EXPLORATION OF FATHERS' REACTIONS TO CESAREAN CHILDBIRTH

by

Dyanne Delmendo Affonso

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SIGNED: Dyanne D. Alfonso

APPROVAL BY THESIS DIRECTOR

This thesis has been approved on the date shown below:

G. Domino

George Domino
Professor of Psychology

2-4-80

Date

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ABSTRACT

Fifty fathers whose infants were born by a cesarean procedure were interviewed to assess their reactions to the cesarean childbirth. The perceptions, feelings, and reactions of the fathers were explored in eight areas: knowledge, preparation, emotional reaction, relationship of a cesarean to surgery, concerns and fears, consequences of a cesarean, similarities and differences between a cesarean and vaginal birth, and satisfying and stressful events.

In addition, data were collected utilizing the semantic differential to obtain fathers' ratings on four categories: a vaginal birth, a cesarean birth, feelings prior to the cesarean, and feelings after the cesarean. The interview data were analyzed through coding and frequency tabulations. The semantic differential ratings were analyzed through the Statistical Package for Social Sciences as developed by Nie and associates, version 7 procedure at Northwestern University, Vogelback Computing Center, to obtain chi square, t-test, and variance values.

CHAPTER 1

INTRODUCTION

There are selected experiences in the human life cycle which have the capacity to generate tremendous physiological, psychological, and anthropological significance. One such life event is the process of birth. The literature abounds with data on the impact of birth on the woman and the newborn. However, the father-person has been largely ignored as a significant participant in the birth event and has even been referred to as the forgotten man (Hines 1971; Nash 1965). Only in recent decades has there been a growing interest in exploring the reactions of men to the birth experience. Most of the published studies focused on the responses of father to a vaginal birth (Fein 1976; Forbes 1972; Greenberg and Morris 1974).

Modern obstetrical care is permeated with technological advances. One consequence of the increased technologically-controlled means to ensure safe childbirth is an increased cesarean birthrate (Hibbard 1976). The cesarean birthrate in this country has more than doubled since 1970. Today, one in ten babies born in the United States will be delivered by the cesarean method (Jones 1976). The technical and procedural aspects of a cesarean birth have received tremendous attention. Topics such as the modes for anesthesia, indications for the cesarean, advances in the surgical methods, and postpartal complications can readily be found in the medical literature (Green and

Sarubbi 1977; Kenny 1975; Paul, Huey, and Yaeger 1977). There is clearly a preoccupation by health professionals with the physiological outcomes from cesarean childbirths as evidenced by the increased emphasis that cesaren births have contributed substantially to the reduction of maternal and neonatal morbidity (Jones 1976).

It is generally accepted that every physical event has the capacity to generate feelings and reactions in the individuals who are forced to cope with the situation. The literature is beginning to reflect the growing interest in the psychological impact of cesarean birth. However, once again, the subjects of choice are women and newborns (Enkin 1977; Marut 1978). To date there have been no studies published which explored the reactions of fathers to the cesarean birth experience. The goal of this study is to change this data gap; therefore, the perceptions and feelings of fathers toward the births of their babies by the cesarean method were explored. This study identifies the reactions of a selected sample of fathers to their cesarean childbirth experience and provides data by which hypotheses can be generated for future research.

Literature Review

The role of the father as a significant participant in the childbirth event has long been accepted by many cultures and was recorded as early as 60 B.C. (Licht 1935). The couvade ritual, a custom where the father took to bed during the birth process, was viewed as one expression of the father's significance in the birth event (Trethowan 1972). Although Western society failed to keep the father's role clearly defined by minimizing, ignoring, or ridiculing the male's participation during

the birth process, there is now renewed interest in exploring the male's experiences associated with childbirth. There follows a discussion of four aspects of the fathering experience: the father's experiences during pregnancy, the preparation for fathering, the father's impact during labor and birth, and the father's interaction with the newborn.

The Father's Experiences during Pregnancy

Early research efforts investigating the psychological impact of pregnancy on men focused primarily on the psychopathological consequences as evidenced by such titles as "Pregnancy as a precipitant of mental illness in men (Freeman 1951)"; "Sexually deviant behavior in expectant fathers (Hartman and Nicolay 1966)"; and "The husband's role in psychiatric illness associated with childbearing (Kaplan and Blackman 1969)." Only in recent years, have there been studies that explored the psychological impact of pregnancy on men from a perspective other than that of psychopathology.

The father's emotional experiences during pregnancy have been described extensively by Colman and Colman (1971). They stress that a man's emotional reaction and adjustment to the approaching paternal role is dependent upon his ability to resolve any conflicts which may arise through the resurgence of unconscious feelings related to his experiences with his father. Biller and Meredith (1975) suggested that boys learn about fathering through their own experiences of being fathered.

Whelan (1975) proposed that paternal orientation may take three forms no matter what the father's conscious or subconscious reason

for desiring the pregnancy. These are: (1) the romantic orientation in which the father may feel a sense of wonder and awe about the whole thing or even be overwhelmed by the idea of supporting the child (2) career orientation in which the father may regard fatherhood as a burden that will interfere with his other life priorities, and (3) the family orientation in which the father may look forward to the responsibilities and regard the child as a blessing.

A different perspective is offered by the French existentialist Marcel who commented that a man often has an indistinct recollection of the gesture of procreation and is, therefore, able to withdraw from all of its consequences. Following a similar theme, DeGarmo and Davidson (1978) state the beginning of fatherhood develops from what might be called "nothingness of experience," especially since conception and development of the new human being occurs within a woman's body.

The reasons for paternity are multiple. Wile (1937) led the way for DeGarmo and Davidson (1978) who postulated the following motivations for paternity: to unite a man and wife, to heal a troubled marriage, to increase self-esteem, to satisfy a wife's wishes, to increase the chance of inheritance from the family, to provide continuity with the future, to allow expression of nurturant qualities, to provide status and prestige, and to offer a higher stage in his psychosexual development.

There appears to be evidence that the male's initial reaction to confirmation of a pregnancy is one of ambivalence. Antle (1975) described feelings of surprise, guilt (even if the pregnancy was planned), and pride in one's virility. Liebenberg (1973) noted that

in addition to feeling pleasure, men at the same time worried about whether they could carry out the increased emotional and financial responsibilities. An element of hope for one's self-realization may also be present in the male's responses. Benedek (1959) described how the newborn represented hope of self-realization for the male, especially in fathers who had a poor relationship with their own fathers. The literature also suggests feelings of isolation, jealousy, and dependency. Antle (1975) described how the expectant father may experience feelings of a widening distance between himself and his partner as the pregnancy continues, leading to jealousy, increased insecurity about his competence as a man, and the need for more sexual acknowledgement. Liebenberg (1973) proposed that pregnancy is a time of heightened dependency when the man needs mothering for himself. Ackerman (1958) states that another theme of male feeling is a sense of loss in the entire experience due to his wife's increased demands and his involvement in meeting her demands. The psychoanalytic perspective proposes the male may be envious of the female's ability to partake in reproduction. Horney (1926) commented that such masculine envy of pregnancy begins early in childhood. Van Leeuwen (1947) explored this phenomenon of masculine envy and suggested that the increased work energy seen in selected men may be a manifestation of their envy for the woman's ability to reproduce.

Recently there have been data indicating that fathers also experience body image changes during pregnancy. Fawcett (1978) found that men experienced changes in their perceived body space similar to that in pregnant women. Fawcett described an increase in perceived body

space as the pregnancy progressed while perception of space around them remained the same or appeared smaller. Such perceptions were especially prominent in husbands of multiparas. Fawcett inferred that such perceptual changes in the male's body image allowed the husband to feel more directly involved in the pregnancy and have the potential for enhancing the husband-wife relationship during pregnancy. There are numerous authors who have explored the impact of changes in body image on the pregnant woman. Carty (1970) noted there was a dissatisfaction with the body as feelings of a widening body space increased. Bobak (1969) and Russell (1974) attribute such changes in perceptions of body image to the anxiety and crises that can sometimes occur in pregnancy and parenthood. Romney (1975) makes a stronger point by attributing such changes in body image as a basis for depression. The impact of perceived body changes on the male has yet to be explored. Fawcett's (1978) study is exciting because it infers that possibly there is a "perceptual experience" of pregnancy for men, and thus, there can also be physical and psychopathological manifestations as a consequence of such perceptual experiences.

The male's experience of pregnancy leads to unique emotional concerns and needs. Antle (1975) categorized these into four areas: (1) those relating to his protective feelings toward his partner (2) his anxieties concerning his role as provider (3) fears regarding the physical vulnerability of his partner and child, and (4) heightened dependency needs and the nurturant emotions pregnancy may elicit. McNall (1976) found three groups of concerns: (1) feelings of helplessness and apprehension about labor and delivery (2) feelings about changes in the

couple's relationship, and (3) feelings about fatherhood. Another emotional concern for fathers is related to their perception of increased responsibilities. Stichler, Bowden, and Reimer (1978) commented that the uneasiness the expectant father feels is often related to finances, even if such perceptions do not necessarily reflect the real financial situation at hand. The sense of being overwhelmed, the father's perception of increased responsibility is described as follows:

> Man the hunter, man the fighter, man the provider. You grow up supposing to excel in all these things. If you are a "worthwhile man" you should be able to provide completely for your family. A new life threatens your security because the new responsibility is not a temporary one, but lifelong. This creates panic, and you have to reassess again and again your qualifications for providing for your family (Stichler et al. 1978, p. 156).

Preparation for Fathering

There has been increased attention to the expectant father's conscious planning and preparation for parenthood. Many studies have involved selected samples of fathers attending some type of prenatal education class. Examples are studies by Heise (1975), Wapner (1976), and Wonnell (1971). Obrzut (1976) reported that fathers engage in numerous activities in their preparation for fathering such as preparing living arrangements for the baby, showing interest in children, and making financial modifications. Fein (1976) reported expectant fathers consciously prepared for changes in their marital relationships by spending more time with their wives, paying more attention to the wife's needs, and discussing future relationships with her. Antle (1978) commented that the development of the fathering role is enhanced by activities such as fantasizing, observing and talking with other

fathers, and recalling one's own relationship with his own father. Antle emphasized the latter point is especially important because most men have little preparation for parenting and must base their role on the most salient model, usually their father.

The Father's Impact during Labor and Birth

The experience of birth truly exemplifies the integration of the bio-psycho-socio-cultural impact on the individual and family (Affonso 1975). Although birth is considered to be a joyous, exhilarating experience, it is also accepted as a time of stress for the participants. Clark and Affonso (1976), Shainess (1963), and Sasmor (1972) propose that the psychodynamics of the birth process can be greatly affected by the presence of a prepared father. There are numerous benefits to the woman when the father is in attendance during labor and birth. Sasmor (1972) identified these benefits as: (1) the father providing a link with reality for the woman (2) his being a source of praise for the woman's work, and (3) his sharing the joy, excitement, and sense of accomplishment with the woman over the baby's birth. There are also physical benefits for the woman who has the father in attendance. Kimball (1954) suggests a relationship between emotional and physiological functioning with a better performance by the woman's body when she is made mentally comfortable by her interaction with her husband. Bradley (1962) noted that the father's presence shortened the length of labor by 1-1/2 hours in multiparas and 3-1/2 hours in primiparas. Rose (1962) and Goodman (1966) discussed the concept of the father being the most significant person in the environment to offer psychological support, even if his

only activity was to be present or to hold the woman's hand. Willmuth (1975) demonstrated that a supportive person, such as a husband, could reduce the woman's feeling of isolation and abandonment. There is also evidence that the father's presence results in decreased need for analgesia by the woman (Engel 1964). Women appeared to have more control over the pain experience when the father was present (Block and Block 1975). Tanzer (1967) had a profile of women who described their childbirth as an exhilarating event. One characteristic of all women in the sample was that they had a husband in attendance. Cogan and Henneborn (1975) further reinforced the finding that women who were attended by their husbands had less pain, received less medication, and expressed more positive feelings about the total birth experience.

There are also benefits to the father when he participates in the childbirth event. Cronenwett and Newmark (1974) interviewed 152 fathers in relation to 28 items on a Likert-type questionnaire and found that fathers who attended a formal prenatal class and/or attended the baby's birth, made more positive comments about the birth event and had more satisfaction in their wives' performance as well as their own role. Phillips and Anzalone (1978) allowed men to talk about their feelings, noting that the majority of men who expressed a meaningful childbirth experience had taken the time to prepare for the event through some type of class and had witnessed the birth. Holman (1966) described how the father's involvement in the birth helped prepare him for his new fathering role in a way similar to the way pregnancy helps prepare and mature a woman. Forbes (1972) supports this view by describing how pregnancy can be a maturing process for the father. DeGarmo and

Davidson (1978) assert that the childbirth experience facilitates the man-to-woman relationship by building a stronger family unit. There is also evidence to support the theory that participation of the father in the birth does influence his closeness and bonding to the new infant. Greenberg and Morris (1974) described the importance of visual and tactile contacts in the father's reactions to the newborn. Such contacts are possible only if the father is physically present with his newborn.

The literature suggests that men have increased concerns during the time of labor and birth. Concerns of expectant fathers become paramount during this time. Antle (1978) infers the birth event is a source of considerable apprehension. McNall (1976) suggests that the concern over the labor and delivery period meant the experience was ever-fresh in the father's mind, and there may be a need to relive the events just as mothers do. A major concern for fathers was the abnormality or wellness of the infant. Genne (1961) identified the father's concern as whether the mother would survive the delivery. DeGarmo and Davidson (1978) proposed that if the father is with the mother throughout childbirth, he will know what is happening, will not be apprehensive about the unknown as he sits in the waiting room. Another point worth noting is the account of a woman whose newborn died, in which she relates the comforting presence of her husband in the delivery room. She did not have to explain the circumstances of the death, due to the father "being there" all the time (Breuer 1976).

The Father's Interaction with the Newborn

There is strong support of the belief that a relationship exists between a father's participation in the birth event and his subsequent interactions with the newborn infant. There is evidence to indicate a strong relationship between increased exposure of the male to the newborn and the subsequent development of positive father-infant interactions (Greenberg and Morris 1974). A concept called "engrossment" was described in terms of certain behaviors fathers exhibited to demonstrate their complete attention to the infant as if "engrossed by the baby's presence." Engrossment is characterized by visual and tactile stimulations to the newborn, ability to differentiate the baby's distinct features, perception of the infant as "perfect" versus perceptions of awkwardness, expressing sensations of feeling "high or elation" to the baby's birth, and increased self-esteem when with the newborn. An important correlate was found; fathers who were prepared and participated in the birth had more characteristics of engrossment with their newborns (Greenberg and Morris 1974). Reiber (1976) also had data to support this, demonstrating that fathers who were prepared and participated in the birth had more acceptance of the realities of newborn's behaviors. Leonard (1976) studied new fathers the second day after the baby's birth and found that men who had more positive attitudes toward the newborn were characterized by having had more exposure to children, had participated in the pregnancy, and were more involved in the postpartal care of the baby in the hospital.

Fathers and Cesarean Births

Most of the studies reviewed here were based on men's responses when birth is a vaginal process. The literature which explores a father's reaction during the cesarean birth is scarce and almost non-existent. Affonso and Stichler (1978) obtained some data indirectly by interviewing 105 women on how they perceived their husbands felt about cesarean birth. Although data can only offer speculation, it is interesting to note an overwhelming majority of women wanted their husbands in attendance at the birth event for a variety of reasons--from being supportive to reassuring them that the correct baby was removed from their uterus (when they were under general anesthesia and could not guarantee this fact). When husbands were not allowed to participate, women expressed feelings of disappointment, sadness, anger, and even used the word "depression": Women were asked to comment on what made a cesarean a harder or easier birth experience, and the lack of husband participation in witnessing and attending the cesarean event was an overwhelming reason for the cesarean childbirth being a "harder, less satisfying, and disappointing experience (Affonso and Stichler 1978, p. 92)." In another study, Leonard (1976) reported fathers whose babies were delivered by cesarean had more positive feelings about their newborns as contrasted to their vaginal counterparts. He attributes this to the male's perception of this type of delivery as being more abnormal, difficult, crisis event; that once the baby arrived, they were relieved their baby was out of danger.

