6%. Only 33.4% of mothers utilized nurses or certified nurse midwives for information during pregnancy and only 16.7% of the fathers utilized

nurses as a resource for information.

From the above information on resource utilization, it appears that both mothers and fathers in the present study relied on their past childbirth experience for the information needed to prepare for their second birth experience. Parents may have felt less need to prepare for the second birth experience because of this reliance on information gained from their past birth experience. The seemingly lower utilization of nurses as sources for information may have several explanations and implications. First, only one couple approached through the certified nurse midwife met the criteria for inclusion in the study, which explains why only one mother viewed nurse midwives as a resource for information. Secondly, the two childbirth education programs utilized by the researcher to approach study participants offered classes taught only by registered nurses. Therefore, the childbirth preparation instructors, who were relied upon highly for information by both mothers and father, were actually registered nurses. It appears, then, that nurses in the role of childbirth educator were viewed by parents as being resources for information but nurses in other settings (e.g. private physicians offices) were utilized less by parents as resources for information during pregnancy. Possibly health care providers working in obstetrical offices or clinics are not really registered nurses, but rather medical assistants or technical nurses who lack the knowledge necessary to counsel and educate

expectant parents. Or, possibly nurses working in private obstetrical offices or public clinics are utilized only for their technical skills and are not given the time with expectant parents to utilize their educational and counseling skills.

Discussion of Concerns

The majority of mothers (97.2%) and fathers (80.6%) reported discussing their childbirth concerns with others. One hundred percent of the mothers who discussed concerns did so with their husbands, whereas 89.7% of the fathers who discussed concerns did so with their wives. Besides their spouses, mothers reported discussing their concerns with their doctors (77.7%) and their friends (74.3%) whereas fathers reported discussing their concerns with their friends (69%) and relatives (55.2%). Of the mothers, 22.9% discussed concerns with nurses and 37.1% discussed their concerns with childbirth class instructors. Of the fathers, only 13.8% utilized nurses as resource persons for discussing their concerns while 27.6% discussed their concerns with their childbirth class instructors.

According to the primigravidas in Brown's (1986) study, their husbands were particularly supportive when they listened to their wives' concerns and showed an interest in the pregnancy. For husbands, high mean scores on support items were in the areas of their wives involving them in the pregnancy and reassurance of their worth as a helpmate and potential parent. Hott (1976) found that

first-time fathers in her study wanted to meet as a group with other fathers so as to discuss concerns which they did not want to discuss with their wives.

In the present study and in Brown's (1986) study, it appears that wives found husbands who listened to their concerns to be a supportive resource. Possibly the fathers in the present study who discussed their concerns with other people and not their wives needed to discuss areas that they did not want to, or could not, discuss with their wives. Similar to the previous section on sources for information, both mothers and fathers were more likely to discuss their concerns with nurses who instructed childbirth classes than with nurses in other areas. Possibly the casual structure and longer time span of childbirth classes is more conducive to allowing parents to discuss their concerns with nurses in these settings. Whereas brief prenatal visits, which are not always attended by husbands, do not presently offer the appropriate time and structure to allow for nurses in these settings to be utilized as a resource by parents for discussion of their childbirth concerns.

In the present study, the highest mean level of concerns regarding the expected baby was found to be significant for the mothers who did discuss their concerns during pregnancy with others. Perhaps discussion of concerns with others reflects the increased need of these mothers to share their feelings with others regarding the

expected child and his/her impact on the family. No significant findings regarding discussion of concerns was found for fathers.

Future Employment Plans

Fewer mothers (36.1%) planned to work full-time after their second child was born than had worked full-time (41.7%) before their second child's birth. But more mothers (22.8%) planned to work part-time after the second child's birth than were working part-time (13.9%) before their second child's birth. One father, who was unemployed during the second pregnancy, planned to be working full-time after the second child's birth. The above employment figures reflect the historical changes of women in the labor force since LeMasters' (1957) study. Eight of the 46 primigravidas in LeMasters' study had "extensive professional work experience" before their first child's birth and all reported suffering "extensive" or "severe" crisis after their child's birth. In the present study no significant correlations were found between future employment plans and other study variables. The differences in employment figures before and after the second child's birth, particularly for mothers, indicate that some mothers may make career changes after the birth of their second child which may impact on the family income.

In summary of the above action variables, all couples planned on being together during labor and birth, the majority planned on attending childbirth preparation class

but generally reported preparing less during their second pregnancy than they did during their first pregnancy. More mothers than fathers reported discussing concerns during pregnancy with their spouse. Nurses, in general, were not utilized highly as sources of information or for discussion of parental concerns during pregnancy, but nurses in the role of childbirth educator were used as resources more often by both mothers and fathers. More changes in the intended employment status following the second child's birth were found for mothers than for fathers. Issues identified above, such as career changes made following the birth of children and utilization of nurses by expectant parents for support and information need further investigation.

Interpretation of Major Research Questions

Included in this next section is an interpretation of findings regarding the three major research questions. Since the nonprobability sample was also limited by size, no generalizations to the population can be made. In addition, moderate alpha levels on the retained study sub-scales and high intercorrelation on three sub-scales (childbirth, firstborn, expected baby) are limitations which need to be recognized during interpretation of the findings and indicate the need for further psychometric reassessment of the instruments.

Question I

What are the perceived childbearing, childrearing and marital concerns of mothers during the third trimester of their second pregnancy?

The mothers' mean scores for all five retained study sub-scales indicated that the sub-scales did not represent areas of concern for the mothers in this study. The highest level of concern was reported on the marital sub-scale, followed by the firstborn, expected baby, finances and childbirth sub-scales. Previous researchers (Belsky, Spanier & Rovine, 1983) have found that the addition of a first-born or later-born infant negatively impacts the marital relationship. Both Glenn and Weaver (1978) and Rollins and Feldman (1970) found that women with younger, dependent children reported the lowest levels of marital satisfaction.

Mothers who planned on bottle-feeding their second child reported the highest level of marital concerns. Mothers who reported preparing less during their second pregnancy reported the highest level of concerns regarding their firstborn child and the expected baby. Mothers who discussed their concerns during pregnancy with others reported the highest level of concern regarding the expected baby. The highest level of financial concerns was reported by mothers who were undecided about enrolling in childbirth preparation classes. Mothers who reported feeling negative about their first childbirth experience also reported the highest level of concern regarding their

upcoming childbirth. In addition, greater financial concerns were reported by younger mothers and mothers with lower family incomes, while mothers with longer first labors reported greater marital concerns. Increased childbirth concerns of multigravidas, less preparation for childbirth, and increased concern for the expected baby have also been found by previous researchers (Larsen, 1966; Norr, et al., 1980; Stark & Carrico, 1983).

Individual items of concern, not included in the five retained sub-scales or dropped along with the two deleted sub-scales, were also reported by mothers as being areas of greater concern. Failure of these items to correlate with the proposed sub-scales needs to be addressed prior to further study replication. Some of these items are presented here as being only of interest since their significance could not be obtained: (a) time for personal interest, (b) maintaining household as liked, (c) having a healthy baby, and (d) balancing the needs of the family with other commitments. Low intercorrelation of these items with others on the proposed sub-scales in the present study could be explained by: 1) poor item construction, 2) poor sub-scale construction which did not allow for alternative dimensions of concern, or 3) a dominant level of concern related to the item which negated discrimination by the instrument. Although these and other deleted items did not correlate with other items on a sub-scale, the higher levels of concern reported by mothers on these items warrants attention by future researchers.

Question II

What are the perceived childbearing, childrearing and marital concerns of fathers during the third trimester of their wife's second pregnancy?

