

THE EFFECT OF PLANNED VERSUS UNPLANNED PREGNANCY
ON THE BODY-IMAGE OF THE PREGNANT WOMAN

A THESIS

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DEDICATION

This thesis is dedicated to my husband whose faith and confidence in me, and whose patience throughout the past year, has made the attainment of this degree possible. And, to my parents who instilled in me the desire for knowledge and the faith that I could accomplish my goals.

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CHAPTER 1

INTRODUCTION

There is much being written and discussed today concerning the changing role of women in American society. Many people feel that women are gradually attaining equality with men in the job market and will eventually invade even the most "male-dominated" of professions. Equality of the sexes is slowly becoming a reality.

Despite these numerous changes, however, there remains one phenomenon that is unique to women. This phenomenon is the experience of carrying and bearing a child. Although the pregnant woman's partner may share in the pregnancy to a great degree, the actual childbearing belongs to the woman.

Pregnancy is associated with many psychological and physiological changes. One of the somatic changes that a gravida undergoes is a profound alteration in the outward appearance of her body which becomes especially pronounced as the woman approaches the end of her pregnancy. As her actual body shape changes, so may the way in which she views herself both emotionally and physically.

A woman's concept of her body at any time is very important to her and the emphasis on physical beauty in our society makes it even more so. As the gravida moves farther away from the lithe, slim "ideal" she may have a more difficult time maintaining a body-image that is acceptable to her.

Perhaps one aspect of the pregnancy that may also have some effect on the woman's view of herself and her body is the fact that the pregnancy may or may not have been planned at this time. If the partners have anticipated the baby, the gravida may be able to construct a more positive picture of herself than she might if the pregnancy was not anticipated.

Problem Statement

Because there is a lack of research regarding the effect of the planning of pregnancy on the body-image of a pregnant woman, this study addressed the question: Is there a difference between the body-images of pregnant women with planned versus unplanned pregnancies?

Justification of the Problem

Pregnancy is associated with a change in "the whole of what one feels one's self to be" (Iffrig, 1972, p. 631). It is commonly accepted that a pregnancy necessitates a

substantial role change for a woman both individually and in relation to her family. However, in addition to a social role transition, the pregnant woman must also cope with a tremendous change in the appearance of her body. This element may be an important factor in the woman's mental state during her pregnancy, but it is too often overlooked by nurses and physicians as an aspect of the period that one "must just put up with" (Weinberg, 1978, p. 18). What is forgotten is that to many people the body is a mark of femininity and is an important part of sexuality and self-concept.

Rubin (1968) emphasizes that the body-image and the ideal image are interdependent parts of the overall self-concept. If the actual body-image moves too far from the ideal image, tension and anxiety may result and the self-concept may suffer. For many women, this may be a significant occurrence because "the female in her role as a woman is explicitly identified with her body" (Fisher, 1964, p. 10). Changes in this body, then, necessitate changes in a woman's mental picture of herself.

Today's woman may be extremely body-conscious as the media bombards her with pictures of the "ideal" woman who is slim, vivacious, and beautiful. As the gravida moves away from this image she may feel odd, unloved, and alone.

Because she becomes more introspective and narcissistic during pregnancy, these feelings may be intensified and create a problem area (Caplan, 1961). Other facets of the situation such as timing of the pregnancy, family relations, economic situation, etc., may also affect the gravida's emotions. Whatever the source of the pregnant woman's positive or negative feelings, they must have some effect on the way in which she views her situation and hence herself (Caplan, 1961; Venezia, 1972).

Before 1971, there was a very limited amount of nursing literature addressing body-image. Since that time, this concept has received more attention by nursing professionals. However, according to Fawcett (1979) who has done several studies on body-image in pregnancy, there is still a paucity of empirical research in this area. There is a need for studies which relate body-image theory to the nursing process. These studies will become increasingly important as nurses realize that information concerning body-image is helpful in understanding patients and families and in planning nursing interventions which help to promote realistic and healthy body-attitudes.

Roy (1976) points to man's need to adapt to a changing environment in order to preserve his psychic integrity and self-concept. She sees the activities of the nurse as

assessing individual patient behaviors and needs with a goal of promoting positive adaptation to stressors and change. Because pregnancy is indeed a time of change and crisis (Iffrig, 1972), nurses must realize the importance of using education and counseling techniques to decrease anxiety and promote healthy maturation in this period. The gravida should be able to receive acceptance, encouragement, support, and help in adjusting to her changing situation. Through continued research into the many facets of this experience, nurses will compile the information necessary to effectively educate and help pregnant patients.

Conceptual Framework

The conceptual framework for this study was composed of the theories of body-image by Schilder (1950) and that of psychological processes of pregnancy suggested by Deutsch (1945).

Body-image, as defined by Schilder (1950), is the picture we have of our own body in our mind. It is an active and dynamic part of the world, constantly changing according to life circumstances.

Because the body-image never exists by itself but is associated with a personality, it is greatly influenced by tendencies, motives, thoughts, and emotional changes. It

is also altered by our perception of the words and actions of others that draw attention to particular parts of our body--especially by the comments of those we love and with whom we are spatially close.

Schilder (1950) states that any altered physiological state will result in changing emotions and necessitate restructuralization of the body-image. Changes in one part of the body may be generalized to the whole structure and cause our total body-image to either shrink or expand. In the same way, our concept of the beauty or ugliness of one part of our body may alter the entire image either negatively or positively, as may the desirability of the situation in which we are functioning.

Because our own body-image is so closely entwined with those of the people around us, a new discovery about a part of our body provokes a special interest in that part of the body of others. If we feel that our own body part is not acceptable in comparison with those of others, we may form a very negative view of ourselves and even try to abolish our present body-image and form a new one, constantly striving to obtain the "ideal" image as we perceive it. Constructing the perfect body-image for ourselves is rarely possible and negative feelings may remain.

Deutsch (1945) feels that pregnancy causes a great upheaval in a woman both physically and mentally. Each woman brings certain emotional factors into her pregnancy which are then interwoven with the organic manifestations of the condition, causing new emotional elements to emerge. The pregnant woman becomes introspective and is very concerned with the changes taking place in her mind and body. As she progresses through the pregnancy her entire attitude towards herself undergoes a great revision.

The way that she feels about her pregnancy at any time is influenced by the woman's developmental level, relationship with her sexual partner, and attitude toward the pregnancy itself. These factors may also have an effect on the way that the woman views her own body and the fetus that lies within it.

Assumptions

For the purpose of this study, the following assumptions were made:

1. Body-image is a function of physical, situational, and environmental factors.
2. Pregnancy constitutes a crucial period in the life cycle of a woman.
3. The nonpregnant body-images of the pregnant subjects in the study were similar to the baseline body-images

of the nonpregnant women in the study population.