Clearly more data are necessary to examine the impact of cesarean childbirth on fathers. It is no longer adequate to interview

women on what they perceive their husband's reactions to be. Nash (1965) commented that too many studies on fathers have been done using the mother's report. Frequently, there is little agreement between the comments made by women with those made by men. It is "necessary to study fathers themselves rather than studying their wive's perception of their role (Nash 1965, p. 289)." This study attempts to do that.

Specific Aims and Objectives

The specific objectives of this study were the exploration of the perceptions, feelings, and reactions of the father regarding:

1. Knowledge regarding the purpose of the cesarean
2. Preparation for the cesarean birth
3. Feelings and reactions to having a cesarean childbirth
4. Perception of the birth as being associated with a surgical event
5. Concern and fear for his women, baby, and himself
6. Perception of the impact or consequences of the cesarean birth on his woman, baby, and himself
7. Perception of the similarities and/or differences between cesarean birth and vaginal birth
8. Perception of which aspects of the birth experience were satisfying versus events which were stressful

Investigation of father's reactions to cesarean birth of their children should clarify several issues:

1. For too long in American society the role of men during the birth experience has been minimized, ridiculed, or ignored. This was

vividly expressed by Simmons (1962, p. 34) who stated "We moderns are about the only people on earth who prescribe for the father an idle, nervous, inconsequential role in this critical period." Societal changes, such as the father having to work away from home, rapidly led to the father slipping into the role of the forgotten man (Hines 1971), and the vagueness of the father's role became magnified during the birth event. However, men are rapidly becoming more involved in childcare activities, especially as women's roles expand and undergo dramatic changes. Men also are rapidly expressing their interest and desire to be active participants in childbirth and not mere observers as had once been accepted to be the norm. Thus, understanding of the reactions of men to childbirth experiences should be increased. Attempts to achieve this understanding have been accomplished with vaginal births, but no attempt has been made to explore such reactions when birth is abdominal or cesarean. The reactions of men may provide new insights into the development of the paternal role and the male's subsequent interaction with his new infant and other family members.

2. The following excerpts from a survey of the literature indicate further information regarding the role of the father in the birth experience.

> The current literature tends to minimize the significance of any possible psychological response specifically called fatherliness. This author would challenge a concept that implies the role of father is a psychologically foreign one (Josselyn 1956, p. 264).

> A great deal of research has been done on the mother-child relationship, but much of this is of such a nature as to give the impression that the father does not exist, that he does not matter, or that his role will be studied and discussed by someone else at some other time (Layman 1961, p. 107).

> But when one compares the output in many other areas of psychology, one must feel that this topic of fathers and their role in child development has received very much less attention than it deserves (Nash 1965, p. 288).

3. Cesarean childbirth is rapidly becoming a more acceptable mode for birth in obstetrical care rather than an extraordinary intervention with extreme hazards as it was in the past. Frequently, cesarean childbirth is regarded as the optimal choice and elected to ensure optimal outcomes to mothers and babies (Jones 1976). However, as more and more studies focus on the response of men during childbirth, the focus continues to be primarily on the vaginal birth event. At the present time, no study has been reported exploring the psychological impact on men when birth is by cesarean method.

4. Fathers' responses to their fears and concerns, to what feelings were generated by such a mode for birth, and their identification of stressful versus satisfying situations have clinical implications. Such data are currently not available despite efforts to collect the information utilizing systematic methods. Currently available are comments made by individual men who expressed their reactions to the birth of their babies. More systematic data are needed in order to permit the birth environment to have a more positive impact on fathers. Health professionals can utilize the data obtained to assess and reevaluate the method by which cesarean births presently occur. Modifications could then be made in the health care system which would allow this type of birth experience to be a meaningful event to the father and to society.

5. Hypotheses are generated for future studies in which more sophisticated methodological approaches would be employed to ensure reliability and validity of conclusions made.

CHAPTER 2

METHOD OF RESEARCH

In order to identify the psychological impact of cesarean childbirth on fathers, exploratory interviews were utilized. The interview method was selected since there are not studies in this area to generate specific hypotheses and since the intent was to discover new ideas and data about the topic area.

The interviewing process was selected because it provided the most effective means to obtain information regarding the emotional impact on fathers to this mode of childbirth. When data are desired regarding how people feel, what they experience, what their emotions and motives are, "why not ask them (Allport 1942, p. 37)."

Setting of the Study

Contact was made in recruiting fathers for informed consent by approaching the man, or his wife, and/or physician in the hospital setting in which the cesarean birth occurred. This setting was selected because it provided the most facilitative means to identify men who had a cesarean birth experience. Permission to conduct the study was also obtained by the hospital's protocol for research endeavors. This allowed the obstetrical community an opportunity to become aware of the nature of the study and reduced the potential for any communication problems which might occur as a result of the impact the study could generate while in progress. Participating fathers were given the

opportunity to select one of two settings in which the interview was conducted: the hospital setting or his home environment. Only 16% of the sample (8 fathers) were interviewed in their homes, the remaining 84% (42 fathers) were conducted in the hospital. These two options were chosen because, during the pilot study phase, all fathers stated such an option should be available so that men could choose a setting more convenient to them rather than convenient only for the interviewer.

Selection of the Sample

Men (N=50) whose women delivered by the cesarean method, and who consented to participate during the period the study was conducted, constituted the sample. No differentiation was made on the basis of age, ethnicity, marital status, or educational background in terms of recruitment of the fathers. Fathers who were able to speak English were recruited to ensure verbal communication with the interviewer.

Conduct of the Pilot Study

A pilot study was conducted on a small group of selected fathers who had experienced a cesarean birth event in order to: (1) do a general assessment of the topic to help transform the initially vague problem area into a more precise, meaningful one in which relevant variables could emerge, and (2) help define the data-collection tool to ensure greater relevancy.

The pilot study was conducted in two phases. The first phase consisted of home interviews of four fathers to assess their general responses to the births of their babies by cesarean. The interview was unstructured, and the father was told only of the topic area in broad

terms. Fathers were told that the investigator would be taking brief notes, but no verbatim record was attempted. Each of the four fathers freely expressed their feelings, thoughts, and perceptions, with each interview taking approximately 2-1/2 hours. Fathers eagerly verbalized their feelings and very little input of questions, comments, or clarifications was required. From these four initial interviews, the investigator developed questions based on the common themes the four men had highlighted. This became the basis by which the first draft of the data collection tool was developed. This first tool consisted primarily of multiple choice-type questions and resembled a questionnaire.

The second phase of the pilot study consisted of sharing the drafted questionnaire with a different set of four fathers who had cesarean birth experiences. The four fathers were asked to respond specifically to the drafted tool and to critique or comment on the content, format, and manner in which the study would be conducted if such a questionnaire was used. All four fathers overwhelmingly stated that the content was appropriate, but the format of a questionnaire was too limiting. The four men indicated that the questionnaire did not allow the male any freedom to share what he desired to address, or to express his feelings in a unique way. The four men were specifically asked if open-ended questions would be more helpful in encouraging fathers to express themselves and they all agreed. Thus, this second phase in the pilot study was crucial in helping to shape the final data collection tool. The pilot study also had additional benefits in that fathers made suggestions as to the best setting for the study, provided insights into the length of time the interview might demand, and which content

areas were likely to encourage more verbal expression than others. As a result, the final tool consisted of numerous deletions and additions along with the use of more than one type of question.

Formulation of the Interview Guidelines

The completed interview guidelines can be found in the Appendix and consisted of the following parts.

1. General information to identify the father's age, ethnicity, marital status, occupation, and the order of the present cesarean birth (first or repeat experience)
2. The father's preparation for the cesarean birth
3. The father's sources and nature of knowledge regarding the cesarean childbirth
4. The father's feelings about having a cesarean childbirth
5. The father's perceptions regarding the association of cesarean births with a surgical procedure
6. The father's perceptions of the impact and consequences of a cesarean birth on his woman, the baby, and himself
7. The father's concerns and fears for his woman, the baby, and himself
8. The father's comparison of a vaginal birth with a cesarean birth
9. The father's perceptions of events which were satisfying and those which were stressful during the cesarean birth experience

The interview guideline consisted of several types of questions to which fathers were asked to respond. The rationale for the use of these various types is discussed below.

Fixed-alternative Questions

Parts 1 and 2 of the interview guidelines consisted predominantly of multiple choice questions in which the alternatives have been

predetermined by the investigator. They were closed questions. Such questions were simple to administer, easily "standardizable," and quick and inexpensive to analyze (Selltiz et al. 1963). The nature of the questions in these two parts were that basic information and knowledge were assessed, rather than feelings and perceptions, so that the convenience of using fixed-alternative questions is appropriate.

Open-ended Questions

The majority of the questions in the remaining parts of the interview were open-ended in nature. The predominant use of such questions was supported by the belief that open-ended questions are best used for exploring feelings and motives because they allow the subject considerable freedom in response; the respondent is given the opportunity to answer in his own frame of reference; and the interviewer is permitted to see clarification of responses through non-directional probes (Selltiz et al. 1963).

Combination of Check-answer and Free-answer Method

This consisted of an initial check-answer part immediately followed by a free-answer part which allowed the expansion of the meaning for the check-answer, and the freedom to identify answers not identified previously. Throughout selected parts of the interview guidelines, the words "specify" and "other" were used to allow free answers. Selltiz et al. (1963) stated this combination achieves the best results because the free answer allows more accuracy and reduces the possibility of sacrificing meaningful information. This combination check-answer and

free-answer method was especially prominent in Part 5 when the major theme of cesarean and its association with surgery was addressed.

Semantic Differential Techniques

This technique involves a standardized method for measuring meaning and also includes a scale method which can determine the number and nature of factors entering into semantic description and judgment through operations such as factor analysis. Fathers were instructed to check the position on a seven-point scale which represented the direction and intensity of their judgment of the bipolar adjectives being presented. The rationale for using this method is that the meaning of a particular concept to the individual father can be specified quantitatively (Osgood 1969). This technique was used in Part 8 to assess the father's comparisons of vaginal with cesarean birth, as well as in assessing his feelings prior to and after the cesarean birth was completed.

Data Collection

Data was collected utilizing the interview guidelines. The interviewer wrote down the father's verbal comments as close to verbatim as possible. Each interview took approximately one hour. Some interviews were longer, dependent on the degree of expression the father engaged in regarding the events surrounding the birth. The exact length of the interview was determined by the father's ability and desire to verbally express his responses. The interview occurred within 2-10 days after the cesarean birth in an attempt to ascertain a father's initial

emotional reactions to the childbirth event. The exact date of the interview was chosen by the father for his convenience.

Analysis of the Data

Data were analyzed according to the type of question utilized. Fixed-alternative questions were tabulated for frequency and percentages. The majority of these questions assessed general information relating to the father's background (Part 1), his preparation (Part 2), and knowledge (Part 3) of the cesarean birth event; they constituted demographic variables of the sample. Cross-tabulations were obtained and chi-square analysis was done to determine if a systematic relationship existed between two variables. Cross-tabulation involves a joint frequency distribution of cases according to two or more classificatory variables, and these joint frequency distributions can then be analyzed by certain tests of significance such as chi-square analysis (Nie et al. 1970). Nine fixed-alternative questions were selected for cross-tabulation to elicit chi-square analysis: (1) Age (2) Education (3) Ethnicity (4) Occupation (9) Rank order of cesarean (10) Witnessed the birth (12) How soon discovered about a cesarean birth (14) Adequate time to prepare and (20) Attended classes to prepare. These nine demographic variables were each cross-tabulated with the nineteen remaining variables identified in the interview questions. Four demographic variables (Questions 3, 9, 10, and 14) were also cross-tabulated with each of the bipolar adjectives in the semantic differential technique which compared the two modes of birth and assessed feelings prior to and after the cesarean birth.

Open-ended questions constituted the majority and were coded for categories and tabulated for frequency count and percentages. This type of analysis was considered appropriate and fulfilled the research purpose because "Coding is the technical procedure by which such data are categorized; raw data are transformed into symbols that may be tabulated and counted (Selltiz et al. 1963, pp. 50, 401)."

The check-answer questions were tabulated while the free-answer questions were coded and tabulated. The data obtained from these questions indicated whether appropriate hypotheses could be formulated which would then be worthy of investigation in future research efforts. Most of the combination check-answer/free-answer questions related to the association of cesarean birth with surgery. Currently, the only information which suggests an existing relationship between surgery and cesarean births are the verbal data obtained from individual fathers who elected to comment on their cesarean childbirth experience.

Four questions employed the semantic differential technique. Two questions focused on the exploration of fathers' feelings when they initially discovered the cesarean was to occur (Question 23), and their feelings now that the birth is over (Question 24). Two questions focused on father's descriptions of the birth process when vaginal (Question 41), and cesarean (Question 42). A profile of the mean and mode responses was obtained. Analyses of t-tests were done to assess differences in means between Questions 23 and 24 and Questions 41 and 42.

CHAPTER 3

RESULTS

Characteristics of the Sample

The sample was composed of fifty fathers who were able to communicate their responses verbally in English and who completed the various checklists. The fathers ranged in age from 19 to 47, with a mean age of 29 years. Their educational level ranged from tenth grade to having a doctoral degree, with a bimodal frequency for high school graduates (N=15), and fathers who had some college experience but did not complete degree requirements (N-15). Anglo-American fathers comprised 62% of the sample; 30% were Mexican-Americans; 4% were Black-Americans; and 4% were Oriental-Americans. Their occupations were classified according to the Two-Factor Index for Social Position (Hollingshead and Redlich 1958); the mode was for the skilled manual category. Appendix B identifies the various occupations and their classifications. All fathers were married. For 68% this was the birth of their first child; 20%, the birth of a second baby; 6%, the third baby; another 6% were having their fourth child. This was the first cesarean childbirth for 78%; the second cesarean event for 18%; the third cesarean for 4%. For 64% of the fathers, this was both their first cesarean event as well as the birth of their first child; 22% were having a repeat cesarean experience; 14% had other children born vaginally, but this was the first child born cesarean. A large majority (82%) of the fathers both desired to witness the cesarean

birth event and were present to watch the birth; 18% did not watch the cesarean birth, of which 12% had no desire to do so; 4% did not care if they did or did not; and one father desired to watch the birth but did not have the opportunity to do so. These characteristics are summarized in Appendix A.

Interview Questions: Classification and Frequency of Responses

Preparatory Time before the Surgical Birth Event

Fathers were assessed for the length of time they had available to prepare for the reality of a cesarean birth event. For 60%, the fathers discovered that a cesarean would happen within a two-hour period, with 34% indicating they knew less than one hour and 26% knew within one to two hours. Only the fathers who were experiencing a repeat cesarean birth event (22%) stated they knew earlier in the pregnancy. Other fathers (8%) knew within a twenty-four hour period, some (4%) within one week, and 6% knew for more than one week. The two-hour period for most fathers appears insufficient time to grasp what is to occur and to cope with the reality of a surgical birth. However, when fathers were asked if they had adequate time to prepare for the cesarean birth, the majority responded yes (66%) while 34% stated no. Many of the fathers who responded affirmatively also commented that regardless of whether a man felt prepared or not prepared, there was no choice but to force one's self to accept the cesarean because circumstances dictated the need for such a birth. Such a forced acceptance led many

fathers to answer yes to the question assessing adequate time, because the degree of preparedness did not appear relevant to the father.