The fathers' mean scores for all five retained study sub-scales did not represent areas of concern for the fathers in this study. As with mothers, the highest level of concern reported by fathers was on the marital sub-scale. Decreased marital satisfaction by fathers following the birth of a first child (Wandersman, 1980) or a second child (Mermin, 1982) has been reported by previous researchers.

Fathers with younger firstborn children reported more concern regarding the firstborn. Also the younger fathers, and those who had lower family incomes and were less educated reported more financial concerns than older fathers with more education and higher family incomes. Previous researchers who studied first-time fathers have reported increased financial concerns (Hobbs, 1965 & 1976) and greater concerns with less education (Dyer, 1963).

Individual items of concern, not included in the five retained sub-scales or dropped along with the two deleted sub-scales, were also reported by fathers as being areas of greater concern. Failure of these items to correlate with the proposed sub-scales needs to be addressed prior to further study replication. Some of the individual items of concern with the highest mean concern score are presented here as being only of interest since their significance

could not be obtained: (a) time for wife to pursue her own interests, (b) desiring second child of opposite sex than firstborn, (c) time for personal interests, and (d) thoughts about own health or death. As previously stated, low intercorrelations of these items with others on the proposed sub-scales in the present study could be explained by: 1) poor item construction, 2) poor sub-scale construction which did not allow for alternative dimensions of concern, or 3) a dominant level of concern related to the item which negated discrimination by the instrument. Although these items did not correlate with other items on a sub-scale, the higher levels of concern reported by fathers on these items needs to be addressed by future researchers.

Question III

> Are there differences in the perceived childbearing, childrearing and marital concerns of mothers when compared to the perceived childbearing, childrearing, and marital concerns of fathers during the third trimester of their second pregnancy?

The differences in the level of concern between husbands and wives on all five sub-scales was found to be highly significant. Mothers reported a greater level of concern than fathers on each of the five sub-scales. Although mothers as a group and fathers as a group reported the highest level of concern on the marital sub-scale, this sub-scale had the highest variation ($\tilde{x}$=.30, SD=.61) in difference between spouses. The least variation ($\tilde{x}$=.36,

SD=.37) between concerns reported by spouses was on the firstborn sub-scale. In comparing mothers and fathers as two groups it would appear that marital concerns were reportedly higher than concerns in the other sub-scale areas. When reviewing the variation between spouses it becomes clear that the highest variation is also on the marital sub-scale. This difference between spouses further supports the premise of King's (1981) framework that challenges nurses to assess the perceptions of each individual relating in the interaction process.

For both mothers and fathers, the younger the parent and the less the family income the greater the financial concerns. Mothers, who felt they prepared less during their second pregnancy as compared to their first pregnancy, also reported more concerns regarding their firstborn child and the expected baby, but this relationship was not found for fathers. Since mothers often feel responsible for managing both their upcoming birth experience and the added demands of two children, (Mercer, 1979) less preparation during the multigravidas second pregnancy may increase their level of concern regarding meeting the needs of both their firstborn and the expected baby.

Mothers who reported discussing their concerns with others also reported more concerns regarding the expected baby, but this relationship was not found for fathers. Possibly mothers who chose to discuss their concerns with others did so because they had more concerns about the

expected baby and his/her impact on the family. The younger the firstborn child the greater the concerns regarding their firstborn reported by fathers, but not mothers. With the addition of the second child, fathers often take on more child care responsibilities with their first child (Duvall, 1977). In anticipation of meeting both the physical and emotional needs of the firstborn child after the second child's arrival, and assuming that younger children require more direct involvement, fathers with younger children may have perceived greater concerns regarding their firstborn.

In summary of the three major study questions. The limitations of the study sub-scales which were previously addressed need to be recognized. For the smaller, nonprobability sample in this study, both mothers and fathers did not report high levels of concern on any of the study sub-scales. The sub-scale reported to have the highest level of concern by both mothers and fathers was the marital sub-scale. Differences in the level of concern reported by mothers and fathers was found to be significant, with mothers reporting significantly higher levels of concern than their spouses on all five study sub-scales. Greater differences between spouses were found on the marital sub-scale with greater levels of concern being reported by the mothers in this study. Although mothers reported higher levels of concern on each of the study sub-scales than fathers, the order of the sub-scales by mean

response was similar for mothers and fathers indicating a similar pattern of prioritizing the areas of concern.

Implications of Questions I, II, and III to King's Framework

The three major research questions for the present study focused on describing the childbearing, childrearing, and marital concerns of mothers, of fathers, and the difference in these concerns of mothers and fathers during a second pregnancy.

King's (1981) theory of dynamic, interacting systems was found to offer the conceptual framework needed for study questions I, II, and III. In the present study only a portion of King's model was tested. The data obtained in this study can be related to the entire framework for development of nursing interventions. In Figure 4 is an example of how King's model could apply to nurses interacting with parents expecting their second child. Since the seven study sub-scales initially proposed by the investigator were not found to be acceptable, they were removed from the revised model.