4. The study subjects were honest with their responses to the questionnaire.

5. The study subjects were able to read at a sixth-grade level.

Hypotheses

The following hypotheses were investigated:

1. There will be no difference between the body-images of pregnant women who have planned their pregnancies and those who have not planned their pregnancies.

2. There will be no difference between the body-image of a pregnant woman at five months and at eight months of pregnancy.

3. The demographic variables of age, race, educational level, parity, and socioeconomic status will have no effect on the body-image of the pregnant woman.

4. There will be no difference between the body-images of the nonpregnant study subjects and the body-images of the pregnant subjects at five months of pregnancy.

Definition of Terms

The following terms were defined for the purpose of this study:

Assistant--Person who assisted the investigator by answering questions that the subjects had concerning the study, obtaining consent forms, and administering the questionnaires. Assistants received a detailed explanation of the research study, questionnaire, and method of data collection.

Body-image--That picture or schema of our own body which we form in our minds as a tridimensional unity involving interpersonal, environmental, and temporal factors plus the feelings and attitudes which we have concerning our body (Kolb, 1959). For this study, body-image was represented by the Body-Cathexis score on the Body Cathexis-Self Cathexis Scale (BC-SC Scale).

"Ideal" image--Our conception of the "perfect" body-image which is developed through our interaction with the media and with the people around us.

Negative body-image--Feelings of dissatisfaction with the way one views his body. Level of dissatisfaction with body-image was indicated by Body Cathexis scores falling at the lower end of the continuum scale.

Planned pregnancy--A pregnancy that the partners prepared for and anticipated at this particular time. For this study the existence of a planned pregnancy was determined by the subject's response to a question on the

patient information form.

Positive body-image--Feelings of satisfaction with the way one views his body. Level of satisfaction with body-image was indicated by Body Cathexis scores falling at the upper end of the continuum scale.

Self-concept--The "composite of thoughts and feelings which constitute a person's awareness of his individual existence; his conception of who and what he is" (Jersild, 1952, p. 9). For this study, self-concept was represented by the Self Cathexis score on the BC-SC Scale.

Unplanned pregnancy--A pregnancy not anticipated at this particular point in the woman's life. For this study, the existence of an unplanned pregnancy was determined by the subject's response to a question on the patient information form.

Limitations

The following limitations were recognized with regard to the study:

1. A small sample size limits generalization of the findings.
2. Findings are specific only to the population studied.

3. The time period available for data collection did not allow the investigator to measure the subjects' pre-pregnant body-images.

Summary

Chapter 1 presented the major purpose of this study which was to evaluate the effect of planned versus unplanned pregnancy on the body-image of the pregnant woman. Justification of the need for study in this area was presented based upon the current literature. A conceptual framework derived from the theories of Deutsch (1945) and Schilder (1950) was described. The chapter also presented the assumptions upon which the study rested and the hypotheses which were investigated, followed by definitions of terms crucial to the understanding of the study. The body of the chapter concluded with the limitations which affected the generalizability of the study findings.

CHAPTER 2

REVIEW OF THE LITERATURE

The nine-month period of pregnancy provides the clinician caring for the pregnant woman with an opportunity to examine the bodily and emotional changes which accompany the pregnant state. The present study focused on variables which affect body-image during pregnancy and the changes, if any, which occur in the body-image of the pregnant woman.

The review of the literature for the study concentrates on six areas. First, the relationship between self-concept and body-image is discussed along with prominent theories and empirical studies which analyze this relationship. Second, findings relating to the differences between male and female body-images are related. Third, current findings on the psychology of pregnancy are compared followed by a discussion of the studies concerned with body-image and pregnancy. Next, the feasibility of using attitude scales to measure feelings about the body is analyzed. Finally, the concept of body-image in pregnancy is discussed as it relates to the practice of nursing.

Self-Concept and Body-Image

Pregnancy is associated with many subtle and profound changes in the pattern and organization of the pregnant woman's life situation. Family members' roles and relationships are adjusted in order to accommodate a new family member and preparations are made to provide a new baby with the necessities of life upon its arrival. Investigators agree that this aspect of the pregnancy affects the entire family (Anthony & Benedek, 1970; Caplan, 1961; Fawcett, 1977). However, one of the most obvious changes in pattern and organization during pregnancy takes place in the pregnant woman's own body. While this change may affect her family to some degree, it is the pregnant woman herself who must cope physically and psychologically with the alterations affecting her size and shape.

Fisher (1973) and Schilder (1950), among others, maintain that any change in the appearance of the body is accompanied by a change in the body-image--the picture and attitudes that one has regarding the body at any time. Likewise, any alteration of the body-image may, in turn, affect one's total self-concept.

Self, or self-concept, is "the composite of thoughts and feelings which constitute a person's awareness of his individual existence, his conception of who and what he is"

(Jersild, 1952, p. 9). As such, it is the nucleus of his personality and the center of experience and meaning in his life (Allport, 1961; Jung, 1953). Jung (1953) postulates that the "self" is life's ultimate goal, motivating human behavior and causing man's life-long search for wholeness. Rogers (1959) views the self-concept as a frame of reference, a "conceptual gestalt," which is composed of conscious and unconscious aspects and which moderates all relationships between one's self and others, and between one's "real" and "ideal" selves. Although these investigators define "self-concept" in slightly different manners, the basic tenet is similar--the "self" is critical to man's very being.

A person's self-concept is not ready-made, but is acquired through his experiences from birth. Sullivan (1947) states that the self is formed through the assimilation of "reflected appraisals" and depends greatly on interpersonal relationships. Before a young child is cognizant of the fact, significant others communicate their opinions and feelings to him, and these ideas become part of the child's self-concept. Because of this process, Jersild (1952) and Sullivan (1947) feel that attitudes toward the self are closely related to attitudes toward others. In addition, because many of the bases for the self-concept

are unconsciously assumed and ingrained early in childhood, the self-concept becomes a basic and enduring aspect of one's personality, although it may be modified to some degree through learning and experience. In this sense it is also a dynamic entity. This point is supported in a well-designed study by Engel (1959) who followed young adults over a two-year period and found that their self-concepts were already quite well-established and stable. Other Western researchers concur with this opinion (Cattell, 1950; Hall & Lindsey, 1978; Jourard & Remy, 1955). It is interesting to note, however, that the Eastern personality theory of Abhidhamma assumes that there is no abiding sense of self, and that the semblance of personality springs from the intermingling of impersonal processes which change completely from moment to moment (Hall & Lindsey, 1978).