Suggestions to Help Fathers Be Better Prepared

Many fathers (52%) described a need for more information to familiarize themselves with the cesarean procedure and the events to be anticipated prior to, during, and after the cesarean birth. Some fathers (20%) expressed a desire to be told earlier that the possibility of a cesarean could exist for any pregnant couple. Others fathers (88%) suggested efforts be made to help develop more positive attitudes in the public toward cesarean childbirths because of the frequent occurrence of such a birth in this modern day. Another 8% commented that fathers need to accept the reality of a cesarean because they had no choice if circumstances dictated such a birth in order to protect the woman and baby. No suggestions were offered by 8% of the fathers, and 4% of the fathers stated that a previous cesarean was helpful for preparing them for this repeat cesearean.

Knowledge Base of Fathers

Why a Need for the Cesarean and How Information Was Obtained

The majority of fathers (82%) were told by the physician that a cesarean delivery was going to happen, 8% discovered it from their wives, 6% were told by a nurse, and 4% of the fathers had not known it was about to happen because no one informed them. All of the fathers (100%) were able to provide a reason why their baby had to be born

cesarean. The modal reason given was having a repeat cesarean (24%), followed by the baby's abnormal position (18%), lack of labor progress (18%), fetal distress (16%), maternal complications (12%), and feto-pelvic dysproportion (12%).

When fathers were asked how they learned about cesarean births, 34% credited childbirth education classes, 22% obtained information from the physician, 16% learned of such a delivery in school, 8% credited relatives and family members, 6% learned from their wives, another 6% obtained information from books and magazines, one father credited a nurse, and one father stated he didn't learn about cesareans from anyone. Some type of childbirth education classes were attended by 64% of the fathers, while 36% did not attend any type of class. Of the fathers who attended class, 40% stated the class was very helpful because they saw films and slides of a cesarean delivery; 12% stated the classes were somewhat helpful because they used some of the techniques advocated for vaginal delivery, such as breathing exercises; and 12% did not find the classes helpful at all because the focus was largely on the vaginal birth process.

Description of a Cesarean Birth

When fathers were asked to describe a cesarean birth, 56% elaborated the involvement of a surgical technique into the uterus for removal of the baby; 20% made reference to an "opening into the abdomen or stomach" for removal of the baby; 12% described a delivery method brought about by maternal or fetal complication which was mandatory to save the life of mother and/or baby; 8% described an unnatural, abnormal

delivery. One father (2%) commented that such a delivery was easier because the long labor was bypassed; and another father was unable to provide any descriptions, stating he "knew nothing about cesareans at all."

Anatomical Landmarks

Fathers were also asked if they could locate the area of surgical entry and eventual birth of the baby on the woman's anatomy. They were given a drawing of a female body and asked to place a mark where they thought the baby was born during a cesarean process. All of the fathers were able to locate the incisional site, congruent with the type of incision performed on the woman. Figure 1 identifies the task that fathers were given regarding location of the anatomical landmarks and the results obtained from the sample.

Suggestions to Help Fathers Gain More Knowledge

Many fathers (42%) suggested it would be helpful to attend some type of class or program where cesarean births were discussed in detail. Fathers commented that the present childbirth education classes needed to devote more time to discussion on the cesarean mode of delivery so that all expectant couples attending could begin to anticipate the possibility of a cesarean as early as possible during the pregnancy. Some fathers (34%) elaborated that men needed to become more assertive in seeking information by directing questions to physicians and nurses during the prenatal period. Another suggestion by fathers (18%) focused on the need to raise the public's awareness of cesarean births by making more literature available, providing opportunities to view films on the

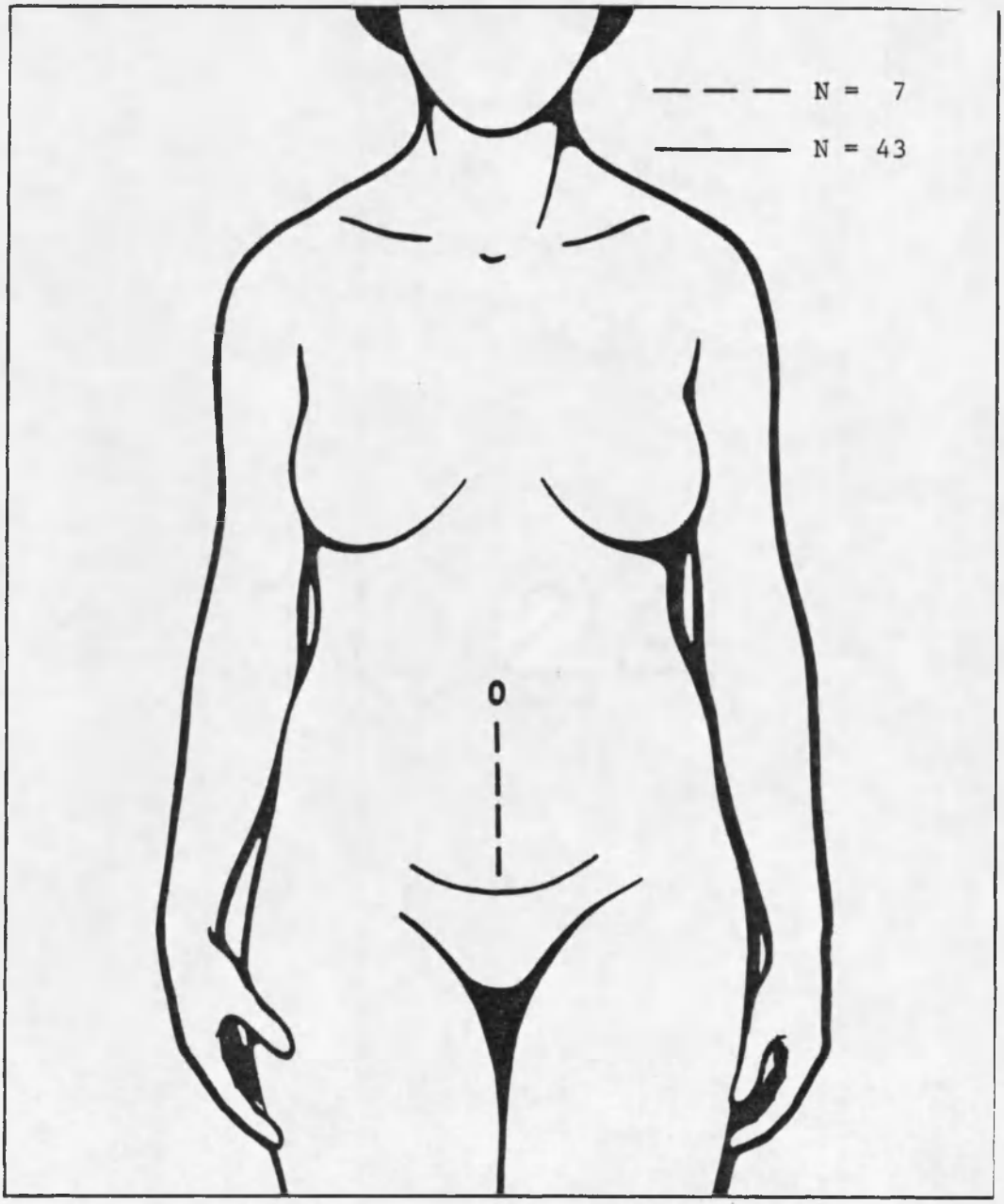

Figure 1. The Anatomical Location of a Cesarean Birth.

procedure, announcing that the possibility of a cesarean exists for every pregnancy, and advertising that cesarean deliveries are a more common mode of birth in order to minimize the feelings of being deviants from the norm when its occurrence is unexpected. A small group (4%) felt that having had a previous cesarean was helpful to increase their knowledge because they knew what to expect the second time.

Feelings Generated by the Cesarean Birth Experience

Fathers were told during this phase of the interview that many men have shared feelings of being happy and relieved; angry and frustrated; sad and disappointed; or worried and concerned. The individual father was then asked, "How was it for you? Did you have any of these feelings and, if so, tell me why." Feelings of being happy and relieved were shared by 54% of the fathers who felt the positive outcome of both mother and baby doing well was the primary reason. Another reason given by fathers (38%) was that they were relieved that the entire event was over, especially because the ordeal of labor (pain and suffering) and the possibility of something going wrong had all been terminated once a decision was made to do a cesarean, and good outcomes were achieved. For 12% of the fathers, happy feelings were related to being present in the delivery room, witnessing the birth, and supporting the mother. One father (2%) was pleased with the baby's sex, and two fathers (4%) stated that they did not feel any sense of happiness or relief because they did not want a cesarean delivery performed.

The majority of fathers (76%) did not have any feeling of being angry and frustrated about the cesarean birth event. The fathers who

did have such feelings provided reasons such as not expecting a cesarean along with preference for a vaginal birth process (12%); lack of knowledge about the impending cesarean, primarily due to the hospital staff's practices of not explaining events or procedures (10%); and not being allowed to participate or witness the birth (one father).

A minority of fathers (18%) had feelings of being sad and disappointed. Reasons given were: a sense of loss over the desired natural, normal, vaginal birth process (14%); sadness that the wife had to experience a harder birth, longer and more painful recovery (6%); and the inconsistencies from the hospital staff's behavior, such as their disagreements among each other (2%).

Reasons given for feelings of being worried and concerned were the generalized anxiety about the outcome for wife and baby (50%); worries about the surgical impact of the birth on the wife and baby because surgery was construed to be a major event permeated with additional risks (34%); and watching the various procedures associated with a cesarean birth, such as the epidural, seeing the incision, and other aspects of the surgical procedures (4%). One father commented on feeling overwhelmed by the hectic pace, which rapidly intensified his worries, when a decision was made to perform a cesarean. No feelings of being worried and concerned were expressed by 14% of the fathers. They stated that they felt confident because the expertise of the doctors and nurses reassured them that their wives were in the good hands of numerous skilled professionals.

Cesarean Childbirth and its Relationship to Surgery

All fathers (100%) answered affirmatively that a cesarean birth is like surgery. When asked to give reasons for the relationship between a cesarean birth and surgery, the following were elicited in order of descending frequency: 32% commented that such a birth had increased risks because a surgical procedure was involved; 30% described a common, safe, fast surgery and were impressed with the medical/technological capabilities witnessed during the birth which made them glad such a surgical means for delivery was readily available; 22% stated there was no choice in the mode for birth because surgical intervention was mandatory in the similar way that other surgeries are necessary and the individual has no choice in the matter; 8% commented that a cesarean was different from other surgeries because there was a birthing quality present in terms of a production instead of removal of diseased organs; another 8% also commented on how the surgical procedure for birth created different emotional reactions from that of a vaginal delivery and such increased emotional upsets were similar to those seen when someone has to have surgery.

Fathers were also asked to review a list and check all the items which they agreed contributed to the relationship between a cesarean delivery and that of surgery. Appendix C contains the results obtained in terms of the items and their frequency of reponse.

Impact of Cesarean Delivery on the Participants: Women, Newborns, and Fathers

Half of the fathers (50%) felt a cesarean childbirth affected a woman by creating more emotional upsets for her and increased

negative psychological consequences such as not feeling fulfilled as a woman. Reasons given were: she was not able to deliver the normal, natural way; she did not feel actively involved in effectively initiating the birth; was not able to interact and "bond" with the baby immediately after birth because the surgical procedure interfered with sponteneous behavioral interactions. Another 32% of the fathers indicated that a cesarean affected the woman's physical condition because she was confronted with more pain, loss of blood, fatigue, and longer recovery. Such fathers felt a woman's physiological well-being was in more jeopardy because of a cesarean procedure in contrast to smoother, faster recovery with a vaginal birth. A minority of fathers (8%) presented an interesting view that a cesarean could increase a woman's self-concept because she would realize how much strength she had in coping with additional burdens imposed by the surgery. Other fathers (10%) stated that a cesarean had a neutral effect on a woman because the benefits and risks were similar to that of a vaginal delivery and the ultimate goal of producing a baby was the same, regardless of vaginal or cesarean procedure.

The majority of fathers (60%) indicated a cesarean was a more beneficial, less traumatic mode of birth for a newborn because it was faster and safer. Many fathers commented that their "infant's heads were better shaped" or "the infants skin and face did not look bruised" as contrasted to babies born vaginally was proof of less trauma. Opposite viewpoints were held by 14% of the fathers who stated a cesarean was more traumatic, dangerous, less beneficial for the baby because an abrupt, unnatural way to be born had occurred. One father commented on

the strain for a newborn to be born either way, cesarean or vaginally, while 20% commented that a cesarean had no effect on a newborn, and one father stated he did not know how to answer the question.

All respondents had comments on how a cesarean affected the father. Comments on having increased responsibility in terms of household chores, child-care at home, and increased financial expenses were made by 28% of the fathers who attributed this to the woman's longer recovery and the increased costs incurred by the surgical mode of birth. Some fathers (26%) commented that a cesarean created more emotional upsets for the father. A variety of reasons were given: inability to understand the need for the cesarean, preference for a vaginal, natural birth, feeling a sense of loss for all the preparations made in anticipation for a vaginal delivery, being forced to cope with an increase in physical and emotional needs of the mother, sadness that the mother had to experience a more difficult birth process. Another 24% of the fathers commented that a cesarean created more worries and concerns because of surgery and its subsequent consequences such as complications, longer recovery, difficulties with healing of the incision and its eventual scar. Other fathers (22%) described a cesarean as a more comfortable mode of delivery for the father. Reasons given were: the hassles of labor were avoided; more respect and love were generated for the woman because she had to cope with the additional surgery; faster relief was obtained from the pain associated with labor because the birth process was rapid.

Concerns for Mother, Newborn, and Father

When fathers were asked how the cesarean birth generated concerns for their wives, 66% made statements about the woman's physical well-being and recovery from the surgical intervention. Examples given included pain, and the possibility of infection and other complications increased by surgery. Another 20% described concerns about their wife's emotional reactions, such as the possibility of her grieving the loss of an expected, natural, vaginal birth, the delivery of subsequent babies via cesarean, and other long-term impacts such as resumption of sexual activities without undue discomforts. Another 14% of the fathers emphasized they had no concerns for their wife as a result of the cesarean birth because the physician had everything in control and they felt the cesarean was a relatively easy and safe procedure. When asked why they felt this to be so, they commented that the physician had told them cesareans were safe, quicker, and a more controlled way to deliver a baby.

When asked for concerns related to the newborn baby, 58% responded they were concerned about the baby's general physical well-being; 12% described concerns about the possible dangers that would occur during the birth, such as being cut, having trouble being removed from the uterus, or bad effects from the anesthesia; 30% of the fathers responded that they had no concerns for their babies as a result of the infant being born cesarean.

What concerns did a cesarean create for the father? The modal response (40%) was none. A cesarean created more emotional upsets for the father was elicited in 26% of the sample. Reasons given were: it

was more stressful on the wife and baby, there would be more worries about the wife's emotional reactions, there would be more unknown factors to cope with after the birth, such as interferences with healthy recovery of both the mother and the infant. Another 14% of the fathers commented on concerns regarding the father's increased responsibilities with the care of the household, other children, and increased costs. Other fathers (8%) were concerned about the dangers their wives and infants were exposed to because of the surgical procedure. Another 6% of the fathers has been concerned about "being in the delivery room and witnessing the baby's birth," an event they had planned and expected with a vaginal birth but now worried if this would be possible since a decision for a cesarean was made. Another 6% of the fathers had worried whether they would be able to tolerate viewing the birth because they were prepared to witness a vaginal birth and were not prepared to witness a surgical procedure.