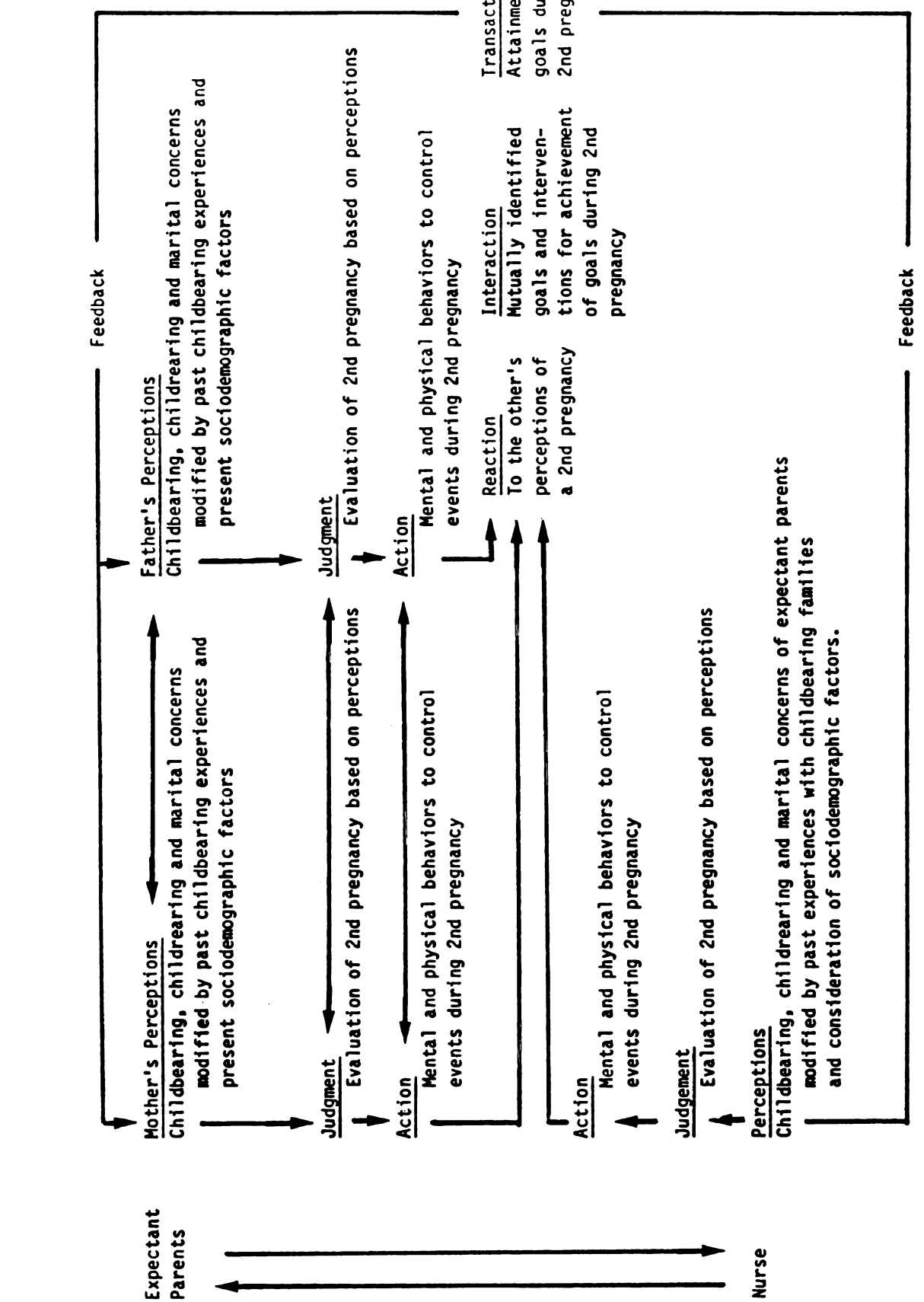

Figure 4. Revised Adaptation of King's model to the process of interaction between nurse and parents expecting their second child (King, 1981).

King's (1981) framework is particularly applicable to interactions occurring between nurses and parents during their childbearing and childrearing years. Nursing is viewed by King as a process of human interactions leading to goal attainment. Nurses must be able to use their knowledge and skills to help individuals and groups cope with present situations while also learning how to adjust to changes in their lives. And finally, nurses must be able to help persons maintain their health so that they can function in their roles.

Utilizing King's (1981) concepts it is quite clear that nurses interacting with expectant parents hope to achieve certain goals. Nurses interacting dynamically with parents will foster achievement of mutually developed childbearing goals. Nurses will need to draw on their knowledge and skills to help expectant parents cope with the present childbearing experience while also helping expectant parents learn how to adjust to changes in their lives caused by the addition of a new family member. And finally, nurses must be prepared to help these parents maintain their physical and emotional health so that they can function in their new roles as parents of two children while also maintaining previous roles.

King (1981) views human beings as being social, perceiving, reacting and purposeful beings who are also action and time-oriented. As seen in Figure 4, both the expectant parents and the nurse are human beings who enter the interaction process with certain perceptions about the

life event. In the present study, perceptions of nurses were not investigated. Concerns perceived by parents during the second pregnancy were found to relate to various past childbearing experiences or present sociodemographic factors. Younger mothers and fathers and those with lower family incomes were found to have greater financial concerns. Mothers who reported feeling more negative regarding their first childbirth experience also reported more childbirth concerns during their second pregnancy. In the present study then, it was found that previous life experiences and sociodemographic factors did influence perceptions of mothers and fathers regarding a current life event. In addition, there was a significant difference found in the level of concern reported by mothers and fathers. It was not the intent of the investigator to study the next phase of the model which recognizes judgments made based on evaluation of perceptions.

Following King's theory, judgments would then lead to certain mental or physical actions. The action phase of the model was addressed by investigating actions taken by expectant parents to control events during the second pregnancy. In the present study it was found that mothers who were undecided about attending childbirth preparation classes had the greatest financial concerns. Mothers who prepared less during their second pregnancy than during their first had greater concerns regarding both their firstborn and the expected baby. And mothers who discussed their concerns

during pregnancy with others also had more concern regarding the expected baby.

The investigator for the present study did not attempt to explore concepts in King's (1981) model occurring beyond the action phase. But as seen in Figure 4, it is at this next phase, the reaction phase, that all the previous factors influencing perceptions of mother, father, and nurse begin to unfold as individuals in the interacting process begin to react to the other's perceptions of the present event.

It was not the intent of the investigator to study the reaction, interaction, or transaction phases of King's model as they apply to expectant parents. What is evident from the study is that, at the point of reaction in the interaction process with the nurse, expectant parents join in the process with perceptions which must be explored by the nurse if mutual goals are to be identified. In the present study it was found that mothers and fathers differed significantly in the amount of concern reported on all five sub-scales. Without knowledge of perceptions of each parent the nurse will be at a disadvantage to compare her perceptions with those of the parents, evaluate areas which are similar or different, and proceed with interactions which are productive and lead to interventions which meet the parents' needs.

Implications of Questions I, II, and III to Nursing Practice

Based on the above application of King's theory to the present study, implications for nurses in practice can be

addressed. First, nurses in advanced practice must identify their own perceptions regarding expectant parents. In the case of second-time parents, nurses must acknowledge the individual perceptions of each parent. Even though both parents experienced the same previous life event (first childbirth), each parent's first childbirth experience was probably not perceived as being identical to the other parent's and so the individuality of perceptions must be assessed. A meaningful finding of this study was that mothers and fathers reported significantly different levels of concern on the study sub-scales. The clinical nurse specialist in advanced practice should have the interviewing skills needed to obtain data on each parent's perceptions during the second pregnancy.

The clinical nurse specialist in advanced practice will need to implement strategies to access expectant parents, particularly fathers. Parenting classes, conducted by clinical nurse specialists through community hospitals and organizations, may offer parents a bridge of support to deal with childrearing concerns before and following the birth of a child. Parenting classes should be offered at various times and settings (evening and morning hours, places of employment) so that both mothers and fathers from a variety of socioeconomic backgrounds can be reached. The family clinical nurse specialist should involve herself in continuing education offerings for nurses working with expectant parents to educate her colleagues to the changing

needs and perceptions of mothers and fathers adapting to additional family members.

Nurses must be able to assess similarities and differences between their own perceptions and those of each parent. In order for mutual goal setting to occur, nurses should assist parents in recognizing the similarities and differences of their perceptions within the marital dyad. Utilizing role modeling in various settings, such as prenatal clinics, childbirth classes, labor and delivery or postpartum units, where nurses interact with both mothers and fathers, nurses in advanced practice will be able to demonstrate communication techniques which promote the feedback of each parent regarding their perceptions. By role modeling acceptance of individual perceptions and sound communication techniques, the clinical nurse specialist can promote better awareness of perceptions within the dyad and also between each parent and their health care providers. Attendance by fathers at their wives' prenatal and postpartum clinical appointments and their childrens' well-child examinations should be initiated and encouraged by nurses in advanced practice caring for families. By dynamically encouraging involvement of fathers and siblings, the clinical nurse specialist will be able to better assess family interactions and offer anticipatory guidance regarding family adaptation, communication, or development. In addition, the clinical nurse specialist working with families in the primary care setting will be promoting health care which is truly comprehensive and continuous.

Part of recognizing one's own perceptions about a particular life event is comparing one's own perceptions to those of others. Current literature incorporating new findings from nursing research and other social science disciplines should be utilized fully by nurses to reevaluate their own perceptions. Continuing education through reading professional nursing journals to attending conferences, seminars and workshops can be stimulating methods for keeping abreast of new knowledge within the nursing profession. Nurses with generic education in nursing may particularly benefit from continuing education activities. Through workshops on family assessment or on interviewing skills needed in caring for childbearing families, nurses can expand their knowledge and gain from undergraduate nursing education. Clinical nurse specialists in advanced practice should be leaders for other nurses caring for expectant parents by involving themselves as consultants or speakers at continuing education offerings.

Nurses in advanced practice must be able to assess the individual perceptions, needs, and goals of parents during different childbearing and childrearing stages. Nurses practicing true family-centered nursing must redirect their attention from focusing solely on the acute care of the pregnant or laboring mother to promoting the health of all family members as they adapt to life changes during the childbearing and childrearing years. Nurses in advanced practice must take the initiative to share knowledge of family concepts through research and education with nurses

caring for expectant parents so that the health of the entire family is promoted.