Most researchers feel that a basically stable self-concept is necessary to provide each individual with a sense of integrity and to insure healthy day-to-day living. A part of the self-concept is the "ideal" self, and while the individual strives to reach this ideal, he also attempts to keep his actual and ideal concepts congruent enough so that he will avoid undue psychological stress (Allport, 1961). Jersild (1952) summarizes this well when he states that while the self is a continuously changing and growing

phenomenon, it is also, paradoxically, strongly geared to prevent growth and change. "A person seeks to preserve his selfhood even though it may be based on false premises" (Jersild, 1952, p. 19).

The relationship between self-concept and body-image is not a new concept. In 1929, Freud conceptualized the body-image as fundamental to the development of the ego or self. Jenkins (1980) states that body-image is an important dimension of self-concept. As such, body-image affects one's ego, self-identity, personality, self-esteem, and behavior (Moore, 1978; Rappoport, 1972; Secord & Jourard, 1953; Traub & Orbach, 1964). In a related area, previously conducted empirical studies have supported Schilder's (1950) claim that body-image and self-esteem are positively correlated (Berscheid, Walster, & Bohrnstedt, 1973; Johnson, 1956; Mahoney & Finch, 1976; Rosen & Ross, 1968, Secord & Jourard, 1953).

Probably the first aspect of the self to evolve is the "bodily me" (Allport, 1961). As the infant and child realizes that he is a separate physical being, he begins to form a personality based on the physical aspects of his body--those things that he calls his own. As a consequence, the bodily self becomes a life-long anchor for the individual's self-awareness and self-concept, although it never

alone accounts for the entire personality.

Historically, the concept of body-image had its origins in the neurological investigations of the 1920's, although Pare' had written of the occurrence of the phantom-limb phenomenon in the 1500's (Kolb, 1959). Head (1920) proposed the idea of a body schema to explain man's ability to recognize position or postural change. This proposition was developed into the Postural-Sensorimotor Model. Freud (1929) believed that the body-image developed through body surface sensations only. Within the field of psychiatry, however, it was Schilder (1950) who broadened the concept to include environmental, temporal, and personal factors as well as neurological aspects, and the bulk of body-image research was initiated as a result of Schilder's theory.

In Kolb's (1959) discussion of Schilder's theory he divides the concept of body-image into four interrelated areas. These include the body-ego, which is the part of our personality that perceives the body; the body-ideal, or that image of the "perfect" body against which we measure our bodily perceptions and concepts; the body-percept or the visual picture we hold of our bodies; and the body-concept--the thoughts, feelings, and attitudes which we have regarding our bodies. Venezia (1972) refers to this

latter aspect as the attitudinal dimension, and it is with this part of the body image that the Body Cathexis-Self Cathexis Scale is concerned.

Schilder (1950) states that body-image develops through experience--initially through the tactile exploration of ourselves and our mothers, and then through observation of those around us and the comparison of our bodies with theirs. According to Spitz (1959) the separation of the bodily self from the environment is recognized at about 8 months and the "observable self" develops by approximately 15 months of age. However, most researchers feel that a child does not really develop a unique body-image until school age at which time he can completely dissociate himself from others (Allport, 1961; Freud, 1949; Piaget, 1950; Schilder, 1950). Therefore, development of the body-image is a social phenomenon, depending upon the child's interactions with the molding forces of this culture--parents, friends, schools, churches, etc. Jourard (1957) and Jourard and Remy (1955) have empirically demonstrated that attitudes and actions of parents have long-term effects on their children's body perceptions. They assert that body-images are never isolated but are always seen in relation to others' bodies and opinions. Likewise, Fisher (1973) maintains that a person's body-image depends more upon

others' opinions than on his actual physical self.

As the child matures, his body-image also changes. Freud (1929) believed that at different points in our lives, different bodily structures become more important. Schilder (1950) concurs, and feels that when this occurs, we begin to notice these body parts in those around us and we compare ourselves to others constantly. This phenomenon is especially true when body parts are rapidly changing or growing as in adolescence or pregnancy. If our body part does not compare favorably with those we see around us, our unhappiness with one aspect of our body may encompass our entire body-image causing discontent and anxiety. At this point we try to restructure our body-image so that it is closer to the ideal-image which we have also constructed and toward which we strive (Fisher, 1974).

Different cultures emphasize and deemphasize different aspects of the body at different times. Schilder (1950) states that it is ultimately the culture that determines "beauty" or "ugliness" and dictates the goal toward which one should strive. Jourard and Secord (1955) reached this same conclusion in their classic study of the ideal female figure. Their study has in turn been supported by Fisher (1973); Johnson (1956); Kurtz (1969); and Lerner, Orlos, and Knapp (1976). In the American culture today, the

attractive, slim, physically-fit ideal is very difficult to achieve. Berscheid et al. (1973), Gordon (1977), and Johnson (1956) have concluded that this situation may lead to anxiety and insecurity in those who are unable to reconcile their real with their ideal body-images. Related to this is Fisher and Cleveland's (1958) discussion of the concept of "body boundary" which is a barrier that each individual erects to distinguish self from nonself, and to protect the self from undue harm or upset. Fisher and Cleveland feel that the body boundary is part of the personality and may be clearly defined, providing much protection for the self and the body-image, or weakly demarcated, providing little buffer to the self-image. The boundary becomes vulnerable each time the body-image is threatened. McConnell and Daston (1961) found that pregnant women showed feelings of boundary disruption and increased vulnerability to outside influences.

Differences Between Male and Female Body-Images and Sex Roles

There are many discussions in the literature concerning real and imagined differences between male and female body-images and sex roles and the time at which these develop. Kohlberg (1966) feels that a child's social sex roles become translated into concrete body terms at three

to four years of age. From this point on, the child behaves in a way which will be reinforced by society and which further cements his or her body gender label. A study by Katcher and Levin (1955) showed that gender identity developed even before the children were able to differentiate between pictures of male and female genitalia, and that girls recognized the differences earlier than did boys. Fisher (1974) states that women are more open to awareness of their bodies than are males, and are given more freedom in our society to pay attention to their bodies. He feels that "the female in her role as a woman is more explicitly identified with her body than is the male" (p. 10). Also, Fisher (1964), Johnson (1956), and Kurtz (1969) have found that women have more definite body-images than do men and women more nearly equate body with self.

One further difference between the sexes has been demonstrated in several empirical studies. It has been shown that physical attractiveness is more important to females while physical effectiveness is of more interest to males (Bayley & Bayer, 1946; Johnson, 1956; Kurtz, 1969; Lerner et al., 1976). Kurtz (1969) found that while males preferred larger bones and muscles, females identified with slimness, especially of the waist and hips. A study by Moore (1978) resulted in similar findings. However, in a

large study, Berscheid et al. (1973) found that body-image affected self-esteem and sexuality equally in both sexes.