Comparison between Cesarean and Vaginal Births

When asked whether there was a difference between the two modes of birth, 92% responded yes, 6% stated no, and one father (2%) didn't know. Fathers were also asked to describe how a cesarean differed from a vaginal birth for the woman, the baby, and the father. The responses were as follows: 32% stated the major difference for a woman involved the surgical procedure and its consequences (examples given were the longer recovery, the scar, increased postpartum pains and fears); 32% described how a cesarean created more emotional upsets for the woman because she might feel cheated out of a labor experience or feel she

couldn't bring forth the baby into the world. Comments were also made in reference to the long-term effects of having a bodily scar and interferences in interacting and caring for the new baby. Other fathers (14%) stated a cesarean was an easier birth because the difficulties of labor were eliminated and, as a repeated event, a cesarean was more convenient in terms of planning, control, and the lack of uncertainty of an impending labor at undesirable times and places. Some fathers (20%) felt there were no differences because each mode involved pain. One father responded that the didn't know how to answer the question.

In assessing the differences for the newborn, 66% of the fathers stated that a cesarean was more beneficial to the baby because the birth process was easier, faster, and less traumatic. Another 30% commented that there were no differences because each mode, vaginal or cesarean, had equal risks and benefits. One father related that a vaginal birth was safer because passage through the birth canal helped the baby to initiate its breathing. Another father commented that a cesarean was an unnatural, abrupt, non-beneficial way to be born.

As to differences between a cesarean and vaginal birth for the father, 36% responded that a cesarean created more worries for the man relative to his wife's recovery, her emotional reactions, and his increased financial burdens. However, 24% felt that a cesarean was an easier delivery than a vaginal because it was faster and eliminated the long waiting period in which suffering and pain would have to be coped with by the father. Such men commented that a repeated cesarean event was more controlled, planned, and smoother for the father because most of the unknown factors were eliminated. Other fathers (14%) expressed

feelings of a more fulfilled participation, being needed by the wife, and more complete satisfaction through a vaginal birth experience because a more active process by the woman and her husband was ensured. One father (2%) described a cesarean birth as creating more emotional upsets because he was not prepared as he was for a vaginal birth; 24% of the fathers responded that there were no differences between the two modes of birth in terms of impact on the father.

When asked how a cesarean and vaginal birth were similar, 72% responded the end result was the same: a baby, new life, was produced; 6% stated both processes involved some degree of pain; one father felt the procedures, personnel, and equipment involved were the same. However, 20% stated that there were absolutely no similarities between the two modes of birth because the differences were too striking. When fathers were asked which mode of delivery they preferred for their wife if given a choice, 60% chose a vaginal birth, 26% preferred a cesarean, and 14% had no preference, stating they could accept whichever means their wife had to have future babies.

Satisfactions and Pleasurable Aspects of a Cesarean Childbirth

Fathers were asked to identify the events of their cesarean birth experience that brought them satisfaction and pleasure. Comments on events which allowed the father to be actively involved in supporting the mother and witnessing the birth of his baby were made by 68% of the fathers. From the 68%, 48% specifically mentioned witnessing the baby's birth to be the highlight; they elaborated on the joys of being the first to see the baby enter the world, holding the infant, telling the

sex to their wife, interacting with the mother and baby, and then transporting the infant in their arms to the nursery. The other 20% described the pleasure of participating in the birth by being in the delivery suite to support the wife and seeing for themselves that the wife emerged in a healthy state from the surgery. Of the remaining 32% of the fathers, 18% responded it was the positive outcome, healthy mother and baby that was most satisfying; 12% commented that the quickness and safety of the cesarean procedure generated a sense of security that the woman's pains and other dangers were to be eliminated more rapidly than if the birth were vaginal. One father commented that the greatest joy was that he got the preferred-sex baby.

Stressful and Frustrating Aspects of Cesarean Childbirth

For 42% of the fathers, events relating to the preparation for and the surgical procedures witnessed were described as generating increased stress and frustration. Examples given were watching the epidural procedure and the numerous sensory experiences that confused and scared the father because he didn't understand what they meant. Examples given of such confusing sensory experiences were: upset at smelling smoke in the operating room; hearing a popping sound during the epidural insertion; seeing the length of the needle used in the epidural; and seeing the baby having to be pulled, tugged, yanked out of the uterus because it appeared to be stuck or there was difficulty in removing it. For 12% of the fathers, the sudden change of events was very stressful, especially the hectic pace that ensued once the decision to perform a cesarean was made. Fathers were upset that there was a long waiting

period in which their wives received minimal attention because the attitude of the staff was "let's wait and see," followed rapidly by a state of confusion and even chaos once a cesarean was going to happen. Another 12% commented on how the behavior of the medical staff generated frustrations, especially when rude comments were flippantly made by nurses or inconsistencies were observed between what the physicians and nurses said.

Another stressful, frustrating event was the staff's obstruction of the father's view during the birth process. Fathers commented that staff behaved as if oblivious to their presence and desire to watch their babies being born. Other fathers (8%) commented they were stressed by their wives' less-than-positive emotional reactions after the cesarean birth, particularly in relation to their expressions of pain, suffering, and disappointment about not being able to have a natural, vaginal birth. One father commented that he was stressed by his baby's physical condition because the baby had to go into the intensive care nursery in spite of planned, repeat cesarean. For 24% of the fathers, there was nothing about the cesarean childbirth which made them feel upset or uncomfortable. These fathers expressed pleasure with how the entire event was handled by the staff, particularly the expertise of the physician.

Suggestions to Make Cesarean Childbirth More Meaningful

All but one of the fathers had suggestions to offer. Many (54%) suggested that men need to be more actively involved in the cesarean birth event. They described how opportunities needed to be made for

every father to be in the cesarean birth room, if he so desired, to support his wife, see his baby born, and to interact immediately with his wife and baby in the birthing room. Comments on the need for better education for expectant women and men about cesarean childbirth were made by 44%. All of these fathers made pleas that every expectant couple be informed early that the possibility of a cesarean exists for every pregnancy. They also elaborated that information be delivered through various media, such as classes, films, programs, pamphlets, and books, all of which would highlight the preparatory events for a cesarean and what to expect prior to, during, and after the cesarean birth procedure in terms of physical and emotional consequences.

Cross-tabulations of Interview Questions

Tabulated interview questions submitted to a statistical analysis, using the Statistical Package for the Social Sciences (Nie et al. 1970) provided chi-square analysis of the cross-tabulations. Nine of the demographic variables of the sample were cross-tabulated with the nineteen variables assessed by the remainder of the interview questions. The nine demographic variables were the father's age, education, ethnicity, occupation, rank order of the cesarean (first or repeat), whether he watched the cesarean birth, time period discovered a cesarean would happen, whether the father felt he had adequate time to prepare for the reality of a cesarean, and attendance at childbirth classes.

These were cross-tabulated with the remaining variables, examples of which were the description of the cesarean birth, feelings of being happy, sad, frustrated, worried, impact of a cesarean birth on

mother, baby, and father, and events identified to be satisfying or stressful. Of the 80 chi-square values obtained, only eight were statistically significant at the .05 level or less. Because no meaningful pattern was present and because of the possibility that such few significant findings may be due to chance, these were not considered.

Analysis of Semantic Differential

Ratings of Vaginal and Cesarean Childbirths

Two questions (using the semantic differential technique) required the father to rate his feelings about a vaginal and a cesarean birth. Frequencies of response for each of the 20 variables in the ratings of such feelings are presented in Table 1. In order to assess the general direction of the responses in terms of being positive, neutral, or negative in the evaluation of the variable, the frequencies were recoded into a 3-point rating. This was done by summing responses for numbers 1, 2, and 3 to obtain a frequency for responses in a positive direction; summation of responses for number 5, 6, and 7 to obtain a frequency for a negative direction response. These recorded frequencies are found in Table 2 and were used for examining the general direction of the ratings obtained from the fathers.

Pattern in Modal Responses

The modal response obtained for rating a vaginal birth were in a positive direction for fifteen of the twenty variables. The remaining five variables were rated in a negative direction for such evaluations as feeling a vaginal birth was painful instead of comfortable, slow

Table 1. Frequencies of Responses for Rating of Feelings about Vaginal Births (Numerator) and Cesarean Births (Denominator).*

Positive Adjectives	VB/CB	VB/CB	VB/CB	VB/CB	VB/CB	VB/CB	VB/CB	Negative Adjectives
Natural	37/ 7	6/ 7	3/ 6	3/ 7	0/4	0/6	0/12	Unnatural
Beautiful	28/17	6/ 6	6/11	9/ 7	0/3	1/4	0/ 2	Ugly
Clean	25/26	7/12	0/ 3	13/ 5	2/1	2/0	0/ 3	Dirty
Normal	37/ 9	4/ 4	4/ 4	4/15	1/4	0/4	0/10	Abnormal
Comfortable	2/ 7	2/ 8	1/ 7	8/ 4	8/3	10/3	19/18	Painful
Healthy	26/22	10/ 5	6/ 8	5/ 8	2/0	0/3	0/ 3	Sick
Pleasant	10/ 7	6/ 7	7/ 4	12/14	8/4	1/6	6/ 7	Unpleasant
Safe	8/ 8	10/ 9	8/ 8	12/ 9	7/5	2/5	3/ 6	Dangerous
Fair	24/15	7/ 7	4/ 4	13/12	0/5	2/2	0/ 5	Unfair
Personal	34/24	7/13	2/ 4	6/ 3	0/2	1/3	0/ 1	Impersonal
Sweet	10/13	15/ 8	7/ 3	15/18	1/5	1/1	1/ 1	Bitter
Fast	6/31	4/ 6	3/ 6	16/ 3	6/0	8/2	7/ 1	Slow
Human	32/20	8/ 6	3/ 6	5/ 7	0/4	0/2	2/ 4	Mechanical
Active	27/14	8/ 4	4/ 9	10/10	0/2	0/7	1/ 3	Passive
Total-Involvement	26/17	9/ 9	5/ 6	6/ 5	0/4	1/4	1/ 5	Lack of Involvement
Short	2/26	2/ 7	4/ 2	19/10	2/2	10/1	11/ 2	Long
Delicate	5/ 8	5/ 7	2/ 4	17/14	6/4	5/2	10/10	Rugged
Full	16/13	10/ 6	6/ 7	15/12	0/4	0/1	1/ 3	Empty
Smooth	5/11	1/ 7	2/ 4	14/11	7/4	12/4	8/ 9	Rough
Bright	16/11	9/ 7	9/ 9	14/13	0/2	1/3	1/ 4	Dark

*The frequency count does not necessarily equal the total sample due to omissions by some fathers in rating selected bi-polar adjectives.

Table 2. Recorded Frequencies for Ratings of Vaginal Births (Numerator) and Cesarean Births (Denominator).

Bi-Polar Adjectives	Positive Direction (sum of responses 1,2,3)	Neutral Direction (response 4)	Negative Direction (sum of responses 5,6,7)
Natural-Unnatural	46/20	3/ 7	0/22
Beautiful-Ugly	40/34	9/ 7	1/ 9
Clean-Dirty	32/41	13/ 7	4/ 4
Normal-Abnormal	45/17	4/15	1/18
Comfortable-Painful	5/22	8/ 4	37/24
Healthy-Sick	42/35	5/ 8	2/ 6
Pleasant-Unpleasant	23/18	12/14	15/17
Safe-Dangerous	26/25	12/ 9	12/16
Fair-Unfair	35/26	13/12	2/12
Personal	43/41	6/ 3	1/ 6
Sweet-Bitter	32/24	15/18	3/ 7
Fast-Slow	13/43	16/ 3	21/ 3
Human-Mechanical	43/32	5/ 7	2/10
Active-Passive	39/27	10/10	1/12
Total Involvement-Lack of Involvement	40/32	6/ 5	2/13
Short-Long	8/35	19/10	23/ 5
Delicate-Rugged	12/19	17/14	21/16
Full-Empty	32/26	15/12	1/ 8
Smooth-Rough	8/22	14/11	27/17
Bright-Dark	34/27	14/13	2/ 9

instead of fast, long instead of short, rugged instead of delicate, and rough instead of smooth (see Figure 2).

The modal responses in rating a cesarean birth were also in a positive direction for seventeen of the twenty variables. The remaining three variables were rated in a negative direction for evaluating a cesarean birth as more unnatural than natural, abnormal instead of normal, and painful rather than comfortable.

There were several differences in the pattern of modal responses obtained in the rating of selected variables for the two modes of birth. Review of Figure 2 provides a verification of the differences in the frequency distribution related to the modal responses. Fathers in the sample overwhelmingly felt a vaginal birth was natural but were ambivalent between the two extremes of natural versus unnatural in rating a cesarean birth. Although there were responses obtained in a positive direction, the modal response was definitely in the direction of unnatural for a cesarean birth. In terms of evaluation for beautiful versus ugly, a vaginal birth was overwhelmingly rated as beautiful. However, although the modal response for a cesarean was also in the beautiful direction, there were indeed more responses rating a cesarean to be in the ugly direction. Fathers overwhemingly rated a vaginal birth as normal, with only one instance of an "abnormal" rating. There was, however, ambivalence in rating a cesarean birth with approximately equal responses (±2) in all directions of being normal, neutral, as well as in the direction of abnormal. The modal responses were in the abnormal direction. The rating was in favor of a vaginal birth being painful in relation to evaluation for the state of comfort. Although

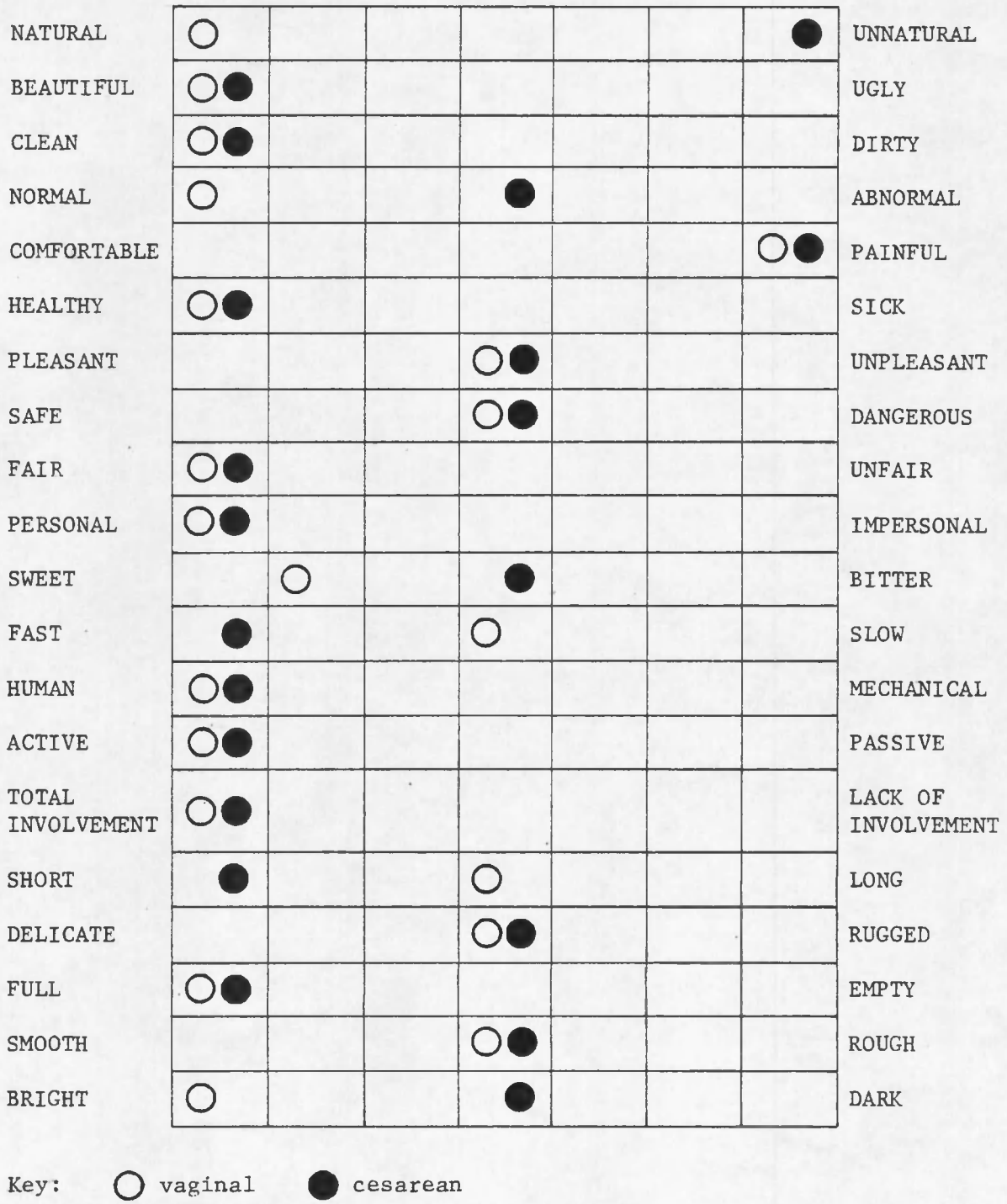

Figure 3. Profile of Modal Responses in Rating a Vaginal Birth and a Cesarean Birth.

there were many responses which rated a cesarean as comfortable, the modal response also was in the painful direction. There appeared to be more frequent ratings of a vaginal birth in the pleasant direction than that obtained for a cesarean birth. A vaginal birth was rated slow as the modal response while a cesarean had a modal response in the fast direction. Likewise, a vaginal birth was rated to be in the long direction but a cesarean was rated to be short. A vaginal birth was also rated to be rugged in the modal response but delicate in the ratings obtained for a cesarean birth. The modal response was also in the opposite direction for the rating of smooth-rough; a vaginal birth was rated to be rough while a cesarean birth was felt to be smooth.