Variables influencing perceptions of parents expecting their second child must be identified by nurses in advanced practice caring for this group. In the present study, mothers who reported feeling negative regarding their first childbirth reported more childbirth concerns during the second pregnancy. Increased childbirth concerns of multiparas have been identified by previous researchers (Larsen, 1966; Norr, et al., 1980; Westbrook, 1978; Winokur & Werboff, 1956). In the present study, mothers who were undecided as to whether or not they would attend childbirth preparation classes during their second pregnancy also reported increased financial concerns. In organizing childbirth preparation classes for repeat parents, nurses in primary care must consider and evaluate financial deterrents for parents attending. Possibly offering tuition reimbursement for lower income families or offering concurrent child care for the older sibling may encourage more parents to attend repeat childbirth classes. Once again, perceptions of the parents need to be assessed before realistic goals which are mutually identified can be met.

In the present study, fathers with younger firstborn children reported greater concern regarding their firstborn child. Mermin (1982) found that fathers of one child were least satisfied as they approached a second childbirth. Possibly satisfaction with a second childbirth is somehow related to the age of the firstborn child and increased

concern by fathers for younger children. Again, perceptions of both fathers and mothers, along with variables influencing their perceptions must be identified by nurses caring for this group. Through further research and evaluation of nursing interventions, nurses in advanced practice will gain a better understanding of the perceptions of expectant mothers and fathers. Knowledge of parental perceptions will lead to the development of nursing interventions which can be evaluated as to their ability to best meet the needs of childbearing mothers and fathers.

Nurses with knowledge of family concepts will want to assist parents in identification of their own perceptions of the meaning of the addition of a new family member. Based on this knowledge of the family, nurses in primary care will want to offer parents the anticipatory guidance needed to be prepared to adapt to these life changes. One finding from the present study was that books and childbirth class instructors are highly utilized by parents as sources of information during pregnancy. Interventions as simple as suggesting good books to assist parents in dealing with issues of importance to them should not be overlooked.

Since childbirth preparation instructors are usually nurses who meet with both mothers and fathers over several class periods, they are in a wonderful position to augment repeat childbirth classes with dynamic approaches to parenting. In addition to offering information on managing labor and birth, why not offer an additional class or classes directed by the clinical nurse specialist on family

adaptation and managing changes brought on by an additional family member? Anticipatory guidance regarding adjustment of the firstborn child, maintaining a good marital relationship with children, or time management with a growing family may prove beneficial in preventing adaptive problems within the family and should be incorporated by nurses in advanced practice.

In addition, clinical nurse specialists in advanced practice must evaluate the role of all nurses working in primary care settings. The promotion of the nurse's time for family-centered assessment, education and counseling of expectant parents, along with the performance of physical assessments and technical tasks, is an area which requires the support and involvement of nurses in advanced practice.

Nurses in both education and advanced practice must risk involvement in research, the testing of theories, and the evaluation of interventions based on these theories and research. Although all nurses may not be in a position to initiate research, nurses in education and advanced practice may be able to assist their colleagues as clinical experts in the development of the study instrument. Nurses in advanced practice can involve all nurses in assisting with data collection and with the testing of nursing interventions in the clinical setting. Ideas for research, related to issues specific to families during the childbearing and childrearing years, should be generated by nurses in advanced practice and brought to the attention of research committees of institutions which do have the resources available for

nursing research. Clinical nurse specialists on these research committees can focus efforts towards identifying perceptions of families during the childbearing and childrearing years so as to develop nursing interventions which allow for the families' needs to be met through mutual goal setting.

In summary, several suggestions have been made regarding the implications for nursing education and advanced practice. Nurses must be able to assess and reevaluate their own perceptions regarding parents during the childbearing years. Nursing education and practice cannot focus solely on the acute needs of parents during childbirth periods. Nursing interventions which are family-centered should promote health of the entire family. Specific interventions like anticipatory guidance or role modeling of communication techniques may be effective in promoting healthy adaptation in childrearing families. Continuing education, which expands on family concepts introduced at the undergraduate level, should be encouraged for all nurses. Involvement in nursing research by clinical nurse specialists in primary care will promote expansion of the knowledge base of nursing in regards to both parental and nurse perceptions during the childbearing and childrearing years.

Implications of Questions I, II, and III for Nursing Education

In reassessing their own perceptions of the childbearing family, nurses in education must also evaluate their

judgments and actions generated from their perceptions. Does the nurse educator prefer to assign primiparas rather than multiparas to her undergraduate nursing students because of the assumption that primiparas need more care and therefore primiparas offer a better learning experience to the student? If so, many students may not be given the opportunities during their undergraduate nursing education to acquaint themselves with perceptions of multiparas during the childbearing period which are unique to multiparas or similar to primiparas. Do nurse educators focus the curriculum mainly on the challenges and problems confronting first-time parents in adapting to their firstborn child? If so, nursing students may never learn to appreciate the complexity of forces interacting within the family when a second or third child is added.

The period of undergraduate nursing education is important in the development of perceptions in students which are likely to influence them once they are practitioners. Therefore, nurse educators must promote diverse learning situations which acknowledge the unique needs of each individual. The introduction of family concepts at the undergraduate level, and further integration of family concepts at the graduate level, will promote a broader base of knowledge for nursing students and practitioners.

Recommendations for Future Research

Recommendations for future nursing research based on findings from the study are presented in the following section.

Instrument Revision and Study Replication

1. Replication of this research study is recommended only after revision of the instrument. The instrument structure originally proposed did not prove to be highly reliable in the present study. Reevaluation is necessary to determine if the childbirth, firstborn and expected baby sub-scales are independent sub-scales or if they do continue to lack multidimensionality as in the present study. If after revision and replication, the reliability measures remain the same or lower and intercorrelations of the childbirth, firstborn and expected baby sub-scales remain high, then there is additional evidence that the proposed instrument structure should not be retained. High intercorrelation between the firstborn and expected baby sub-scales, along with conceptual legitimacy, warrant consideration of fusing these scales into one scale measuring concerns regarding children. This new scale would then need to be tested with samples of parents expecting their second child. The remaining sub-scales would then need to have other items formulated to maintain the internal consistency of each scale. Additional factor analysis of the study items, not limited to seven clusters, might delineate the conceptual make-up for different sets of measures than the seven proposed by the investigator for the present study. These newly clustered measures might prove to be more reliable in future studies.

2. Replication involving lower socioeconomic subjects in order to obtain a more culturally and socioeconomically diverse sample.

3. Replication with the same group of parents during each trimester would add to the findings. Concerns identified by parents during each trimester of the prenatal period could be compared to their concerns during the postpartum period.

4. Replication is suggested using samples which include mothers and fathers expecting their first, second, third, or fourth child so that comparisons between these groups can be made.

Expanded Research

1. The perceptions of nurses caring for childbearing couples in conjunction with those of the mother or father need to be explored. Nursing interventions should be made with the clear knowledge that their perceptions can effect goal attainment by the mother or father. Nurses need more knowledge about perceptions of parents, but nurses also need an awareness of their own perceptions when interacting with these parents.

2. Extraneous variables investigated in the present study offer direction for future research. Research efforts should focus on identifying those variables which consistently relate to increased concerns by parents so that constructive nursing interventions can be developed.

3. Concern regarding the marital relationship was reported by both mothers and fathers to be the scale with the highest level of concern but the greatest variance between spouses. A study which evaluates marital satisfaction (using

standardized marital satisfaction scales) during the childbearing and childrearing years in relation to parental concerns could be conducted. It would be interesting to compare changes in marital satisfaction of spouses over time in relation to various areas of concern.