Psychology of Pregnancy

Fisher (1973) and Schilder (1950) maintain that with any physiological or emotional change, the body-image must necessarily adapt. Schilder (1950) states that:

when the body-image has once been created according to one's needs and tendencies it does not remain unchanged. It is a continual flow, and a crystallization is immediately followed by a plastic stage from which new constructions and new efforts are possible according to the emotional situation of the individual. (p. 240)

Because the body-image is inextricably bound to the self-concept and personality, the changes in body-image will also affect the individual's attitudes and behavior.

In reviewing the literature, one finds numerous discussions of the physiological and psychological changes occurring during pregnancy. The physiological changes have been well-documented. There has, however, been some disagreement among investigators concerning the psychological changes which occur during pregnancy and the extent to which they actually affect the gravida. Detailed empirical study of the normal psychological processes in pregnancy or the variables affecting these processes are rare. Most studies which have been done are speculative and employ readily available clinic populations (Leifer, 1977). Bibring

(1961) has attempted a longitudinal study of the psychological processes of pregnancy and the postpartum period, including the assessment of body-image changes throughout gestation. The final results of this aspect of her study have not been published. Chertok (1969) and Wenner, Cohen, Weigert, Kvarnes, Ohaneson, and Fearing (1969) have also undertaken longitudinal studies but have focused mainly on negative personality aspects of the gravida.

Much research has been done to assess the relationship between attitudes and/or emotional adjustment during pregnancy and the occurrence of obstetric complications and/or pediatric abnormalities. The major finding from this work has been that highly-anxious women do experience more obstetric complications than nonanxious women (Gordon, 1977; Venezia, 1972).

Deutsch (1945) states that a woman's psyche contains an element not found in that of the masculine sex--the psychologic world of motherhood. That a woman's feelings and attitudes do change during pregnancy has long been accepted but rarely documented. Iffrig (1972) states that a knowledge of these changes could assist the clinician in understanding any behavioral changes that may occur in this period.

Benedek (1970), Bibring (1959), Caplan (1961), Colman and Colman (1971), Duetsch (1945), and Leifer (1977) among others, view pregnancy as a developmental crisis in which psychological disequilibrium provides maturational potential for new and adaptive solutions to present and past conflicts. The use of the word "crisis" has been criticized by some, including Fisher (1973), who say that this word causes people to envision much more psychological imbalance than actually occurs in pregnancy. If one uses Rappoport's (1965) definition of crisis as "a change in a steady state," or Dzik's (1976) definition of "a turning point," however, the word loses its negative connotation and seems to define the period in the sense that the previous authors wished. Jimenez (1980) has characterized the changes occurring in pregnancy as "a normal life crisis" which affects women differently depending upon the level of their maturational development before pregnancy. Deutsch (1945) emphasized this aspect also when she states that each woman brings a unique personality into the pregnancy experience. Parks (1951) feels that the crisis of pregnancy is fear of the unknown rather than a psychological breakdown. As such, Parks' definition lays the blame at the door of the clinician who fails to educate the gravida and her family about the pregnancy experience.

The foregoing discussion illustrates the need for a revision of the terms used to refer to the psychological processes of pregnancy. Although most investigators concur on the changes taking place, the different terminology is confusing.

Benedek (1970) used psychoanalysis to study the emotional concomitants of the menstrual cycle and pregnancy. She concluded that the dominant mood of pregnancy, which she feels to be one of narcissistic emotional response and increasing introversion, is due to increased progesterone influence. Colman and Colman (1971) agree that the hormonal influence may alter the intensity of the emotional response in pregnancy but cannot account for all of the mood swings, etc. The hormonal influence must be considered together with body-image changes, role reevaluations, family structural changes, shifting support systems, and attitude toward the pregnancy. It would also seem that our changing cultural views on the "necessity" of pregnancy and motherhood and the fusing of the male and female roles might affect the amount of support the pregnant woman feels that she receives.

Caplan (1961), Colman and Colman (1971), and Rubin (1970) discuss changes in the psychological processes of the pregnant woman throughout the different trimesters. The first trimester is a time of ambivalence, uncertainty, and

questioning. Even for those women who truly desired the pregnancy, questions arise about parenting ability and readiness. These thoughts may not always be conscious but will be present to some extent. They postulate that the planning or not planning of the pregnancy will not alter the kinds of feelings aroused, but only the degree.

Colman and Colman (1971) feel that the greatest task during the first trimester is acceptance of the pregnancy. This leads to a turning inward and an increase in narcissistic tendencies that continues throughout the pregnancy (Bibring, 1959; Deutsch, 1945; Rubin, 1970; Venezia, 1972). At this same time, incidents which formerly would not have affected the woman may now upset or amuse her. The emotions become more labile.

During the second trimester, as the pregnancy becomes confirmed by fetal movement, the woman looks for acceptance for herself and her changing body. Support from others, especially her husband or sexual partner, becomes increasingly important. Caplan (1961) and Deutsch (1945) feel that unless the gravida is given the love and nurturing she needs at this time, she will be unable to give love to her child when it is born.

Some investigators believe that the continued introduction of the second trimester makes it possible for the

gravida to be in tune with her feelings and increases her ability to discuss or relate them (Caplan, 1961; Fisher, 1973). Others feel that the pregnant woman becomes very hesitant to discuss herself or her body (Colman & Colman, 1971; Deutsch, 1945).

In the third trimester, the gravida becomes increasingly involved with her child. Feelings of vulnerability and fear of harm may bother the pregnant woman as she nears delivery (Rubin, 1970). At this point, most of the gravida's role and goal adjustments should have been made, but for some, this task will not be completed until after delivery (Iffrig, 1972).

That women tend to be more generally anxious during pregnancy without deteriorating basically has been noted by Bibring (1959) and Deutsch (1945) and demonstrated empirically by Leifer (1977), Loesch and Greenberg (1962), and Tolor and Digrazia (1977). Fisher (1973), Hooke and Marks (1962), and Venezia (1972) did not demonstrate this finding. However, all of the above studies were relatively small, and studied different periods during pregnancy. The review of the literature shows a consensus that the amount of psychological disequilibrium during pregnancy will be in direct proportion to the amount of anxiety present before pregnancy and the extent to which the pregnant woman experiences

physical complications.