There appeared to be a pattern of a vaginal and cesarean birth having the same direction for a modal response but there were more responses in the opposite direction for rating of one mode of birth versus the other. Such a pattern was obtained for the following variables:

- Both birth methods rated to be fair but more instances of a cesarean rated in the unfair direction
- Both birth methods had modal responses for a safe rating but a cesarean had more responses for the dangerous direction.
- Although a cesarean and a vaginal birth were overwhelmingly rated as personal, more instances of an impersonal rating were obtained for a cesarean birth.
- A cesarean and vaginal birth were rated to be sweet but the vaginal birth had a substantially higher frequency for the sweet rating and there were more instances of a cesarean birth rated as bitter than obtained for a vaginal birth.

- Both were rated with a modal response in the human direction, but a vaginal birth had higher frequency in the human direction and a cesarean had the mechanical direction.
- The modal response was in the active direction for both, but, again, there was a higher frequency of a vaginal birth rated as active and a cesarean substantially rated higher in the passive direction.
- Similarly, a vaginal birth was rated to be more full, bright, and having total involvement in contrast to a cesarean birth which had higher ratings in the neutral to opposite direction of such adjectives.

Indices of Variables in the Frequency Distribution

There appeared to be a difference in the degree of variability obtained as fathers rated a vaginal birth as contrasted to their rating for a cesarean. The variance was unanimously greater for all variables with one exception (rating of fast-slow) when a cesarean birth was rated (see Table 3). Thus, fathers in this sample appeared to differ more greatly from each other and the mean as they rated a cesarean birth but were more homogeneous in their rating of a vaginal birth.

Significance in Mean Differences (t-Test Analysis)

Table 4 gives a profile of the means obtained for each bi-polar adjective rated by the semantic differential in the evaluation of a vaginal and a cesarean birth. The t-test was utilized to determine significant differences in the means obtained for the rating of each birth mode. The t-values were obtained by analysis procedures utilized in the

Table 3. Variance for Ratings of a Vaginal Birth and a Cesarean Birth

Bi-polar Adjectives	Variance	
	Vaginal	Cesarean
Natural-Unnatural	.75	4.80
Beautiful-Ugly	1.75	3.26
Clean-Dirty	2.55	2.70
Normal-Abnormal	1.14	4.30
Comfortable-Painful	2.78	5.54
Healthy-Sick	1.45	3.49
Pleasant-Unpleasant	3.63	3.87
Safe-Dangerous	2.88	3.86
Fair-Unfair	2.20	3.97
Personal-Impersonal	1.44	2.64
Sweet-Bitter	1.97	2.56
Fast-Slow	3.47	2.19
Human-Mechanical	2.11	3.94
Active-Passive	1.95	3.84
Total Involvement-Lack of Involvement	2.04	4.36
Short-Long	2.80	2.99
Delicate-Rugged	3.58	4.28
Full-Empty	2.00	3.17
Smooth-Rough	3.15	4.67
Bright-Dark	2.12	3.32

Table 4. Mean, Standard Deviation, and t-Test Values for Rating of a Vaginal Birth and a Cesarean Birth.

Bi-Polar Adjectives	Vaginal		Cesarean		t-Test Values
	$\bar{x}$	SD	$\bar{x}$	SD	
Natural-Unnatural	1.42	.86	4.22	2.19	8.22**
Beautiful-Ugly	2.00	1.32	2.86	1.80	3.07**
Clean-Dirty	2.30	1.59	2.12	1.65	.75
Normal-Abnormal	1.56	1.07	4.06	2.07	7.39**
Comfortable-Painful	5.48	1.66	4.38	2.35	2.95
Healthy-Sick	1.91	1.20	2.59	1.87	2.23*
Pleasant-Unpleasant	3.57	1.92	4.04	1.96	1.08
Safe-Dangerous	3.36	1.69	3.66	1.96	.87
Fair-Unfair	2.28	1.48	3.22	1.99	2.75**
Personal-Impersonal	1.68	1.20	2.18	1.62	1.91
Sweet-Bitter	2.73	1.38	3.02	1.60	1.06
Fast-Slow	4.22	1.84	1.87	1.48	6.96**
Human-Mechanical	1.83	1.46	2.81	1.98	3.14**
Active-Passive	2.00	1.38	3.30	1.96	3.87**
Total Involvement-Lack of Involvment	2.00	1.42	3.02	2.06	2.98**
Short-Long	4.82	1.67	2.32	1.73	6.85**
Delicate-Rugged	4.38	1.91	3.91	2.07	1.44
Full-Empty	2.50	1.42	3.06	1.78	1.81
Smooth-Rough	4.73	1.77	3.81	2.14	2.64**
Bright-Dark	2.63	1.45	3.26	1.82	2.14*

* $p < .05$

** $p < .01$

Statistical Package for the Social Sciences (Nie et al. 1970) as listed in Table 4. Two-tailed probability tests were used in the Statistical Package for the Social Sciences (SPSS) program, thereby providing t-values indicative only of whether a difference existed without any specification of the expected direction of such differences. Significant t-test values in mean differences at the 0.1 level were obtained for the following bi-polar adjectives: natural-unnatural, beautiful-ugly, normal-abnormal, comfortable-painful, fair-unfair, fast-slow, human-mechanical, active-passive, total involvement-lack of involvement, short-long. Significant t-test values at the .05 level were obtained for ratings of healthy-sick, smooth-rough, and bright-dark.

Chi-square Analysis

Four demographic variables (ethnicity, order of the cesarean, whether the father witnessed the birth, and if he felt prepared) were cross-tabulated with each of the twenty semantic differential bi-polar adjectives for both ratings of a cesarean and vaginal birth. A total of 160 cross-tabulations were done producing 18 results with chi-square values significant at the 0.5 level or less. These are presented in Appendix D for review but are not considered for discussion because of the possibility that such few significant findings may be due to chance as a result of the large number of statistical tests computed.

Rating of Feelings prior to and after the Cesarean Birth Event

Two questions required the father to respond using a semantic differential format in rating his feelings when he first discovered

a cesarean birth was going to happen and then to rate his feelings after it was over. A total of twelve bi-polar adjectives were rated in each of the two semantic differentials.

Pattern in Modal Responses

The same procedures were applied in obtaining a frequency distribution on the raw data and also that of a recoded frequency distribution as described previously. The frequency of responses are found in Table 5 and the recoded frequency distribution indicating a direction of positive, neutral, and negative responses is found in Table 6. The majority of modal responses appeared to change in frequency from a generally negative direction prior to the birth toward a more positive frequency of feelings after the cesarean birth was over (see Figure 3). This was the pattern for six bi-polar adjective ratings as happy-sad, inspired-disappointed, not worried-worried, weak-strong, calm-agitaged, relaxed-tense. There were also instances of frequency changes in feelings from a neutral direction before the birth to a more positive direction after the birth for four bi-polar adjectives as joyful-angry, glad-mad, light-heavy, satisfied-frustrated. There was no change in the frequency for modal responses in ratings of two bi-polar adjectives as feeling relieved-burdened, and valuable-worthless. The direction was positive prior to and after the cesarean birth.

Variability in the Frequency Distribution

Fathers in this sample appeared to be more homogeneous in rating their feelings prior to the cesarean as indicating a more negative direction for modal responses but appeared to differ more greatly

Table 5. Frequencies of Responses for Rating of Feelings prior to (Numerator) and after (Denominator) the Cesarean Birth.*

Positive Adjectives	PCB/ACB	PCB/ACB	PCB/ACB	PCB/ACB	PCB/ACG	PCB/ACG	PCG/ACB	Negative Adjectives
Happy	5/38	0/ 8	8/2	17/ 1	5/0	5/1	10/0	Sad
Inspired	1/21	7/16	3/7	19/ 3	7/1	3/1	10/1	Disappointed
Not Worried	2/21	0/ 9	3/6	10/ 5	4/1	10/3	21/4	Worried
Joyful	3/33	5/ 7	4/5	24/ 3	7/1	1/1	6/0	Angry
Strong	8/22	5/13	5/3	16/ 9	8/0	3/1	5/1	Weak
Glad	6/31	3/11	8/1	21/ 3	3/2	1/1	8/1	Mad
Light	1/10	1/11	4/6	27/15	2/3	5/2	9/1	Heavy
Calm	7/22	6/12	4/4	13/ 2	8/0	5/0	7/0	Agitated
Relieved	7/32	4/10	10/4	11/ 2	5/1	6/0	7/1	Burdened
Satisfied	6/28	6/11	6/5	17/ 3	6/2	3/0	6/1	Frustrated
Relaxed	1/27	2/ 8	1/3	10/ 2	11/4	10/4	15/1	Tense
Valuable	14/25	4/ 8	5/5	13/ 9	5/0	4/1	5/2	Worthless

*The frequency count does not necessarily equal the total sample due to omissions by some fathers in rating selected bi-polar adjectives.

Table 6. Recorded Frequencies for Rating of Feelings prior to (Numerator) and after (Denominator) the Cesarean Birth.

Bi-Polar Adjectives	Positive Direction (sum of responses 1,2,3)	Neutral Direction (response 4)	Negative Direction (sum of responses 5,6,7)
Happy-Sad	13/48	17/ 1	20/1
Inspired-Disappointed	11/44	19/ 3	20/3
Not Worried-Worried	5/36	10/ 5	35/8
Joyful-Angry	12/45	24/ 3	14/2
Strong-Weak	18/38	16/ 9	16/2
Glad-Mad	17/43	21/ 3	12/4
Light-Heavy	6/27	27/15	16/6
Calm-Agitated	17/38	13/ 9	20/2
Relieved-Burdened	21/46	11/ 2	18/2
Satisfied-Frustrated	18/44	17/ 2	15/3
Relaxed-Tense	4/38	10/ 2	36/9
Valuable-Worthless	23/38	13/ 9	14/3

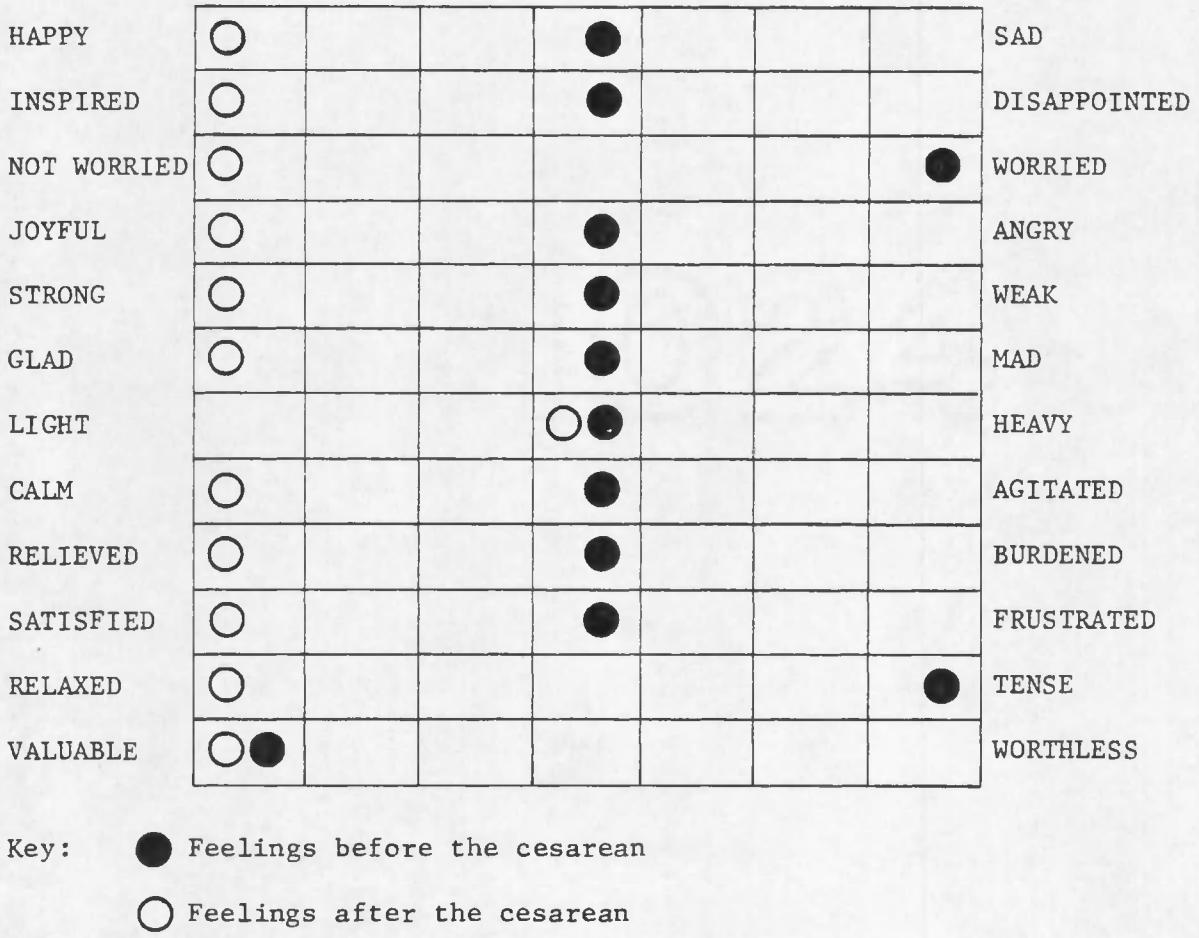

Figure 3. Profile of Modal Responses in Rating Feelings prior to and after the Cesarean Birth.

from each other and the mean in their feelings after the cesarean event was over. Table 7 presents the values of the variances obtained.