4. Individual items reported by mothers and fathers to have greater levels of concern, but that failed to correlate with other items on a sub-scale, could offer direction for future research. Different dimensions than those tapped by the study sub-scales, such as time demands or changes expected with the addition of another child, could provide focus to future research endeavors.

5. Multi-site studies would allow for random sampling of parents from a variety of socioeconomic levels allowing for further interpretation of the effects of extraneous variables on parental concerns during various childrearing stages. A large-scale study of this type would probably require funding by national health or nursing organizations or government agencies.

Experimental Research

From significant findings of descriptive studies nursing interventions need to be developed and their effectiveness researched. A study could be designed to evaluate adaptation and gratification of parents following the birth of their child who were exposed to additional classes on childrearing or family adaptation along with the more traditional core childbirth preparation classes during the prenatal period.

Various strategies should be evaluated, such as combining or separating mothers and fathers during critical discussion periods and having a male direct the fathers' discussions and a female direct the mothers' discussions, or possibly having couples who delivered their second child in the last year return to moderate the class discussions. More research needs to be implemented in order to evaluate the effectiveness of nursing behaviors and interventions. Studies designed to evaluate the effectiveness of nursing interventions in promoting healthy adaptation to life changes during the childbearing and childrearing years would be valuable and should be generated by the clinical nurse specialist in advanced practice.

Marital Stressors Resulting From Couples' Differing Concerns

After identification of differing perceptions between spouses are identified through further research, the effect of these differences on reactions, interactions and transactions between spouses needs to be investigated. Marital stress caused by differing areas or levels of concern between spouses may hinder the healthy adaptation of families during the childrearing years.

Interventions With Siblings

The clinical nurse specialist in advanced practice need to study and evaluate those nursing interventions with siblings which promote healthy adaptation of the entire family to its new member. Prior to intervening, more descriptive studies are needed to establish current practices

regarding preparation of siblings during the childbearing period. Studies should consider the age of siblings when examining current practices and interventions which are found to be most effective.

Conclusion

There is a need for continued research into the concerns of parents and children during each stage of the family life cycle. The interrelationship of research to theory development, practice, and education is an ongoing process which must be maintained by nurses in advanced practice in order to promote dynamic nursing interventions with families. This study, which proposed to investigate the concerns of mothers and fathers expecting a second child, attempted to test nursing theory as it relates to individuals experiencing a very normal life event.

There are major methodological weaknesses within the study. The small sample of subjects was non-randomly obtained from two main sites, private physician's practices and childbirth or sibling preparation classes. The non-probability sample limits the generalizability of the study findings beyond the study sample. Limitations of a small sample were found in relationship to various extraneous variables thereby making potentially meaningful comparisons irrelevant. These limitations may have been reduced by utilizing a broader choice of sites for subject selection. Including study participants obtained from public prenatal

clinics, and subjects obtained randomly, would have strengthened the study sample.

The other major limitations of the study were a very homogeneous sample and the use of an instrument which was not previously tested. Two of the seven initially proposed sub-scales were not retained, reliability indices on the remaining five sub-scales were low, and intercorrelations on three sub-scales were too high and therefore determined to be unacceptable for replication. Further testing of the instrument is necessary. Reliability of the instrument may be improved by adding relevant items to each sub-scale which expand on the concept, or by increasing the heteroginicty of future study samples through random selection from a variety of sites (Polit & Hungler, 1983).

Longitudinal studies must be developed which compare changes over time in families during the childbearing and childrearing years. Descriptive studies will provide the base needed for further investigative studies of the effectiveness of nursing interventions. Ideally studies would be geared to assess the adjustments of couples and families during each stage and with each family addition. Longitudinal studies are generally more costly, time consuming, and threatened by attrition. Although the difficulties common to longitudinal studies can not be easily ignored, the effectiveness of the longitudinal design in studying families may well be worth the effort of nurses in advanced practice.

With an awareness of the study limitations, several significant relationships were found which merit further investigation. The conceptual framework of King's (1981) nursing theory was found to provide the structure needed in interpreting the study questions. Although reactions, interactions and transactions of expectant parents were not measured, the significant differences found between spouses in their level of concern would be cause for suspicion regarding the effectiveness of previous interactions. Healthy adaptations of family members to life changes would be promoted by interactions which develop from an awareness of perceptions which eventually lead to effective transactions. King's (1981) concept of perceptions can offer direction to nurses in advanced practice and primary care as they interact with families to promote their health during the childbearing and childrearing years.

In Chapter VI the research findings were presented. Included were a description and analysis of the study sample as compared to other studies. The implications and recommendations for nursing practice, education and research were discussed.

APPENDICES

APPENDIX A

MOTHER'S QUESTIONNAIRE

FATHER'S QUESTIONNAIRE

Please answer each question to the best of your knowledge.

1. What is today's date? _____ (month), _____ (day), 1987

2. When is your baby's expected due date? _____ (month), ____ (day), 1987

3. What is your age? _____

4. What is your ethnic background? (Please circle one).

   a. White
   b. Black
   c. American Indian
   d. Mexican America
   e. Oriental
   f. Other (Specify) _____

5. What is your religious affiliation? (Please circle one).

   a. Catholic
   b. Jewish
   c. Protestant
   d. None
   e. Other (Specify) _____

6. What is the highest level of education you completed? (Please circle one).

   a. Grade school
   b. Some high school
   c. High school graduate
   d. Some college courses
   e. College graduate
   f. Beyond 4 years of college

7. What is your family's annual income? (Please circle one).

   a. $9,999 and under
   b. $10,000 to $19,999
   c. $20,000 to $29,999
   d. $30,000 to $39,999
   e. $40,000 to $49,999
   f. Above $50,000

8. What is your present employment status? (Please circle one).

   a. Employed full time (40 hours/week)
   b. Employed part time (Less than 40 hours/week)
   c. Homemaker
   d. Unemployed

9. What are your intentions for employment after your second child is born? (Please circle one).

   a. Full-time employment (40 hours/week)
   b. Part-time employment (Less than 40 hours/week)
   c. No plans to work outside the home

10. Was your first child planned? (Please circle one).

   a. Yes
   b. No

11. Did you have any major complications when you were pregnant with your first child (e.g. high blood pressure, diabetes, etc.)? (Please circle one).

   a. Yes
   b. No

   If yes, please briefly describe the complications you had:

   _____

   _____

12. How long were you in active labor with your first child? (Please circle one).

   a. 5 hours or less
   b. 6-10 hours
   c. 11-15 hours
   d. 16-20 hours
   e. 21-24 hours
   f. more than 24 hours

13. What type of birth did you experience with your first child? (Please circle one).

   a. Vaginal
   b. Vaginal with forceps
   c. Cesarean

14. Did you experience any major complications during your first child's birth? (Please circle one).

    a. Yes

    b. No

    If yes, please explain the complications you had: _____

    _____

15. What is the sex of your first child? (Please circle one).

    a. Male

    b. Female

16. What is the age of your first child? (Indicate number of years and months).

    _____ years _____ months

17. How would you describe your feelings regarding your first labor and birth experience? (Please circle one).

    a. Positive

    b. Neutral

    c. Negative

18. Was your current pregnancy planned? (Please circle one).

    a. Yes

    b. No

19. Do you and your spouse plan on being together during labor with your second child? (Please circle one).

    a. Yes

    b. No

    c. Undecided

20. Do you and your spouse plan on being together during your second child's birth? (Please circle one).

    a. Yes

    b. No

    c. Undecided

21. What method have you decided upon for feeding your second child? (Please circle one).

    a. Breast
    b. Bottle
    c. Breast and bottle
    d. Undecided

22. Do you plan on attending or have you attended childbirth preparation classes during this pregnancy? (Please circle one).

    a. Yes
    b. No
    c. Undecided

23. How much preparation (reading, television viewing, classes, discussions) related to childbirth and children have you done during this pregnancy compared to the amount of preparation you did during your first pregnancy? (Please circle one).

    a. About the same amount
    b. More with this pregnancy
    c. Less with this pregnancy

24. What is your source for information concerning childbirth and children. (May circle more than one).

    a. Books
    b. Magazine articles
    c. Newspaper articles
    d. Pamphlets from doctor's office
    e. Television programs
    f. Personal experience
    g. Family and friends
    h. Doctor (s)
    i. Nurse Midwife
    j. Nurse (s)
    k. Instructor in childbirth preparation classes.