Body-Image and Pregnancy

I have previously discussed Kolb's (1959) and Schilder's (1950) assertions that any physical or psychological change precipitates not only a revision of body-image but also a change in self-concept. To believe that a woman's body-image would change during the course of pregnancy seems a logical deduction. However, the exact nature or direction of this change and the variables which affect it have not been studied extensively enough to draw any definite conclusions. Fawcett (1979), Fisher (1973), and Moore (1978) cite the need for empirical study to relate the suppositions and assumptions to body-image theory and to provide a theoretical basis for medical and nursing care.

Those authors who state that the gravida's body-image will become more negative during pregnancy base much of their argument on the assumption that with movement away from the slim societal ideal, the gravida will become increasingly displeased with her bodily shape and appearance. Jourard and Secord (1955) have concluded from several classic studies that in American society "it is good to be smaller than you are in all dimensions but the bust" (p. 246). Moore (1978) states that women in America are not provided with a pregnant "ideal," but are bombarded with

pictures and advertisements showing only the nonpregnant woman. Thus, they may have nothing to identify with which is appropriate to this period in their lives.

Kubie (1937) in a study of past sexual beliefs, states that unconsciously, slimness is equated with cleanliness and obesity with dirt. In addition, he says, from early times, the female body and sexual functions have been considered unclean. In ancient Egypt, menstruating women were subject to isolation, and in the Hebrew culture, purification of a woman delivered of a child took up to two months (Cianfrani, 1960). In some cultures these views are still current, and in America, their remnants can be seen in those women who view pregnancy as an illness.

Studies which support the belief that the gravida will become increasingly dissatisfied with her body during pregnancy have been done by Carty (1970), Fawcett (1977), Leifer (1977), McConnell and Daston (1961), and Moore (1978). They found that dissatisfaction with the body did not become pronounced until the third trimester and that until this time most women were able to accept their bodily changes. Part of this phenomenon may be due to the lag time involved in bringing the body-image up to date. The aforementioned studies were small and studied pregnant women at different points in their pregnancies. None of the studies were

longitudinal.

Fisher (1974) believes that too much emphasis has been placed on the negative body feelings in pregnancy. He has not demonstrated this finding and has concluded as a result of well-conducted studies that women adjust quickly and favorably to the bodily changes of pregnancy. He believes the key to this adjustment is the social acceptance that accompanies pregnancy. Lerner, Raskin, and David (1967) have reached this same conclusion regarding most pregnant women. They believe that the change in body contour is viewed as fulfillment and a defense against depersonalization. Venezia (1972) believes that the issue is not this simple, but depends upon numerous variables associated with each gravida.

Although it seems likely that variables such as age, parity, marital status, social class, and educational level would affect body-image during pregnancy, this subject has been very rarely studied. Clifford (1962) and Doty (1967) have found that there are significant differences between multiparae and primiparae in their attitudes and needs surrounding the pregnancy itself. Benedek (1970) and Colman and Colman (1971) have found little difference in this respect. Clifford (1972) and Loesch and Greenberg (1972) have found more psychological conflict regarding the

pregnancy in unwed women than in those who are married. Fawcett (1977) and Kolb (1959) among many, state that the support of a husband or steady sexual partner is very influential in molding a woman's attitude toward her pregnancy.

Doty (1967) has also found that attitudes toward pregnancy differ between social classes. Rainwater (1968) found this to be true of family-planning attitudes and behavior in general. He also presented some evidence that race may affect the attitudes somewhat. The effect of age on attitude toward pregnancy has not been studied, but Jourard and Secord (1955) have shown that body-concept does change over a period of many years. Interestingly, none of the aforementioned studies has investigated variables related to pregnant body-image per se.

The effect of planned versus unplanned pregnancy on the body-image of the pregnant woman has not been studied empirically. Deutsch (1945) states that this aspect of pregnancy will necessarily affect the woman's attitude toward the pregnancy and her body. Venezia (1972) concurred with Deutsch, but he found no relationship between attitude toward the pregnancy and body-image. McDonnell and Daston (1961) found that it was not attitude toward the pregnancy, but the pregnant woman's personality that affected body-image at this time. The need for more study concerning the

above issues would seem apparent.

Measurement of Attitudes

In this review of the literature, some disagreement was found concerning the efficacy of measuring attitudes in general and those concerning the self in particular. However, the majority of sources reviewed indicated that enduring attitudes could indeed be measured using attitude scales.

Cattell (1950) states that the concept of "self" and all that it includes is a sentiment or acquired attitude structure which is the result of experience. Shaw and Wright (1967) feel that attitudes are relatively enduring systems of evaluative reactions which reflect underlying beliefs. As such, attitudes predispose the organism to behave or respond to situations in ways which are determined by the underlying personality structure. Both Fishbein and Ajzen (1975) and Shaw and Wright (1967) propose that attitudes can thus be measured indirectly by measuring the behaviors which they produce.

The most frequently-used methods of measuring attitudes require subjects to respond to a set of statements regarding an object or a concept. The error involved in inferring the individual's attitude from his responses on the questionnaire should be small when the entire set of statements is used (Cattell, 1973; Fishbein & Ajzen, 1975;

Shaw & Wright, 1967; Wylie, 1974). Cattell (1973) maintains that this is especially true when one studies unique personality traits like self-concept and body-image which are deeply rooted in the person's unconscious.

Shaw and Wright (1967) state that Likert-type scales are used in many attitudinal surveys and can be reliable and valid when based originally on a large number of items that have been carefully analyzed. These scales are usually considered to yield ordinal data and, in the past, nonparametric statistics were applied to them. Now, however, researchers are maintaining that with a widely-tested tool which has good reliability and validity, parametric techniques such as analysis of variance may be used "with very little effect on the indices or on the inferential statistics applied to the indices" (Nunnally, 1978, p. 29). Scott and Wertheimer (1964) concur with this statement. Shaw and Wright (1967) feel that the researcher should make this decision based upon the individual tool being used.

Relationship of the Concept to Nursing

Fawcett (1979) and Murray (1972) cite the crucial need for the empirical study of the theory of body-image and its application to nursing practice. To date most of the nursing studies which have been done regarding body-image have referred to children and to adults following surgery. The

need for these studies in the area of obstetrical nursing would also seem evident.

One of the major functions of the professional nurse is to assist the patient in adapting successfully to changing situations. The period of pregnancy offers a situation in which the nurse can use these skills to the fullest extent. Caplan (1961) and Loesch and Greenberg (1962) assert that while the psychological changes in pregnancy can lead to maturation, the pregnant woman may frequently need guidance to insure that this goal is met. If the nurse utilizes basic principles of crisis intervention and realizes that crisis periods are accompanied by increased suggestibility, the educational opportunities during pregnancy become clear. Caplan (1961) and Dzik (1976) think that nurses are in a unique position to provide this education and support to the gravida because of their closeness to her and because of the nonthreatening atmosphere which usually exists between client and nurse.