Significance in Mean Differences (t-Test Analysis)

Table 8 gives a profile of the means obtained for each bi-polar adjective rated in the evaluation of feelings prior to and after the cesarean birth event. The t-test values were obtained through the SPSS program as previously described. Significant t-test values were obtained for every one of the twelve bi-polar adjectives used for the two evaluations of feelings prior to and after the cesarean event. All t-test values were consistently significant at the .001 level. Thus, fathers in this study indicated a difference in their feelings prior to and after the cesarean birth was over.

Chi-square Analysis

The four demographic variables of ethnicity, order of cesarean, witnessing the birth, and feeling prepared for the cesarean were also cross-tabulated with each of the twelve bi-polar adjectives in the two evaluations of feeling prior to and after the cesarean birth. A total of 96 cross-tabulations were done producing five significant chi-square values. These are not being considered because of the possibility that such few significant findings are likely attributed to chance.

Table 7. Variances for Ratings of Feelings prior to and after the Cesarean Birth.

Bi-polar Adjectives	Variance	
	Prior	After
Happy-Sad	3.23	.85
Inspired-Disappointed	2.82	1.83
Not Worried-Worried	2.70	3.86
Joyful-Angry	2.36	1.43
Strong-Weak	3.26	2.09
Glad-Mad	3.11	2.06
Light-Heavy	2.11	2.38
Calm-Agitated	3.71	1.65
Relieved-Burdened	3.69	1.48
Satisfied-Frustrated	3.16	1.78
Relaxed-Tense	2.27	3.32
Valuable-Worthless	4.04	2.63

Table 8. Mean, Standard Deviation, and t-Test Values for Rating of Feelings before and after the Cesarean Birth.

Bi-polar Adjectives	Before Cesarean		After Cesarean		t-test values
	$\bar{x}$	SD	$\bar{x}$	SD	
Happy-Sad	4.44	1.79	1.40	.92	10.92**
Inspired-Disappointed	4.46	1.68	2.08	1.35	8.89**
Not Worried-Worried	5.53	1.64	2.61	1.96	7.82**
Joyful-Angry	4.08	1.53	1.70	1.19	10.19**
Strong-Weak	3.79	1.82	2.16	1.44	6.31**
Glad-Mad	3.94	1.76	1.82	1.43	8.53**
Light-Heavy	4.62	1.46	3.00	1.54	5.55**
Calm-Agitated	3.97	1.89	2.12	1.28	6.13**
Relieved-Burdened	3.98	1.92	1.68	1.22	8.34**
Satisfied-Frustrated	3.88	1.78	1.88	1.33	7.73**
Relaxed-Tense	5.32	1.50	2.26	1.82	9.45**
Valuable-Worthless	3.46	2.01	2.24	1.62	4.31**

** $p < .01$

CHAPTER 4

DISCUSSION OF THE FINDINGS

The results of the interviews clearly indicate that fathers do have unique reations and feelings about a cesarean birth experience. Many fathers answered yes to the question: "Did you feel you had adequate time to prepare for the cesarean birth?" However, they also elaborated a feeling that they had no choice in the matter but to accept the cesarean birth, regardless of actual preparation. Many fathers commented that they had been told by the physician that circumstances dictated a cesarean. Thus, a father was forced to accept the reality of such a birth, regardless of whether he felt prepared for a cesarean or not. This result is congruent with the corollary derived from Kelly's (1963) personal construct theory that whenever a person is confronted with the opportunity to make a choice, he chooses the alternative which seems to provide the best basis for anticipating the ensuing events. Fathers in this study vividly indicated they had but one choice to make and that was to accept the cesarean birth because it was inevitably going to happen. In spite of this general acceptance, the data indicated fathers needed to be better prepared for a cesarean childbirth. Since most of the men discovered a cesarean procedure was going to occur within only a two-hour period, their responses might have been quite reasonable. Two hours is definitely insufficient time to abandon one's expectations for a vaginal birth, to understand and accept the reasons for the abrupt

changes, and then to deal with the physiological and emotional reponses generated by the events for the woman as well as the father himself. Thus, suggestions made by the sample of fathers were based on a reality orientation of their own cesarean birth experience. For example, the suggestion to inform fathers earlier of an impending decision to perform a cesarean was a definite plea to increase the time one has to cope with the changing events. Also, informing expectant couples that a cesarean is a possibility for every pregnancy is a means of minimizing the discomforts which arise when there is gap between one's expectations for a vaginal birth and the reality of having to have a cesarean. The difficulties in coping with rapidly changing events and disruptions in expectations that fathers shared are realistic because most human behaviors are maintained by anticipated rather than by immediate consequences (Bandura 1977). The suggestions by fathers to increase the public's awareness of cesarean childbirth reflected their awareness of increased cesarean rates in modern obstetrical care. Therefore, these fathers advocated that the general public become more prepared for the possibility of a cesarean, regardless of whether the baby is the first-born or not. Fathers in this study communicated a desire that possibly, as a result of their individual cesarean birth experience, they might help improve or facilitate the coping of others who will eventually be confronted with a similar birth event. A psychological concept is being emphasized that the behavior of each participant is important because through collective actions pressure can be generated to change social practices in ways that will improve the social environment and the individual's life situation (Bandura 1977).

As to the knowledge level of the sample, most fathers could provide the reason for their babies being born cesarean, could adequately describe the cesarean procedure (primarily as a surgical mode of birth), and could identify the anatomical site for the surgical entry and location of the birth. In part, this may reflect the characteristics of the sample in that a large majority of these fathers witnessed the birth process and did attend some type of childbirth education classes, thus enhancing their ability to verbally describe a cesarean birth. However, most of the fathers felt their general knowledge of the cesarean method was inadequate and desired more specific information. For example, fathers desired more information about the surgical procedure, rationale for the hospital preparatory events done to their wives, and what to expect in the delivery room, during recovery, and in the postpartum phases. This particular sample indicated that fathers become active seekers of information, especially by directing questions to physicians and nurses. They also emphasized the need for more information made available through audio-visual resources such as books, pamphlets, films. This would allow fathers more access to the content and provide for learning at their own pace, especially during the prenatal period when they might be receptive to information about childbirth. There appeared to be a value placed on childbirth education classes as one means to gain knowledge. Such a finding is consistent with the literature, indicating that the participation of expectant fathers in class-related activities served as an expression of their involvement and identity with the childbearing experience (Wapner 1976). A large majority of fathers in this

study attended some type of childbirth class and apparently were partially conditioned by the beneficial aspects of their involvement in such activities.

In spite of a value on childbirth education classes, the fathers did not always agree that attendance at a class was very helpful in coping with the reality of their own cesarean birth experience. A basic issue raised was that classes lack sufficient content and discussion about the cesarean birth method, largely because the focus was on vaginal deliveries. Thus, the fathers suggested a need to reassess the present format by which childbirth education classes are conducted. As obstetrical technological advancements escalate the cesarean birth rate, we have not kept pace in preparing the public to be better informed about cesarean birth. Thus, the fathers advocated that both birth modes be presented and discussed equally in classes so that the expectant couple can be better prepared for whatever reality they must eventually face--vaginal or cesarean childbirth.

The results also indicate that a cesarean delivery is capable of generating a variety of emotional responses. In addition to identifying such feelings, an appreciation for the events which contribute to these feelings is important. Such knowledge can encourage a reassessment of the events expectant fathers must deal with. Alternatives to shape more positive emotional responses can also be explored. Any event that lacks clarity is capable of generating tension and anxiety, and the childbirth event is no exception in terms of being confronted to cope with elements of the unknown. Thus, it was not surprising that the principal reason given for happy and relieved feelings was the positive outcomes

of producing a healthy baby, healthy wife, and termination of the ordeal, pain, and dangers associated with labor. However, the findings also showed that a father's active involvement in the cesarean birth contributed immensely to his emotional responses of experiencing pleasure, satisfaction, and joy. To be able to be physically near their wives to offer support, to witness the birth of one's baby, and then to interact as a family immediately in the birth environment, were consistently credited as highlights of the entire pregnancy and childbirth event. So important was this theme that it emerged again when fathers were asked for suggestions as to how a cesarean childbirth could be made more meaningful. The two suggestions given reiterated the theme of active involvement by fathers in support to the wife and being able to watch the baby be born. This finding is consistent with the general principle that active involvement increases efficacy and mastery expectations such that the stronger these expectations the greater the likelihood of dealing with an event successfully (Bandura 1977). The finding is also congruent with women's statements that they were happy when their husbands were present in the delivery room and sad when the father was deinied attendance at the cesarean birth (Affonso and Stichler 1978).

Although the majority of fathers did not state feelings of being angry, frustrated, sad, or disappointed, those father who did have such feelings attributed them to three factors:

1. Grief from the loss of a vaginal delivery, which was construed to be more of a natural, normal, self-fulfilling birth for both woman and father

2. Behaviors of the physician and nurses which made the father feel ridiculed, ignored, or unimportant in the birth event.
3. Lack of information about the events occurring which rapidly changed and quickly generated confusion for the father and eventually intensified his anxieties, tension, and sense of helpfulness.

Identification of the above three factors as contributing to father's negative emotional responses is also congruent with findings in the literature. For example, unresolved feelings relative to experiences of actual or perceived loss can lead to cognitive distortions involving a negative construal of the world, self, and the future, which eventually create affective disturbances (Beck 1967). There is also the concept that anything which destroys or threatens the individual's satisfaction of dependency needs and lessens one's self-esteem, will leave the person vulnerable to depressive reactions (Cameron 1963). Therefore, close examination of these three factors reveals that modifications in the conduct of a cesarean birth to promote a more humanistic approach can greatly reduce such negative emotional consequences for the father. Advocacy for communicating a humanistic perspective in the birth experience can serve to enhance fulfillment of the universal human needs relating to positive regard and conditions of worth (Rogers 1961). Thus, the findings obtained in this study provided a beginning awareness that assessment of the above three areas might be necessary to determine if actions should be implemented to help a father resolve any negative emotional consequences that might be manifested.

The findings also may increase awareness that fathers relate a cesarean childbirth to surgery. There was unanimous agreement that such a relationship existed, and the specific events contributing to such a relationship were identified in Appendix C. The fathers described how the surgical aspect of a cesarean birth greatly contributed to their feelings of being worried and concerned. Reasons given were that surgery was a major happening, permeated with additional hazards and risks which compounded the complexity inherent in the birth process as contrasted with a vaginal delivery. This is a realistic perception by the fathers because the generation of increased anxieties and concerns arising from a surgical event have been clearly documented in the literature (Cassady and Altrocchi 1960; Peitchinis 1965; Sutherland 1952; Tichener and Levine 1960).

One important contribution from the results of this study was the ambivalence fathers had regarding the relationship between surgery and cesarean deliveries. Although one could have predicted that surgical intervention increases a father's anxieties, an interesting finding was that fathers were both fascinated as well as overwhelmed by the surgical events they witnessed in the birth environment. Although the majority of fathers acknowledged that a surgical mode of birth had great physiological impact, there were fathers who also were fascinated and impressed with the medical/technical capabilities they witnessed. Such fathers described the cesarean birth as a safer process, were happy that the birth involved a surgical intervention, and even preferred the cesarean method because it provided a more controlled, planned birth event for the father. These fathers also provided descriptions of how

a cesarean had a birthing quality as contrasted to other surgeries. Such fathers frequently commented on their pleasure with the medical expertise, largely crediting the physicians for the healthy outcomes. Comments of increased confidence, desire to return to the same physician and hospital for future childbirths, were also spontaneously expressed.

Another interesting perspective in the results was to hear fathers state their fascination of "seeing surgery for the first time." Many fathers expressed surprise at their own responses that they enjoyed what they saw. These fathers described how initially they were concerned they would not be able to handle "watching someone being cut up, especially someone you loved." But they were surprised that the scene witnessed was not at all what had been expected in terms of being "bloody, messy, scary, and overwhelming." Rather, fathers were impressed at how organized the cesarean event occurred, how efficient the staff was, and how rapidly and easy the baby was born. Fathers also commented that viewing the surgical birth helped them to develop more positive attitudes toward surgery which would be helpful in the future should they themselves have to face surgery. This is clearly supported by the social learning theory which proposes that from observing others, new behaviors are learned and serve as a guide for future actions. (Bandura 1977). Thus, these findings provide new insights into the multiple consequences that can occur when a father witnesses a cesarean birth. Some fathers in this study offered a new perspective that one of the outcomes from watching a cesarean birth can be the development of more positive attitudes toward surgery in general.

In contrast, some fathers had the opposite reaction to the surgical impact of a cesarean childbirth. These fathers shared how the surgery generated more fears and concerns related to the wife's physical recovery; created more emotional upsets for both the wife and the father; is more traumatic for the baby because a cesarean procedure entailed an unnatural, abrupt way to be born. Surgery was viewed to generate more responsibilities for the father because of increased financial burdens resulting from the longer hospital recovery period. Fathers also felt that their child-care and household duties increased because their wives could not resume responsibilities due to cesarean delivery as quickly as with a vaginal birth. Fathers also appeared to be concerned about the long-term effects from a cesarean delivery. Examples of such concerns were the resumption of normal sexual activities without undue discomforts for the woman; concern that the wife would have to terminate subsequent pregnancies through a harder, more difficult delivery with a cesarean; concern that the eventual scar of the incisional site might generate unpleasant effects on the woman's image of her own body.

When fathers were asked to identify the events that were stressful in the cesarean experience, the majority of responses focused on the surgical, medical events witnessed; the hectic pace dictated by the surgical intervention; and the increased upsetting emotional reactions in the woman due to the surgery incurring more pain, longer recovery, physical limitations, and disappointments about not being able to produce a baby vaginally. These findings indicate that fathers view the surgical impact of a cesarean birth as having numerous consequences on both the emotional and physical adaptation of the woman, which elicit

emotional reactions in themselves. Since the emotional responses of the fathers can be quite varied depending on the circumstances involved, it is important to assess whether any ambivalent feelings are being elicited from the cesarean experience. A father's positive or negative emotional reactions might be easier to identify as contrasted to the subtle ambivalence underlying behaviors. Yet, ambivalent feelings are more likely to generate intense emotional conflicts and tensions which can interfere with optimal behavioral functioning and contribute to various forms of psychopathology if the conflicts are unresolved (Freud 1957). Thus, these findings have highlighted the importance of assessing a father's emotional reactions to the birth event. An interesting study would be to explore whether the emotional reactions of women and their spouses are comparable or divergent, and what the concomitants of such divergence might be. The findings in this study can become stimuli for further investigation into the multiple physical and emotional consequences generated by a cesarean birth experience for both men and women.

Data were also obtained on fathers' comparison of a vaginal and cesarean birth. Although the majority of fathers definitely felt there was a difference between the two modes of birth, the reasons given for the difference fell into three categories of judgment: positive for a cesarean; negative toward a cesarean; neutral because both modes had equal advantages and disadvantages. Once again, the surgical impact contributed to negative judgments of a cesarean primarily because of the physical and emotional distresses elicited, making fathers view the cesarean as a harder, more difficult type of delivery for the woman.

However, the surgical impact also made other fathers give positive judgments for the cesarean because surgery was felt to provide an easier, quicker, more controlled birth process for both mother and baby. There were also fathers who felt that although the technical aspects of the birth were different, the benefits and risks were equal regardless of a vaginal or cesarean process. Thus, the findings obtained from the interview questions appear to indicate that a father's comparison of a vaginal and cesarean birth may reflect his personal judgment as shaped by an evaluation of the present cesarean experience.