25. Do you discuss your pregnancy or childbirth concerns with others? (Please circle one).

    a. Yes (Go on to question #26).
    b. No (Go on to question #27).

26. If yes, with whom do you discuss your pregnancy or childbirth concerns. (May circle more than one).

    a. Spouse
    b. Relatives
    c. Friends
    d. Doctor (s)
    e. Nurse Midwife
    f. Nurse (s)
    g. Instructor or other parents in childbirth preparation class
    h. Other (Specify) _____

Please turn the page and complete the remainder of the questionnaire. Thanks!

Directions

The following are a variety of concerns that parents may have during a second pregnancy. Please check the appropriate box to the right of each statement indicating to what extent you agree or disagree that each statement expresses a concern that you might have during this pregnancy. A concern should be thought of as something that occupies your thoughts, attracts your interest, or is possibly disturbing to you. Please respond to all the statements by checking the appropriate box indicating if you: strongly agree(SA), agree(A), disagree(D), strongly disagree(SD), or feel the statement is not applicable(NA).

		SA	A	D	SD	NA
27.	I am afraid that my figure will not return to normal after the baby is born.	[]	[]	[]	[]	[]
28.	I feel confident that my husband will think I give him the help and support he needs after the baby is born.	[]	[]	[]	[]	[]
29.	I feel I have lacked the energy needed to give my first-born child the attention he/she needs during this pregnancy.	[]	[]	[]	[]	[]
30.	I worry if my second labor and delivery experience will be more difficult than my first.	[]	[]	[]	[]	[]
31.	I am concerned by changes in my husbands sex drive during this pregnancy.	[]	[]	[]	[]	[]
32.	It should not be difficult to keep up our house as I would like after our second child is born.	[]	[]	[]	[]	[]
33.	I am confident that the addition of a second child will not hamper my career goals.	[]	[]	[]	[]	[]
34.	I worry that I will have to give up the special relationship I have with my first-born child after the baby is born.	[]	[]	[]	[]	[]
35.	I am not concerned by any changes in my sex drive during this pregnancy.	[]	[]	[]	[]	[]
36.	My husband and I are considering the possibility of sterilization (vasectomy or tubal ligation) after the baby is born.	[]	[]	[]	[]	[]
37.	I find myself thinking more often about my husband's health or possible death.	[]	[]	[]	[]	[]

		SA	A	D	SD	NA
38.	I feel comfortable with our plans for the care of our first-born child while I am in the hospital.	[]	[]	[]	[]	[]
39.	I am certain of the method of contraception my husband and I will use after the baby is born.	[]	[]	[]	[]	[]
40.	I feel having a second child will not hamper my husband's career goals.	[]	[]	[]	[]	[]
41.	I am confident in my ability to care for a new baby again.	[]	[]	[]	[]	[]
42.	I am concerned that the addition of a second child will interfere with my husband's and my sexual relationship.	[]	[]	[]	[]	[]
43.	I am confident that nothing bad will happen to me during my labor and delivery.	[]	[]	[]	[]	[]
44.	I find myself thinking more about my own health or possible death.	[]	[]	[]	[]	[]
45.	I am certain that my husband will be able to love our second child as much as he loves our first.	[]	[]	[]	[]	[]
46.	I feel confident that our first-born child will love the new baby.	[]	[]	[]	[]	[]
47.	I wonder if I will be able to love my second child as much as I love my first-born child.	[]	[]	[]	[]	[]
48.	I am confident that my doctor, nurse midwife and nurses will be supportive of my emotional needs during my hospitalization.	[]	[]	[]	[]	[]
49.	I am happy about this pregnancy.	[]	[]	[]	[]	[]
50.	I am sure that my husband will have enough time to pursue his personal interests after our second child is born.	[]	[]	[]	[]	[]
51.	I am concerned that my husband does not seem to be happy about this pregnancy.	[]	[]	[]	[]	[]
52.	I worry that something will be wrong with this baby.	[]	[]	[]	[]	[]
53.	I worry about having enough money to buy what my family wants and needs.	[]	[]	[]	[]	[]

		SA	A	D	SD	NA
54.	I wonder if my husband will be able to give me the attention I need after the baby is born.	[]	[]	[]	[]	[]
55.	I feel comfortable that my husband and our first-born child will be allowed to visit me and the new baby as much as I would like while I am in the hospital.	[]	[]	[]	[]	[]
56.	I feel the space available in our house can easily accommodate a second child.	[]	[]	[]	[]	[]
57.	I worry that I will not get the support I need from my husband during my labor and delivery.	[]	[]	[]	[]	[]
58.	I feel prepared for my second labor and delivery.	[]	[]	[]	[]	[]
59.	I think my husband finds me sexually unattractive during this pregnancy.	[]	[]	[]	[]	[]
60.	I feel confident that we can afford to raise a second child.	[]	[]	[]	[]	[]
61.	I am concerned that caring for two children will leave me little time for myself and my own interests.	[]	[]	[]	[]	[]
62.	I worry that I will not be able to give my second child the time and attention I gave my first-born child.	[]	[]	[]	[]	[]
63.	I hope our second child is the opposite sex from our first-born child.	[]	[]	[]	[]	[]
64.	I am afraid that our first-born child might act aggressively toward the new baby.	[]	[]	[]	[]	[]
65.	I am confident that my husband and I will have enough time for shared leisure activities after we have our second child.	[]	[]	[]	[]	[]
66.	I feel I have gotten the support I need from my family and friends during this second pregnancy.	[]	[]	[]	[]	[]
67.	I worry about being able to balance the needs of my family with my other commitments and responsibilities.	[]	[]	[]	[]	[]

		SA	A	D	SD	NA
68.	I feel confident that I will be able to give my first-born child the attention he/she needs after the baby is born.	[]	[]	[]	[]	[]
69.	Career changes made after the birth of our second child will decrease our family income.	[]	[]	[]	[]	[]
70.	I feel that I will receive quality physical care from my doctor, nurse midwife and nurses while I am in the hospital.	[]	[]	[]	[]	[]
71.	I worry about my husband feeling stifled after our second child is born.	[]	[]	[]	[]	[]
72.	I am concerned that my first-born child may regress in the skills he/she has learned after the baby is born.	[]	[]	[]	[]	[]
73.	I wonder if I will be able to stay in control during my labor and delivery.	[]	[]	[]	[]	[]
74.	I am concerned about the health care costs for having our second child.	[]	[]	[]	[]	[]

75. Please describe any concerns you may have during this second pregnancy which were not addressed by the statements above.