Roy (1976) speaks of the importance of the role of the nurse as a change agent. A part of this role concerns educating clients so that they can accept and adjust to change more easily. Before nurses can effectively help their clients to adapt to bodily changes, however, it will be necessary to know what kinds of changes occur, what variables

affect them, and how the pregnant woman reacts to these changes. Carty (1970) examined some of these variables, but her study was small and did not use controls. Fawcett (1977) demonstrated that many of the psychological changes associated with pregnancy affect both the gravida and her spouse. This finding emphasizes the fact that nursing care must focus on the pregnant family as well as the gravida herself.

Jourard (1971) reminds medical professionals that too often we base our psychological support for clients only on assumptions that have no empirical basis. Roy (1976) concurs with this belief and emphasizes the need for nurses to initiate studies which will define a theoretical platform on which to base nursing care.

Summary

The literature related to body-image in pregnancy was reviewed under six major headings. The primary theories concerning self-concept and body-image were discussed first followed by a review of studies demonstrating a relationship between these two concepts. Next, empirical studies showing a difference between male and female perceptions and interest in the body-image were presented. Third, the different views found in the literature with regard to the psychology of pregnancy were compared and contrasted followed by a

discussion of the studies which have investigated body-image in pregnancy. The next major section reviewed the literature with regard to the use of attitude questionnaires for the measurement of self-concept and body-image. Finally, the concept of the body-image as it relates to pregnancy was discussed in terms of the need for nursing research in this area and the basing of nursing care on body-image theory.

CHAPTER 3

PROCEDURE FOR COLLECTION AND TREATMENT OF DATA

An explanatory, nonexperimental research design was used in this study. Explanatory research is concerned primarily with assessing the relationships between facts and providing understanding concerning these relationships (Polit & Hungler, 1978). This study was necessarily nonexperimental because the investigator could neither manipulate the independent variable (planned versus unplanned pregnancy) nor control for all extraneous variables, two factors which are required before a study may be called experimental in nature (Kerlinger, 1973).

Extraneous variables which may affect the dependent variable of body-image are age, race, parity, marital status, socioeconomic status, and educational level. The factor of marital status was controlled by limitations set on sample selection. Effects of the other extraneous variable were analyzed using a one-way analysis of variance statistical technique.

The prospective study was conducted over a three-month period, utilizing three groups. Prospective studies are

defined by Polit and Hungler (1978) as being those which look ahead to a change in the dependent variable.

The first study group consisted of pregnant women with planned pregnancies while the second group included pregnant women with unplanned pregnancies. A control group of non-pregnant patients was included to obtain baseline data on body-image in the population. Carty (1970), Fawcett (1977), and Rubin (1970) have found that it is not until the second trimester that the pregnant woman really has any feelings about the changes which are occurring in her body. Therefore, the pregnant subjects in this study were tested at five and eight months of pregnancy.

Setting

The setting for this study included three private obstetrician-gynecologists' offices. These offices are located in professional buildings adjacent to a suburban general hospital in a large metropolitan area of approximately three million people located in southeast Texas. Each of the physicians whose offices were used sees between 15 and 20 new obstetrical patients and from 70 to 100 routine gynecological patients per month.

Population and Sample

This study utilized the three groups previously discussed in this chapter. Sixty-nine subjects were included in the sample. The subjects were all over the age of 18, married, and living with their husbands. Pregnant women who were from 18 to 22 weeks pregnant and met the aforementioned criteria were included in the study. Subjects in the control group were women who were coming to see the physician for routine yearly examinations. In addition to fulfilling the criteria discussed above, control group subjects had not had any major surgery or disease which might have affected their body-image such as mastectomy, hysterectomy, polio, or arthritis.

The target population for this study was all pregnant patients who fit the criteria and were being seen during the data collection period by the physicians who participated in the study.

Although the investigator had intended to use a stratified random sampling technique in the sample selection, this was not possible due to the small total sample size. Kerlinger (1973) states that the investigator must sometimes forego random selection in favor of a larger sample size. Therefore, all patients who were eligible for the study and agreed to participate were included in the sample.

Protection of Human Subjects

The ethical provisions for protection of the subjects in this study consisted of:

1. An explanation of the study given to the physicians whose patients were included in the study.
2. Written permission obtained from the physicians concerning inclusion of their patients in the study.
3. Written permission obtained from the Human Investigations Committee of Texas Woman's University.
4. A written explanation of the study including its benefits and drawbacks and an opportunity to ask questions given to all subjects before participation in the study.
5. A written consent form signed by all subjects prior to participation in the study.
6. Assurance to the subjects that no names would be used in the reports of the findings.
7. Assurance to the subjects that they could withdraw from the study at any time.
8. Written assurance to the subjects that the results of the study would be made available to them when the study was completed.

Instrument

The instrument used in this study was the Body Cathexis Self Cathexis Scale (BC-SC Scale) developed by Secord and

Jourard (1953). The scale was designed as a research tool for evaluating body-image and its relation to self-concept. The first subscale, Body Cathexis, contains 40 items which are concerned with the physical structure and functioning of the body. The second subscale, Self Cathexis, is composed of 41 items which refer to conceptual attributes of the self. Each subject is asked to select for each item one of five response options which best describes her feelings about the statement. These choices are:

1. Strongly dislike and wish change could be made.
2. Don't like, but can put up with.
3. Have no particular feelings one way or the other.
4. Definitely like, am pleased with.
5. Consider myself particularly or unusually fortunate (Johnson, 1956).

The number of the above items represents the weight assigned for each answer, with lower body-image and self-concept satisfaction associated with weights one and two, and higher satisfaction associated with weights four and five. Average scores on each of the subscales are obtained by totaling the scores in that subscale and dividing by the number of scores. A low rating is indicative of negative cathexis (degree of satisfaction) toward the body or self and a high rating denotes positive cathexis.

Secord and Jourard (1953) validated the BC-SC Scale against the Homonym Test of Body Cathexis. They found that, for a sample of 43 college females, a negative relationship with a correlational value of -0.41 existed. This was significant beyond the $.01$ level. The original investigators also compared body cathexis scores to self cathexis scores and found a correlation coefficient of $.66$ which is significant at the $.01$ level. Johnson (1956) showed a similar correlation of $.79$ using data obtained from a sample of 95 females.

Secord and Jourard (1953) determined split-half reliabilities corrected by the Spearman-Brown formula to be $.83$ for the Body Cathexis subscale and $.92$ for the Self Cathexis subscale. Johnson (1956) calculated test-retest reliability coefficients of $.72$ for Body Cathexis and $.74$ for Self Cathexis in a study testing 52 male students over an eight-week interval.