The data obtained through the semantic differential technique offered several new perspectives on how the fathers felt before and after the cesarean event, as well as comparison of feelings in ratings between a vaginal and cesarean birth. The usefulness of the technique for data collection in this study is consistent with other clinical psychological research endeavors which used the semantic differential for measurement of such variables as attitudes (Brinton 1961; Tannenbaum 1956), anxiety (Brod, Kernoff, and Terwilliger 1964), and dream symbolism (Moss 1961). Through the semantic differential technique, fathers indicated there were differences between the two modes of birth for the rating of five bi-polar adjectives: natural-unnatural; normal-abnormal; fast-slow; short-long; dark-bright. The findings indicated that fathers felt a vaginal birth was natural, neutral to slow, long, and bright, while a cesearean was rated to be more unnatural, abnormal, fast, short, and neutral in terms of bright-dark evaluation. These differences need to be explored more fully through future investigations, to identify, for example, the contributing factors that make fathers evaluate a cesarean

differently for these selected bi-polar adjectives. The findings also indicate another aspect worth exploring more fully. Although the cross-tabulations obtained in this study were not sufficient to completely rule out the element of chance findings, many of the significant chi-square values were obtained when crosstabulations involved such variables as ethnicity, order of birth, and whether a father witnessed the cesarean birth. These crosstabulations are definitely worthy of further investigations to ascertain if a relationship exists between a father's feelings and his ethnicity, watching his baby being born, and whether the first or a repeat cesarean was occurring.

There appeared to be a significant difference in feelings upon first discovering a cesarean was going to happen and after it was all over. The obtained results indicate that fathers had more positive emotional responses after the cesarean event was over. This is not surprising especially when the overall outcomes were good with a healthy mother and baby. However, little is known about the selective events that increase tension and anxieties prior to the cesarean event. Thus, a productive approach might be to take each of the 12 bi-polar adjectives on the semantic differential and have fathers identify the events that contribute to how they rated each. This would provide new information about the kinds of specific environmental and interactional manipulations necessary to minimize negative emotional responses prior to, during, and after a cesarean birth experience.

The increase in variability in fathers' responses to the rating of a cesarean birth and their feelings after the cesarean event was over is also worthy of mention. This finding might be attributed to the fact

that in both circumstances fathers were dealing with an element of the unknown. For example, little is known about cesarean childbirth by the general public as reflected in this study when fathers commented they had general knowledge but lacked the specifics on the cesarean birth method which would have allowed better coping when the cesarean became a reality. The widely accepted view held by the public is that the normal way to deliver a baby is vaginally and thus, fathers were more homogeneous in their ratings of a vaginal birth. Additional evidence to substantiate the general acceptance of a vaginal birth was the increased rating of a cesarean birth toward the "unnatural" direction. If society's norm is that birth occurs vaginally, then anything else can be expected to be viewed as abnormal or unnatural as indicated by fathers rating a cesarean in this direction. The increased variability between feelings prior to the cesarean than after the cesarean also reflects the intensity with which fathers were dealing with the unknown. The outcomes were not certain and, therefore, anxieties were reflected in increased ratings of being more worried, tense, and ambivalent. In contrast, the more homogeneous ratings by fathers of feeling more positive after the birth was over might be attributed to the good outcomes which eliminated having to cope with the unknown.

Clinical Implications

The results obtained from this study provide direction for numerous clinical implications. Some of these are as follow:

1. Education programs need to be developed which will provide more opportunities for fathers to gain knowledge and discussion of the

cesarean birth method. The lack of audio-visual resources is a realistic concern. Fathers emphasized an educational means to enhance their coping with the cesarean experience. This emphasis is consistent with the literature involving behavioral approaches to facilitate coping or effect changes. A basic concept in behavior modification emphasizes strategies or interventions as an educational process because the person learns adaptive ways to cope through the mastery of new skills, and the emphasis of intervention is clearly on education rather than on manipulation (Bellack and Hersen 1978). Regarding the implementation of educational programs, it appears more advantageous to integrate content on both vaginal and cesarean births rather than separate the presentations. This will ensure that all participants will have a certain degree of preparation regardless of the birth method that becomes their reality.

2. This study indicated there are multiple consequences when fathers witness the cesarean birth event, both in terms of positive and negative emotional responses. Thus, an important implication is the assessment of a father's reactions when he does actively participate or is denied opportunities to do so. This will permit identification and problem solving for aspects of the birth event that could escalate negative emotional reactions. It might also be productive to utilize such assessment data as a baseline for future exploration on how the father is developing his paternal role and his subsequent interactions with both his newborn infant and his wife. There is literature indicating the enhancement of paternal-infant interactions when fathers witnessed the birth (Greenberg and Morris 1974; McDonald 1978). However, the

literature findings focused on fathers viewing a vaginal delivery with no published data on the effects when a cesarean delivery was observed.

3. Fathers frequently commented that increased emotional upsets were created for the woman when birth was cesarean, and this in turn created more emotional upsetting reactions for the father. Are such feelings a projection of the father's emotional reactions to having his baby and wife go through a cesarean experience, or has he come to such an evaluation because of the behaviors observed in his wife? This is an area worth further exploration during later contact with the family, especially in terms of clinical assessment to identify problem areas which can greatly affect the marital and/or parent-infant relationships if conflicts remain unresolved.

4. Fathers in this study indicated some preoccupation with the surgical impact and consequences of a cesarean childbirth. The surgical aspects were identified to be both stressful and pleasurable aspects in evaluation of the birth experience. Therefore, this relationship between surgery and cesarean deliveries needs to be more fully explored, especially to provide direction for more effective educational approaches in communicating the cesarean birth method to the public. More data are also needed regarding the events prior to, during, and after the surgical birth that can create undue stress for the fathers as they attempt to cope with the entire experience.

5. Many fathers in this study alluded to the feeling that a cesarean delivery created a sense of loss over not experiencing a normal, natural, desired vaginal delivery. Thus, for some fathers grief-work might be necessary for the resolution of any perceived loss when birth

was not a vaginal process. Sensitivity for the assessment of any perception of loss should be particularly emphasized in the few months after the cesarean birth when feelings of depression may surface relative to some unresolved aspect of the birth event. It would be most beneficial to explore any perception of loss related to one's self-esteem in addition to the perceived loss over an event (as with losing a vaginal process). Such a focus in assessment is consistent with the dynamic perspective that failure to live up to one's expectations, feeling one has not acted with integrity and competence, or lack of achievement in whatever was believed to be personally valuable and important, contribute to making a person vulnerable to depression (Cameron 1963). An undesirable, unexpected cesarean birth can easily encompass the above feelings. Thus, further exploration of the feelings stated by fathers in this study might be relevant in providing new insights into the dynamics of postpartal depression for both women and their spouses. Currently, explorations into postpartal depression are largely focused on the woman as the preferred subject of investigation (Kane 1968; Pitt 1968). The father's vulnerability to depression in the postpartal period has yet to be explored.

6. There are several implications relating to the need for reassessment of how the cesarean birth event is conducted by professionals in the health care system. The following are selected samples of these implications.

(a) The philosophy and policies of hospitals and obstetricians that deter the active involvement of fathers during a cesarean childbirth need to be reassessed. Prohibition of the father's

presence in the cesarean birthing room may be obsolete, particularly in light of the data obtained in this study which indicated there were multiple consequences from viewing the birth. Also, the birth event's meaningfulness was generally attributed to the father's active involvement in supporting his wife and watching his baby being born.

(b) A consistent theme in this study which needs attention is the plea that men and women realize early in the pregnancy that a cesarean delivery can become a reality for every expectant couple. The prenatal period of nine months is an excellent time for expectant couples to begin coping with the possibility of a cesarean delivery. The prenatal period usually ensures that the couple has entered into the health care system and the various professional resources can be readily available to help increase knowledge, clarify misconceptions, and orient to the various alternatives by which a pregnancy can culminate in terms of the birth event. The value of prenatal teachings has been documented in the literature, although the focus has largely been on preparation for vaginal births (Felton and Segelman 1978; Gaziano, Garvis, and Levine 1979; Sumner 1976). Such prenatal preparation can minimize the element of surprise with its resultant upsurge of emotional reactions indicative of stress, disappointments, confusion, anger, and even depressed moods if the birth event is less than anticipated.

(c) Fathers in this study also commented that the behaviors of the professionals in the health care system frequently became a

source of stress, especially when fathers desired to be an active participant during the cesarean birth and such goals were not compatible with those of the staff. Therefore, health professionals need to be more cognizant of their own behaviors in terms of elements which enhance or interfere with the coping abilities of the father when birth is a cesarean process.

Limitations of the Study

The findings obtained in this study are best appreciated for their implications with an awareness of their limitations. This study was limited by the following factors.

1. The sample size was somewhat small and the sample may not be representative of the population of fathers having cesarean childbirths.

2. The interview method for data collection was confined by the handwritten format of recording a father's responses which did not permit verbatim responses. Thus, such variables as the interviewer's communication style, inherent biases, and nonverbal behavioral cues were not controlled.

3. The study was conducted in only one hospital setting. Therefore, the findings could have been altered by the particular manner in which the cesarean birth occurred as confined by the hospital's philosophy and policies.

4. The environment in which the data were collected did not allow for consistency in approach because such factors as the woman's state of comfort, the entrance and exit of the baby for feeding encounters, intrusions of nurses, visitors, or comments by the woman's roommate were

not controlled. Such distractions could possibly have altered the father's responses to the questions being asked at the given moment.

Recommendations for Further Study

This study is a beginning exploration of the reactions and feelings of fathers to a cesarean birth experience and an attempt to provide further insights into the dynamics of a father's emotional reactions to such a childbirth event. The findings obtained in this study suggest these further explorations:

1. Determine the validity and generalizability of these findings by repeating the study with a larger sample from a variety of hospital settings. This would also permit an assessment of the impact of the hospital environment on eliciting specific responses.

2. Conduct a study utilizing the semantic differential technique as the data gathering tool to determine its reliability and validity as an instrument for assessing selected feelings generated by a cesarean birth method.

3. Examine the impact of the father's ethnicity on his feelings, reactions, and concerns relative to a cesarean childbirth. Specifically, investigate the emotional responses of specific ethnic groups such as Mexican-American fathers to their cesarean childbirth experience.

4. Investigate the impact of a father witnessing a cesarean birth and his subsequent interactions with the infant. Specifically, determine if there are any differences in father-infant interactions that can be attributed to active participation or nonparticipation in the cesarean delivery as the father so desired.

5. Assess the feelings, reactions, and concerns of both the father and his wife to identify if their emotional responses are comparable or divergent and what the consequences of such concordance-discordance might be.

6. Explore the impact of a father's active participation in support of his wife during the cesarean delivery on their subsequent marital interactions. Specifically, investigate any differences in the marital relationship when fathers are active participants versus when they are mere observers who do not enter the cesarean birthing room.

7. Examine and assess the presence of any grieving regarding the perceived loss of a vaginal birth in both the husband and wife. Specifically, develop tools by which the presence, intensity, and duration of any such grief experiences can be measured.

8. Compare the differences in emotional reactions of fathers who are specifically prepared for a cesarean childbirth through formal classes or programs versus those who do not receive any formal instruction.

9. Develop more consistent tools for eliciting and measuring a father's reactions to a cesarean birth by utilizing the descriptive data obtained from the various interview questions. Such tool development will allow more systematic collection of the data, permit more statistical processes to be applied to the collected data, and generate hypotheses which permit the application of experimental designs for future research endeavors.

The semantic differential instrument can be refined by administration to groups of fathers who experienced a vaginal birth of their children and to groups of fathers who experienced a cesarean birth. The results obtained from these two contrast groups can help in further investigation as to whether the reactions obtained are primarily related to the method of delivery versus the effects from relief that the birth event is over.

The semantic differential instrument can also be administered to a group of fathers before and after the birth of their children in order to explore any significant differences in reactions to the birth mode.

APPENDIX A

CHARACTERISTICS OF THE SAMPLE (N=50)

Chronological Age	f	Percent
20 or below	2	4
20-24	4	8
25-29	24	48
30-34	13	26
35-59	3	6
40-44	2	4
45-47	2	4
Education		
Less than high school	2	4
High school graduate	15	30
Junior college completed	2	4
College experience, degree requirements not completed	15	30
Baccalaureate degree	10	20
Masters degree	3	6
Doctorate degree	3	6
Ethnic Background		
Anglo-American	31	62
Mexican-American	15	30
Black-American	2	4
Oriental-American	1	2
Other: Saudi Arabian	1	2
Marital Status		
Married	50	100

Number of Living Children	f	Percent
One	34	68
Two	10	20
Three	3	6
Four	3	6
Number of Pregnancies Lost		
None	41	82
One	9	18
Number of Cesarean Births		
One	39	78
Two	9	18
Three	2	4
Order of Present Cesarean Birth		
First	32	64
Repeat cesarean	7	14
First cesarean, other vaginal births	11	22
Present to Watch Baby Born		
Yes	41	82
No	9	18
Desired to be Present to Witness the Birth		
Yes	43	86
No	6	12
Undecided	1	2

APPENDIX B

CLASSIFICATION OF OCCUPATIONS ACCORDING TO THE TWO-FACTOR INDEX OF SOCIAL POSITION

Occupation	f	Percent
Major Professionals Engineer (N=2), clinical psychologist, archeologist, college professor	5	10
Business Managers	0	0
Lesser Professionals Teacher at Pima College (N=2)	2	4
Minor Professionals Real estate, small business owner, supervisor with city, department manager	4	8
Semi-Professional Land development, physio-therapist, landscaper	3	6
Clerical and Sales	0	0
Skilled Manual Employees Aircraft mechanic; electricians (N=5), USAF sergeant (N=2), auto mechanic (N=4), fireman, border patrol agent, carpenter (N=2), highway patrolman, plumber (N=2)	18	36
Machine Operators and Semi-Skilled Employees Tool and production operator, dental technician, construction worker, assistant chef, carpenter helper, surveyor, IBM technician (N=2), heavy equipment operator, welder, masonry-worker, city worker	12	24
Unskilled Employees Technician (N=2), smelter operator, truck driver (N=2)	6	12

APPENDIX C

RESPONSES TO CHECKLIST ASSESSING THE SPECIFIC EVENTS CONTRIBUTING TO THE RELATIONSHIP BETWEEN CESAREAN BIRTH AND SURGERY (N=50)

Cesarean Births Viewed as a Surgical Procedure	f	Percent
1. Anesthesia is necessary; not possible for birth to occur without it	39	78
2. Cutting procedure is necessary; birth cannot occur without it	47	94
3. Use of more equipment for the birth	34	68
4. More persons are needed for the birth to occur	31	62
5. Takes a longer time for the birth to occur	2	4
6. Costs more for the baby to be born because of the surgical expense	32	64

Surgical Aspects Agreed to be Involved in a Cesarean Birth		
1. The woman's stomach must be cut open to allow the baby to be born	42	84
2. More blood is involved because of the surgery	25	50
3. More risks are involved to mother and baby because of the surgery	15	30
4. The use of anesthesia can be dangerous to mother and baby	17	34
5. It is a more difficult birth because of the surgery	10	20
6. There will be more pain to the woman because of the surgery	19	38

Surgical Aspects Agreed to be Involved in a Cesarean Birth--continued	f	Percent
7. A cutting procedure must be made into the abdomen and the womb to allow the baby to be born	44	88
8. There will be a longer and harder time to recover from the birth for the woman because of the surgery	40	80
9. There will be more "emotional upsets" for the woman because of the surgery	19	38
10. It is a safer birth for the mother and baby because of the surgery	33	66

APPENDIX D

CROSS-TABULATIONS WITH SIGNIFICANT CHI-SQUARE VALUES

Cross-tabulation	Chi-square Value	Degrees of Freedom	p-Value
1. Ethnic x Sweet-Bitter (vaginal birth)	33.78	18	.01
2. Ethnic x Fast-Slow (vaginal birth)	36.99	18	.01
3. Ethnic x Bright-Dark (vaginal birth)	32.63	15	.01
4. Ethnic x Fast-Slow (cesarean birth)	51.24	15	.01
5. Ethnic x Rugged-Delicate (cesarean birth)	42.99	18	.01
6. Ethnic x Worried-Joyful (rating when first discovered)	61.69	18	.01
7. Ethnic x Valuable-Worthless (rating after all over)	26.15	15	.03
8. Order of Present Cesarean x Beautiful-Ugly (cesarean birth)	22.17	12	.03
9. Order x Normal-Abnormal (cesarean birth)	20.68	12	.05
10. Order x Fair-Unfair (cesarean birth)	21.70	12	.04
11. Order x Disappointed-Inspired (rating when first discovered)	23.17	12	.02
12. Watched Baby be Born x Sweet-Bitter (vaginal birth)	17.73	6	.01

Cross-tabulation	Chi-square Value	Degrees of Freedom	p-Value
13. Watched x Fast-Slow (vaginal birth)	21.30	6	.01
14. Watched x Full-Empty (vaginal birth)	13.17	4	.01
15. Watched x Normal-Abnormal (cesarean birth)	15.18	6	.01
16. Watched x Human-Mechanical (cesarean birth)	13.25	6	.03
17. Watched x Bright-Dark (cesarean birth)	16.48	6	.01
18. Watched x Calm-Agitated (rating after all over)	15.15	4	.01

APPENDIX E

LETTER OF INFORMED CONSENT

Dear Father,

The delivery of a child by surgical operation is rapidly becoming a more common way for babies to be born in our American society. There have been numerous studies examining the medical aspects surrounding the procedure and treatments involved with cesarean childbirth. Until recently, the emotional effects of cesarean childbirth on its participants--the women, men, and newborns--have not been fully explored. Most of the recent studies examining the emotional effects have been done with women. Currently, there is no written data regarding the reactions of men to the cesarean birth experience. In an effort to change this, I am conducting a study entitled: "Exploration of Fathers' Reactions to Cesarean Childbirth." The study consists of a brief interview using a prepared interview guideline to assess the feelings, perceptions, and thoughts of men to the cesarean birth experience. It is hoped that such a study will provide new information about the emotional effects that a surgical delivery of a child can have on fathers. Such information can then be used to identify ways in which a cesarean birth event can be made more meaningful for fathers.