_____

_____

_____

_____

THANK YOU

		SA	A	D	SD	NA
38.	I worry that I will not be able to give my second child the time and attention I gave my first-born child.	[]	[]	[]	[]	[]
39.	I feel that my wife will receive quality physical care from her doctor, nurse midwife, and nurses while she is in the hospital.	[]	[]	[]	[]	[]
40.	I worry that something will be wrong with this baby.	[]	[]	[]	[]	[]
41.	I am concerned that the addition of a second child will interfere with my wife's and my sexual relationship.	[]	[]	[]	[]	[]
42.	I feel I have lacked the energy needed to give my first-born child the attention he/she needs during this pregnancy.	[]	[]	[]	[]	[]
43.	I am afraid that my wife's figure will not return to normal after the baby is born.	[]	[]	[]	[]	[]
44.	I feel confident that we can afford to raise a second child.	[]	[]	[]	[]	[]
45.	I worry about having enough money to buy what my family wants and needs.	[]	[]	[]	[]	[]
46.	I feel confident that I will be able to give my first-born child the attention he/she needs after the baby is born.	[]	[]	[]	[]	[]
47.	My wife and I are considering the possibility of sterilization (vasectomy or tubal ligation) after the baby is born.	[]	[]	[]	[]	[]
48.	I am afraid that our first-born child might act aggressively toward the new baby.	[]	[]	[]	[]	[]
49.	I am sure that my wife will have enough time to pursue her personal interests after our second child is born.	[]	[]	[]	[]	[]
50.	I worry if my wife's second labor and delivery experience will be more difficult than her first.	[]	[]	[]	[]	[]
51.	I am confident that the addition of a second child will not hamper my career goals.	[]	[]	[]	[]	[]
52.	I am not concerned by any changes in my sex drive during this pregnancy.	[]	[]	[]	[]	[]

		SA	A	D	SD	NA
53.	I feel having a second child will not hamper my wife's career goals.	[]	[]	[]	[]	[]
54.	I am confident that nothing bad will happen to my wife during her labor and delivery.	[]	[]	[]	[]	[]
55.	I find myself thinking more about my own health or possible death.	[]	[]	[]	[]	[]
56.	I feel I have gotten the support I need from my family and friends during this second pregnancy.	[]	[]	[]	[]	[]
57.	Career changes made after the birth of our second child will decrease our family income.	[]	[]	[]	[]	[]
58.	I worry that I will not be able to give my wife the support she needs during her labor and delivery.	[]	[]	[]	[]	[]
59.	I worry about being able to balance the needs of my family with my other commitments and responsibilities.	[]	[]	[]	[]	[]
60.	I am confident that my wife's doctors, nurse midwife, and nurses will be supportive of her emotional needs during her hospitalization.	[]	[]	[]	[]	[]
61.	I am happy about this pregnancy.	[]	[]	[]	[]	[]
62.	I feel the space available in our house can easily accommodate a second child.	[]	[]	[]	[]	[]
63.	I am certain of the method of contraception my wife and I will use after the baby is born.	[]	[]	[]	[]	[]
64.	I feel confident that my wife will think I give her the help and support she needs after the baby is born.	[]	[]	[]	[]	[]
65.	I am concerned by changes in my wife's sex drive during this pregnancy.	[]	[]	[]	[]	[]
66.	I am confident that my wife and I will have enough time for shared leisure activities after we have our second child.	[]	[]	[]	[]	[]
67.	I wonder if I will be able to love my second child as much as I love my first-born child.	[]	[]	[]	[]	[]
68.	I am concerned about the health care costs for having our second child.	[]	[]	[]	[]	[]

69.

70.

71.

72.

73.

74.

75.

		SA	A	D	SD	NA
69.	I find my wife sexually unattractive during this pregnancy.	[]	[]	[]	[]	[]
70.	I feel prepared for my wife's second labor and delivery experience.	[]	[]	[]	[]	[]
71.	I wonder if my wife will be able to stay in control during her labor and delivery.	[]	[]	[]	[]	[]
72.	I feel comfortable with our plans for the care of our first-born child while my wife is in the hospital.	[]	[]	[]	[]	[]
73.	I worry about my wife feeling stifled after our second child is born.	[]	[]	[]	[]	[]
74.	I worry that I will have to give up the special relationship I have with my first-born child after the baby is born.	[]	[]	[]	[]	[]

75. **Please describe any concerns you may have during this second pregnancy which were not addressed by the statements above.**

_____

_____

_____

_____

THANK YOU

APPENDIX C

LETTER OF AGREEMENT TO ASSIST WITH STUDY

xxxxxxxxx

xxxxxxxxx
xxxxxxxxx
xxxxxxxxx

Dear xxxxx:

Thank you for agreeing to approach your clients who are expecting their second child for inclusion in my study. As we discussed the purpose of the study is to investigate the concerns perceived by parents (both mothers and fathers) during the third trimester of their second pregnancy, while expecting their second child. By helping me to contact parents expecting their second child, you will be supporting my efforts to complete requirements for a Master's degree in Nursing from Michigan State University.

Again, let me assure you that assisting with the study will take very little of your time and approximately only 20 minutes of your client's time. All the participants' responses on the study questionnaire will remain strictly confidential. As we discussed, all study participants should be 21 years of age, experiencing the third trimester of a normal pregnancy, have one normal child who is alive and well (gravida 2: para 1), and be married to their child's and the expected baby's biologic father. Although no beneficial claims will be made to participants in the study, it is hoped that those of your clients who agree to answer the study questionnaire will find it an interesting and worthwhile experience.

Enclosed is a copy of the study questionnaire for your information. If you have any questions regarding the questionnaire please feel free to contact me at the number given below. I will make arrangements to deliver the introductory letters for potential study participants to your office within two weeks so that you or your office staff can begin to share them with receptive clients as soon as possible.

Thank you again for helping to support my research and educational efforts! I hope you find that the feedback from your clients who choose to participate in the study is positive!

Sincerely,

Nancy L. Maudlin, R.N., C.,
M.A., MSN Candidate

Michigan State University
College of Nursing, Graduate Program
Family Clinical Nurse Specialist Program
Phone: (616) 375-8850

APPENDIX D

LETTER OF INTRODUCTION TO PARENTS

Dear Expectant Mother and Father:

The purpose of this letter is to request your participation in a study of parents (both mothers and fathers) who are expecting their second child. I am a certified family nurse practitioner and a graduate student presently completing requirements for a Master's Degree in Nursing at Michigan State University. In order to provide the best nursing care possible to parents who are expecting their second child, it is important that nurses better understand those concerns which are unique to parents during their second pregnancy.

The purpose of the study is to gain information regarding concerns specific to those parents who are expecting their second child. By completing the questionnaire developed for this study, you and your spouse will have the opportunity to share the thoughts, feelings and concerns you may have during this pregnancy as you anticipate the arrival of your second child.

Participation in this study is voluntary. All participants should be at least 21 years of age and at least 27 weeks into their second pregnancy. The completion time is approximately 20 minutes and all responses will remain confidential. You are free to withdraw from the study at any time. Participation in the study or withdrawal from the study will in no way effect the health care your family is now receiving.

Thank you for considering to share your time and thoughts with me for the benefit of other parents who are expecting their second child. My best wishes to you both for an enjoyable birth.

Sincerely,

Nancy L. Maudlin, R.N., C., M.A.,
MSN Candidate
Michigan State University
College of Nursing, Graduate Program
Family Clinical Nurse Specialist Program
Phone: (616) 375-8850

If you think that you and your spouse might be interested in participating in the study, please fill out the attached form and leave it with the receptionist or class instructor. Please feel free to take this letter home with you for your information. If you indicate interest in participating in the study by completing the attached form, you can expect to be contacted by me within two weeks.

Yes, my spouse and I are interested in participating in your study on concerns of parents expecting their second child.

Name: _____

Mailing Address _____

_____

_____ Zip Code _____

Home Phone: _____ Work Phone: _____

Best time to call: _____

[] Check this box if you would like a summary of the Study.