Data Collection

All obstetrical and gynecological patients who were seen over a one-month period and who met the established criteria were asked to participate in the study. Each prospective subject was given a written explanation of the study (Appendix A) and allowed to ask questions. The women who agreed to participate then signed a consent form

(Appendix B) before filling out the study questionnaires. Both the consent forms and questionnaires were labeled only with code numbers to protect the anonymity of the study subjects. After the consent form had been signed and witnessed, the subject was given a short demographic questionnaire (Appendix C) and the Body Cathexis-Self Cathexis Scale (Appendix D) and asked to complete them. The questionnaires required from 12 to 15 minutes to complete and were filled out while the subjects waited to see their physician in the examination room.

One person in each physician's office acted as an assistant in the study. The assistants answered questions, obtained consent forms, and administered the questionnaires. Each assistant received a detailed explanation regarding the study, the questionnaire, and the method of data collection.

The questionnaire was administered to the pregnant patients at two different prenatal visits. The first administration was between 18 and 22 weeks of pregnancy and the second at 30 to 34 weeks of pregnancy. The control group of nonpregnant subjects was administered the questionnaire only one time to establish baseline data concerning body-image.

Treatment of Data

Descriptive statistics were used in this study to summarize the data obtained on the demographic data forms and on the BC-SC Scale. Depending upon the level of measurement of each variable, the frequency, median, range, percentile rank, mean, and standard deviation were calculated.

From the subjects' responses on the Body Cathexis scale, a total body-image score was calculated according to the directions given by Secord and Jourard (1953). A one-way analysis of variance (ANOVA) was used to compare the first scores obtained on the questionnaire by the pregnant subjects with those of the control group. According to Kerlinger (1973), analysis of variance is a method of "identifying, breaking down, and testing for statistically significant variables that come from different sources of variation" (p. 147). This test was done to learn whether the body-images of the pregnant subjects in their fifth month differed significantly from the body-images of the nonpregnant women in the population.

To analyze the repeated measure of body-image between the planned and unplanned groups at five and eight months of pregnancy, a two-factor ANOVA was used. The rationale for using this statistical test was that there were two levels of the independent variable (planned versus unplanned

pregnancy) and two trials or administrations of the questionnaire. This test allows one to analyze the independent and interactive effects of more than one independent variable on the dependent variable (Polit & Hungler, 1978). This investigator is aware that the use of analysis of variance techniques on these data violates the assumption that these statistical tests can only be used when the original data are interval or ratio. However, as was discussed more fully in Chapter 2 under Attitude Testing, many authors now feel that parametric statistics may be used with data from adequately-tested Likert-type attitude scales (Nunnally, 1978; Scott & Wertheimer, 1964).

Effects of the extraneous variables were analyzed using a one-way ANOVA to determine the influence of the variables across the different groups.

Summary

This chapter discussed the methodology used in the collection and treatment of the study data. Described within the chapter were the type of research design utilized, the setting, the population and sample characteristics, and the steps taken to protect the human rights of the subjects. Also included were reviews of the instrument used in the study, the method of data collection, and the procedures used in the data analysis.

CHAPTER 4

ANALYSIS OF DATA

An explanatory, nonexperimental study was executed to determine the effect of planned versus unplanned pregnancy on the body-image of the pregnant woman. Sixty-nine women agreed to participate in this study and completed the study questionnaires. A description of the study sample is included in this chapter followed by a presentation and analysis of the data collected.

Description of the Sample

The sample for this study consisted of 69 subjects divided into three groups. Twenty of the subjects were members of a control group of nonpregnant women who met the established criteria for inclusion in the study. These women were included only to provide a baseline body-image profile for the general population, and the data collected from their questionnaires will be discussed in comparison to the findings related to the pregnant subjects in the next section of this paper.

The other 49 subjects in the sample were the pregnant subjects with which the study was actually concerned. These subjects were divided into a group of 30 women with

planned pregnancies and a group of 19 women with unplanned pregnancies on the basis of their responses to a question on the demographic data form. All pregnant women who fulfilled the requirements and were eligible for the study did agree to participate. Five additional women filled out the study forms. However, two of these women were estranged from their husbands and three were discovered to be four to five weeks further into their pregnancies than they thought. Therefore, these subjects were eliminated. The descriptive statistics which follow were calculated from answers given on the pregnant subjects' demographic data forms.

The ages of the pregnant subjects ranged from 20 to 34 years with a mean age of 26.898 and a standard deviation of 3.709. The median age was 26.600 and the mode was 29.000, with 16.3% of the subjects falling within this age category.

The majority of patients being seen by the participating physicians are Caucasian and this was reflected in the study population. Forty-three (87.8%) of the subjects were Caucasian (non-Hispanic) while only three (6.1%) were Hispanic, one (2.0%) was Oriental, and two (4.1%) of the subjects were Indian. There were no Black women in this study sample.

Educational level of the subjects was also evaluated. None of the women had less than a seventh-grade education. One subject (2.0%) had a junior high (seventh, eighth, or ninth grade) education and one subject (2.0%) had a 10th or 11th grade education. Twelve subjects (24.5%) had completed high school, 18 (36.7%) had some college education, and 15 (30.6%) had completed four years of college. Two subjects (4.1%) had completed post-baccalaureate degrees.

Five of the study subjects (10.2%) had family incomes between \$10,000 and \$19,999 and 14 (28.6%) had incomes ranging from \$20,000 to \$29,999. The income range from \$30,000 to \$39,999 held 19 subjects (38.8%) while eight subjects (16.3%) had incomes between \$40,000 and \$49,999, and three (6.1%) subjects reported \$50,000 or above for annual income.

In the descriptive category of gravidity, or number of times pregnant, 21 subjects (42.9%) were pregnant for the first time, 18 (36.7%) were pregnant for the second time, and six (12.2%) were pregnant for the third time. Three subjects (6.1%) were in their fourth pregnancy and one (2.0%) was in her fifth. The mean in this category was 1.878 with a standard deviation of 0.992.

Each subject's parity was also evaluated. Twenty-eight subjects (57.1%) had as yet delivered no children,

13 (26.5%) had previously delivered one child, and six (12.2%) subjects had had two previous deliveries. One subject (2.0%) had three children and one (2.0%) had delivered four. The mean in this category was 0.653 with a standard deviation of 0.925.

Question nine on the Demographic Data Form asked each pregnant subject whether this pregnancy had been planned at this time. Thirty subjects (61.2%) responded "yes" to this question and 19 (38.8%) gave a negative response. It was on the basis of this question that the study groups were formed.