With kind regards,

Mrs. Dyanne D. Affonso, R.N.
Graduate Student in Clinical
Psychology
University of Arizona
Department of Psychology
Tucson, Arizona

I agree to participate in an interview regarding my thoughts and reactions to my recent cesarean birth experience. I understand this interview will take approximately one hour of my time. I understand the purpose is to find out how fathers think and feel about the cesarean birth experience. I may ask questions whenever I feel necessary. I am assured that my name will not be identified with my responses. Mrs. Affonso has my permission to share the findings through literary works and/or verbal communications (speeches, reports). I also understand that this consent form will have to be filed in an area designated by the Human Subjects Committee, with access restricted to the investigator or authorized representatives of the department. I understand there are no direct benefits, costs, or risks to me as a participant in the study. I can refuse to answer any questions and can withdraw from the study at any time without incurring ill consequences. My signature on this form and my completion of the interview indicate my voluntary consent to be a willing participant in this study. I understand that a copy of this consent form is available to me upon request.

Witness's Signature	Subject's Signature
Date	Date

APPENDIX F

INTERVIEW GUIDELINES

Part I: General Information

1. Age_____

2. Education: Specify highest level attained

   1. less than high school: last grade completed _____
   2. high school graduate
   3. other types of schooling beyond high school: specify _____

   _____

   4. junior college
   5. some college: specify the number of years _____
   6. baccalaureate degree
   7. masters degree
   8. doctoral degree

3. Ethnicity:

   1. Anglo-American
   2. Mexican-American
   3. Black-American
   4. Indian-American: specify tribe _____

   5. Oriental-American: specify _____

   6. Other: _____

4. Occupation _____

5. Marital Status:

   1. Single 2. Married 3. Divorced

   The following refer to the current marriage:

6. Number of living children (including the new baby)

   1
   2
   3
   4
   5 or more: specify _____

7. Number of pregnancies or babies lost:

   1. none
   2. one
   3. two
   4. three
   5. four or more: specify _____

8. Number of cesarean births (including the present one)

   1. first
   2. second
   3. third
   4. fourth
   5. fifth or more: specify _____

9. Were you present to watch your baby be born?

   1. yes
   2. no

11. Did you want to be present to watch your baby be born cesarean?

   1. Yes
   2. No
   3. Couldn't decide; didn't matter to me

Part II: Preparation

12. How soon before the cesarean happened were you told the baby would be born that way?

   1. less than one hour
   2. 1-2 hours
   3. 3-8 hours
   4. 9-24 hours
   5. 2-3 days
   6. 4 days to one week
   7. more than a week: specify _____
   8. knew ahead of time because it was a repeat cesarean
   9. I don't remember

13. How did you first find out a cesarean was going to happen?

    1. doctor told me
    2. nurses told me
    3. my woman told me
    4. no one told me; I could tell by the behaviors of the staff that something like this was going to happen
    5. no one told me; I never knew it was going to happen until it did

14. Did you feel you had adequate time to prepare for your cesaren birth?

    1. yes
    2. no

15. What suggestions do you have that would help fathers be better prepared for a cesarean birth?

_____

_____

_____

Part III: Knowledge

16. Why was your baby born cesarean?

    1. baby was too large
    2. woman's pelvis was too small
    3. baby in wrong position: specify _____
    4. baby in distress as indicated by heart rate dropping
    5. woman made no progress in labor: specify how many hours _____
    6. woman had complications: specify what _____
    7. woman had a repeat cesarean
    8. I don't know
    9. Other: specify _____

17. Please examine this drawing and place an X where you think marks the place where the baby is born when the birth is cesarean. (give father the drawing)

18. In your own words, briefly describe what a cesarean birth is:

_____

_____

_____

19. Where did you learn about cesarean births?

    1. from the doctor
    2. from the nurse
    3. from my woman
    4. relatives, family members: specify whom _____
    5. friends and neighbors
    6. books, magazines, TV
    7. classes I attended to prepare for childbirth
    8. other: specify where you got your information _____

20. Did you attend classes to prepare for childbirth during this pregnancy?

    1. yes
    2. no

21. If you attended classes, were they of any help to you in preparing for this cesarean birth?

    1. Yes, definitely because _____

    2. Somewhat helpful because _____

    3. Not really because _____

    4. I did not attend any classes

22. What suggestions do you have that would help men to have more knowledge about what a cesarean birth is all about?

    _____

    _____

    _____

23. BELOW IS A LIST OF WORDS TO DESCRIBE THE BIRTH PROCESS. RATE THE WORDS IN TERMS OF HOW YOU FEEL ABOUT A VAGINAL BIRTH.

NATURAL	_____	_____	_____	_____	_____	_____	_____	UNNATURAL
BEAUTIFUL	_____	_____	_____	_____	_____	_____	_____	UGLY
DIRTY	_____	_____	_____	_____	_____	_____	_____	CLEAN
NORMAL	_____	_____	_____	_____	_____	_____	_____	ABNORMAL
PAINFUL	_____	_____	_____	_____	_____	_____	_____	COMFORTABLE
HEALTHY	_____	_____	_____	_____	_____	_____	_____	SICK
UNPLEASANT	_____	_____	_____	_____	_____	_____	_____	PLEASANT
DANGEROUS	_____	_____	_____	_____	_____	_____	_____	SAFE
FAIR	_____	_____	_____	_____	_____	_____	_____	UNFAIR
PERSONAL	_____	_____	_____	_____	_____	_____	_____	IMPERSONAL
SWEET	_____	_____	_____	_____	_____	_____	_____	BITTER
FAST	_____	_____	_____	_____	_____	_____	_____	SLOW
HUMAN	_____	_____	_____	_____	_____	_____	_____	MECHANICAL
ACTIVE	_____	_____	_____	_____	_____	_____	_____	PASSIVE
TOTAL INVOLVEMENT	_____	_____	_____	_____	_____	_____	_____	LACK OF INVOLVEMENT
SHORT	_____	_____	_____	_____	_____	_____	_____	LONG
RUGGED	_____	_____	_____	_____	_____	_____	_____	DELICATE
FULL	_____	_____	_____	_____	_____	_____	_____	EMPTY
ROUGH	_____	_____	_____	_____	_____	_____	_____	SMOOTH
BRIGHT	_____	_____	_____	_____	_____	_____	_____	DARK

24. BELOW IS A LIST OF WORDS TO DESCRIBE THE BIRTH PROCESS. NOW RATE THE WORDS IN TERMS OF YOUR FEELINGS ABOUT A CESAREAN BIRTH.

NATURAL	_____	_____	_____	_____	_____	_____	_____	UNNATURAL
BEAUTIFUL	_____	_____	_____	_____	_____	_____	_____	UGLY
DIRTY	_____	_____	_____	_____	_____	_____	_____	CLEAN
NORMAL	_____	_____	_____	_____	_____	_____	_____	ABNORMAL
PAINFUL	_____	_____	_____	_____	_____	_____	_____	COMFORTABLE
HEALTHY	_____	_____	_____	_____	_____	_____	_____	SICK
UNPLEASANT	_____	_____	_____	_____	_____	_____	_____	PLEASANT
DANGEROUS	_____	_____	_____	_____	_____	_____	_____	SAFE
FAIR	_____	_____	_____	_____	_____	_____	_____	UNFAIR
PERSONAL	_____	_____	_____	_____	_____	_____	_____	IMPERSONAL
SWEET	_____	_____	_____	_____	_____	_____	_____	BITTER
FAST	_____	_____	_____	_____	_____	_____	_____	SLOW
HUMAN	_____	_____	_____	_____	_____	_____	_____	MECHANICAL
ACTIVE	_____	_____	_____	_____	_____	_____	_____	PASSIVE
TOTAL INVOLVEMENT	_____	_____	_____	_____	_____	_____	_____	LACK OF INVOLVEMENT
SHORT	_____	_____	_____	_____	_____	_____	_____	LONG
RUGGED	_____	_____	_____	_____	_____	_____	_____	DELICATE
FULL	_____	_____	_____	_____	_____	_____	_____	EMPTY
ROUGH	_____	_____	_____	_____	_____	_____	_____	SMOOTH
BRIGHT	_____	_____	_____	_____	_____	_____	_____	DARK

BRIEFLY TELL OR DESCRIBE WHY YOU HAVE YOUR FEELINGS ABOUT CESAREAN BIRTH. CHOOSE WHICHEVER CATEGORY IS APPROPRIATE AND ANSWER (More than one category may be chosen).

25. I felt happy and relieved because:

26. I felt angry and frustrated because:

27. I felt sad and disappointed because:

28. I felt worried and concerned because:

29. I felt (state feeling):

Because:

Part V: Cesareans and Surgery

30. Would you consider a cesarean birth to be like a surgery, an operation?

31. Briefly describe your feelings about cesareans and its relationship to surgery.

Checklist Assessing the Specific Events Contributing to the Relationship between Cesarean Birth and Surgery

Check which of the following you feel contributes to cesarean births being viewed as a surgical procedure. (Check as many as you feel reflects your thoughts.)

1. ___ anesthesia is necessary; not possible for birth to occur without it
2. ___ cutting procedure is necessary; birth cannot occur without it
3. ___ use of more equipment for the birth
4. ___ more persons are needed for the birth to occur
5. ___ takes a longer time for the birth to occur
6. ___ costs more for the baby to be born because of the surgical expenses

Below is a list of statements describing the surgical aspects involved in a cesarean birth. Check the ones which you would agree with.

1. ___ the woman's stomach must be cut open to allow the baby to be born
2. ___ more blood is involved because of the surgery
3. ___ more risks are involved to mother and baby because of the surgery
4. ___ the use of anesthesia can be dangerous to mother and baby
5. ___ it is a more difficult birth because of the surgery
6. ___ there will be more pain to the woman because of the surgery
7. ___ a cutting procedure must be made into the abdomen and the womb to allow the baby to be born
8. ___ there will be more "emotional upsets" for the woman because of the surgery
9. ___ it is a safer birth for the mother and baby becauser of the surgery
10. ___ it is a safer birth for the mother and baby because of surgery

32. RATE YOUR FEELINGS ABOUT HAVING A CESAREAN CHILDBIRTH WHEN YOU FIRST DISCOVERED IT WAS GOING TO HAPPEN.

HAPPY	_____	_____	_____	_____	_____	_____	_____	SAD
DISAPPOINTED	_____	_____	_____	_____	_____	_____	_____	INSPIRED
WORRIED	_____	_____	_____	_____	_____	_____	_____	NOT WORRIED
ANGRY	_____	_____	_____	_____	_____	_____	_____	JOYFUL
STRONG	_____	_____	_____	_____	_____	_____	_____	WEAK
MAD	_____	_____	_____	_____	_____	_____	_____	GLAD
HEAVY	_____	_____	_____	_____	_____	_____	_____	LIGHT
CALM	_____	_____	_____	_____	_____	_____	_____	AGITATED
RELIEVED	_____	_____	_____	_____	_____	_____	_____	BURDENED
SATISFIED	_____	_____	_____	_____	_____	_____	_____	FRUSTRATED
TENSE	_____	_____	_____	_____	_____	_____	_____	RELAXED
VALUABLE	_____	_____	_____	_____	_____	_____	_____	WORTHLESS

33. RATE YOUR FEELINGS ABOUT HAVING A CESAREAN CHILDBIRTH EXPERIENCE NOW THAT IT IS ALL OVER.

HAPPY	_____	_____	_____	_____	_____	_____	_____ SAD
DISAPPOINTED	_____	_____	_____	_____	_____	_____	_____ INSPIRED
WORRIED	_____	_____	_____	_____	_____	_____	_____ NOT WORRIED
ANGRY	_____	_____	_____	_____	_____	_____	_____ JOYFUL
STRONG	_____	_____	_____	_____	_____	_____	_____ WEAK
MAD	_____	_____	_____	_____	_____	_____	_____ GLAD
HEAVY	_____	_____	_____	_____	_____	_____	_____ LIGHT
CALM	_____	_____	_____	_____	_____	_____	_____ AGITATED
RELIEVED	_____	_____	_____	_____	_____	_____	_____ BURDENED
SATISFIED	_____	_____	_____	_____	_____	_____	_____ FRUSTRATED
TENSE	_____	_____	_____	_____	_____	_____	_____ RELAXED
VALUABLE	_____	_____	_____	_____	_____	_____	_____ WORTHLESS

Part VI: Impact and Consequences

34. A cesarean can affect a woman in the following ways:

35. A cesarean can affect a newborn baby in the following ways:

36. A cesarean can affect men in the following ways:

Part VII: Concerns

37. Most people who have cesarean births have expressed some concerns. What concerns did you have for:

YOUR WOMAN:

38. YOUR BABY:

39. YOURSELF (What concern does a cesarean create for the man, the father?)

Part VIII: Comparison--Vaginal versus cesarean birth

40. Do you feel there are differences between a vaginal and a cesarean birth?

1. yes
2. no
3. don't know

Part VIII (continued): Comparison--Cesarean versus vaginal birth

43. How do you feel a cesarean birth differs from a vaginal birth for YOUR WOMAN:

44. BABY:

45. FATHER:

46. How do you feel a cesarean and vaginal birth are similar?

47. If you could have had a choice for this birth, which would you have preferred?

    1. cesarean
    2. vaginal
    3. no preference

Part IX: Satifactions versus Frustrations

48. What aspects of the cesarean birth were satisfying to you and brought you happiness and pleasure?

49. What aspects were stressful and brought you feelings of anger, frustration, and disappointment?

50. What suggestions do you have to make cesarean childbirths a more meaningful experience for fathers?

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