APPENDIX E

TELEPHONE SCREENING TOOL

Screening Tool

Inclusion Criteria

Participant Code #												
Date												
Age > 21												
Normal Current Pregnancy												
Healthy Firstborn												
Total Number of Pregnancies												
Biologic Parents												
Children Previous Marriage												
Married and Share Household												

Telephone Contact Log

	1	2		1	2		1	2		1	2		1	2	
Participant Code #															
Date															
Introduction															
Review of Study															
Agree to Participate															
Refusal to Participate															
Undecided on Participation															
Questions Answered															
Thank You															

[1] Initial Telephone Contact with prospective participants.
[2] Follow-up Telephone Contact if more time requested.

APPENDIX F

CONSENT FORM

CONSENT FORM

Being at least 21 years of age, I consent to participate in one study requiring the completion of one research questionnaire of approximately 20 minutes. It has been explained to me and I understand that:

1. The purpose of the research is to gather information on the concerns of expectant parents during the third trimester of their second pregnancy;
2. Participation in the Study or withdrawal from the Study, will in no way effect the health care my family receives.
3. The questionnaire is not intended to be therapeutic or educational and no claims of beneficial therapeutic or educational effects have been made;
4. Reading and answering questions related to concerns experienced during a second pregnancy may cause emotional discomfort. The possibility of emotional discomfort is the only potential Study risk identified;
5. I may discontinue my participation at any time;
6. All information obtained will be treated with strict confidentiality and the identity of participants will remain strictly anonymous;
7. I have been given an opportunity to ask questions about the Study. If I have any further questions, I may contact Nancy L. Maudlin, R.N., at (616) 375-8850.
8. Results will be made available to me upon request.

My consent to participate is freely given, without coercion by anyone. My return of the completed questionnaire constitutes my informed, voluntary consent to participate in the Study.

APPENDIX G

GENERAL DIRECTIONS

General Directions

Thank you for agreeing to take the time necessary to take part in this study. The purpose of this study is to explore the concerns of mothers and fathers expecting their second child. The information that you and your spouse and other couples provide will help other nurses and myself in planning the health care of parents who are expecting their second child.

Mothers, please complete the pink questionnaire; and fathers, please complete the blue questionnaire. Please read the directions before beginning to answer your questionnaire and answer all questions as honestly and accurately as you can. To insure confidentiality, do not put your name anywhere on the questionnaire. As you answer the questionnaire, please remember that it is not a test. There are no wrong or right answers to any of the questions. Therefore, your honest responses are appreciated. If you do not understand any part of the questionnaire, please do not hesitate to call me at the number below for help.

After you both have completed the questionnaires, please feel free to discuss your answers with your spouse, but do not change your answers. Then, please place the questionnaires in the stamped envelope provided and return them to me within one week.

I will be pleased to send you a summary of the results of this study following its completion if you so desire. Again, thank you for your time and help in my study.

Nancy L. Maudlin, R.N., C., M.A.,
MSN Candidate
Michigan State University
College of Nursing, Graduate Program
Family Clinical Nurse Specialist Program
Phone: (616) 375-8850

APPENDIX H

VERIFICATION OF RESEARCH APPROVAL

MICHIGAN STATE UNIVERSITY

UNIVERSITY COMMITTEE ON RESEARCH INVOLVING
HUMAN SUBJECTS (UCRIHS)
238 ADMINISTRATION BUILDING
(517) 355-2186

EAST LANSING • MICHIGAN • 48824-1046

August 4, 1987

Ms. Nancy L. Maudlin
5405 Swallow
Kalamazoo, Michigan 49002

Dear Ms. Maudlin:

Subject: Proposal Entitled, "Parents' Perceived Concerns While Expecting Their Second Child"

UCRIHS' review of the above referenced project has now been completed. I am pleased to advise that the rights and welfare of the human subjects appear to be adequately protected and the Committee, therefore, approved this project at its meeting on August 3, 1987.

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 3, 1988.

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,

Henry E. Bredeck, Ph.D.
Chairman, UCRIHS

HEB/jms

cc: Dr. Barbara Given

APPENDIX I

RETAINED STUDY SUB-SCALES

Proposed and *Retained Sub-scale Items of Concern

Self

I am concerned that caring for two children will leave me little time for myself and my own interests.

I am confident that the addition of a second child will not negatively change my career goals.

I feel I have gotten the support I need from family and friends during this second pregnancy.

I am happy about this pregnancy.

I worry about being able to balance the needs of my family with my other commitments and responsibilities.

I am afraid that my figure will not return to normal after the baby is born (Item only on mother's questionnaire).

Spouse

I find myself thinking more often about my spouse's health or possible death.

I am sure that my spouse will have enough time to pursue his/her personal interests after our second child is born.

Having a second child should not effect my spouse's career goals.

I worry about my spouse feeling stifled after our second child is born.

I feel confident that my husband will be able to give me the help and support I need after the baby is born.

I am concerned that my spouse does not seem to be happy about this pregnancy.

I am afraid that my wife's figure will not return to normal after the baby is born (Item only on father's questionnaire).

Marital Relationship

*I am concerned that the addition of a second child will interfere with my spouse's and my sexual relationship.

I wonder if I will be able to give my spouse the attention he/she needs after the baby is born.

*I think my husband finds me (I find my wife) sexually unattractive during this pregnancy.

*I am not concerned by any changes in my sex drive during this pregnancy.

I am certain of the method of contraception my spouse and I will use after the baby is born.

My spouse and I are considering the possibility of sterilization (vasectomy or tubal ligation) after the baby is born.

*I am confident that my spouse and I will have enough time for shared leisure activities after we have our second child.

*I am concerned about changes in my spouse's sex drive during this pregnancy.

*Indicates retained Sub-scale item.

Firstborn

*I feel confident that our firstborn child will love the new baby.

*I feel comfortable with our plans for the care of our firstborn child while I am in the hospital.

*I am afraid that our firstborn child might act aggressively toward the new baby.

*I feel confident that I will be able to give my firstborn child the attention he/she needs after the baby is born.

*I worry that I will have to give up the special relationship I have with my firstborn child after the baby is born.

*I am concerned that my firstborn child may regress in the skills he/she has learned after the baby is born.

During this pregnancy I feel I have lacked the energy needed to give my firstborn child the attention he/she needs.

*Indicates retained sub-scale item.

Expected Baby

*I worry that I will not be able to give my second child the time and attention I gave my firstborn child.

I am confident in my ability to care for a new baby again.

I hope our second child is the opposite sex from our firstborn child.

I worry that something will be wrong with this baby.

*I wonder if I will be able to love my second child as much as I love my firstborn child.

*I am certain that my spouse will be able to love our second child as much as he loves our first.

*Indicates retained sub-scale item.

Childbirth Process

*I am confident that nothing bad will happen to me/my wife during my/her labor and delivery.

*I worry if my/my wife's second labor and delivery experience will be more difficult than my/her first.

*I am confident that my/my wife's doctors and nurses will be supportive of my/her emotional needs during my/her hospitalization.

*I wonder if I/my wife will be able to stay in control during my/her labor and delivery.

*I feel prepared for my/my wife's second labor and delivery.

*I worry that I will not get/I will not be able to give the support I/my wife needs from my husband/me during my/her labor and delivery.

*I feel comfortable that my husband/I and our firstborn child will be allowed to visit me/my wife and the new baby as much as I would like while I/she is in the hospital.

*I feel that I/my wife will receive quality physical care from my/her doctors and nurses while I/she is in the hospital.

*Indicates retained sub-scale item.

Household/Finances

*I feel confident that we can afford to raise a second child.

Career changes made after the birth of our second child will decrease our family income.

I feel the space available in our house can easily accommodate a second child.

It should not be difficult to keep up our house as I would like after our second child is born.

*I worry about having enough money to buy what my family wants and needs.

*I am concerned about the health care costs for having our second child.

*Indicates retained sub-scale item.

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