The next descriptive category was concerned with feelings toward the pregnancy at five months' gestation. Four subjects (8.2%) reported feeling very unhappy and three (6.1%) reported no feelings one way or the other. Of these seven subjects, all four of the "very unhappy" women were in the planned pregnancy group. In the "no feelings" category, one subject was in the planned pregnancy group and two were in the unplanned group. Twenty-five subjects (51.0%) were pleased with their pregnancy while 17 (34.7%) felt extremely fortunate to be pregnant.

The demographic variables of age, race, educational level, income, gravidity, parity, and feelings toward the pregnancy are summarized in Tables 1 and 2.

Table 1

Summary of the Demographic Variables of Age, Race,
Educational Level, and Income

Demographic Variable	Number in Each Group	Percentage of Total
Age:		
20-22	6	12.2
23-25	13	26.5
26-28	13	26.5
29-31	10	20.3
32-34	7	14.3
Race:		
Caucasian (non-Hispanic)	43	87.8
Hispanic	3	6.1
Black	0	0
Oriental	1	2.0
Indian	2	4.1
Educational level:		
Grade 7, 8, 9	1	2.0
Grade 10, 11	1	2.0
High School	12	24.5
Some College	18	36.7
College Degree (4-year)	15	30.6
Post-Baccalaureate	2	4.1
Income:		
Below \$10,000	0	0
\$10,000 - 19,999	5	10.2
\$20,000 - 29,999	14	28.6
\$30,000 - 39,999	19	38.8
\$40,000 - 49,999	8	16.3
\$50,000 or above	3	6.1

Table 2

Summary of the Demographic Variables of Gravidity,
Parity, and Feelings About Pregnancy

Demographic Variable	Number in Each Group	Percentage of Total
Gravidity:		
1	21	42.9
2	18	36.7
3	6	12.2
4	3	6.1
5	1	2.0
Parity:		
0	28	57.1
1	13	26.5
2	6	12.2
3	1	2.0
4	1	2.0
Feelings:		
Very unhappy	4	8.2
Tolerable	0	0
No feelings	3	6.1
Happy	25	51.0
Extremely fortunate	17	34.7

The final category of descriptive data was concerned with body-image scores at five months of pregnancy (Body A score) and at eight months of pregnancy (Body B score) for all pregnant subjects. There were 200 possible points on the Body Cathexis Scale. The Body A measurement had a mean of 129.388 with a standard deviation of 14.083 while the Body B measurement showed a mean of 128.551 and a standard deviation of 15.902. These findings are summarized in Table 3.

Findings

The findings of the study will be discussed as they relate to each of the four hypotheses. (A significance level of $\leq .05$ was set by the investigator for use in the determination of acceptance or rejection of the hypotheses.)

Hypothesis 1: There will be no difference between the body-images of pregnant women who have planned their pregnancies and those who have not planned their pregnancies.

This hypothesis was evaluated using a two-way analysis of variance and was rejected because a difference significant beyond the .001 level was found between the two groups. The cell mean score for the women which planned pregnancies changed from 129.467 to 126.533 and the cell mean for the unplanned group changed from 129.263 to 131.737. The findings indicated that women with unplanned pregnancies had

Table 3
Comparison of First and Second Body-Image Scores
for All Pregnant Subjects

	Body A Score	Body B Score
Mean	129.388	128.551
Standard Deviation	14.083	15.902
Maximum Score	159.000	175.000
Minimum Score	98.000	96.000
Median	128.750	128.000
Mode	127.000	130.000

significantly higher body-images at eight months than did the women with planned pregnancies. The results of these analyses are summarized in Table 4.

Hypothesis 2: There will be no difference between the body-image of a pregnant woman at five months and eight months of pregnancy.

The analysis of data concerning Hypothesis 2 was performed with the same two-way ANOVA used to evaluate Hypothesis 1. With the level of significance set at $\leq .05$, the results of this test were not found to be significant. Because the body-images of the pregnant subjects did not change significantly from five to eight months' gestation, Hypothesis 2 was accepted. The data for this hypothesis is summarized in Table 4.

Hypothesis 3: The demographic variables of age, race, educational level, parity, and socioeconomic status will have no effect on the body-image of the pregnant woman.

A one-way ANOVA was utilized to determine the effects of the extraneous variables on the body-image scores of the study subjects. This test determined whether or not a significant portion of the variability in the body-image scores could be attributed to the demographic variable being studied (Polit & Hungler, 1978). The variable of age was not studied because there is no evidence in the literature to suggest that an age change from 20 to 34 years would singularly cause a change in body-image.

Table 4

Summary of Body-Image Measures Between Groups and at Five
and Eight Months' Gestation

Source of Variance	Sum of Squares	Degrees of Freedom	Mean Square	F	Total Probability
Between Groups	1554640.100	1	1554540.100	4293.58	0.001 (highly signifi- cant)
Error	17018.000	47	362.08511		
Across Trials (5 & 8 months)	1.22888	1	1.22888	0.01	0.908 (not signifi- cant)
Error	4324.3018	47	92.00642		

To analyze the effect of the variable of educational level, several of the categories were collapsed in order that the ANOVA could be utilized. Therefore, categories three, four, and five were combined into a single category labeled "high school" and categories seven and eight were combined into a "college degree" category.

The results of the analysis revealed that of the variables tested, race was the only factor which appeared to significantly affect the dependent variable. The level of significance in this test was .02. Therefore, Hypothesis 3 was rejected. The levels of significance for each of the variables studied are summarized in Table 5.

Hypothesis 4: There will be no differences between the body-images of the nonpregnant study subjects and the body-images of the pregnant subjects at five months of pregnancy.

A one-way analysis of variance was used to compare the body-images of the nonpregnant subjects with those of the pregnant subjects at five months of pregnancy. The analysis revealed a probability level of .3743 which was not significant. Therefore, the hypothesis was accepted at the .05 level of significance. The statistics calculated from the ANOVA are summarized in Table 6.

Table 5

SUMMARY OF BETWEEN GROUPS VARIANCE AND LEVELS OF SIGNIFICANCE FOR
DEMOGRAPHIC VARIABLES AFFECTING BODY-IMAGE

Variable	Sum of Squares	Degrees of Freedom	Mean Square	F	Level of Significance
Parity	1551.884	4	387.971	2.142	.0915
Income	1639.045	4	409.761	2.288	.0750
Race	1950.016	3	650.005	3.864	.0153
Educational Level	657.262	2	328.631	1.706	.1929

Table 6

One-Way Analysis of Variance for Differences Between Groups
on Initial Body-Image Scores

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance
Between Groups	505.372	2	252.686	0.998	.3743
Error	16717.701	66	253.298		

Summary

This chapter has been concerned with the analysis and results of the data collected in this study and a description of the sample used. Findings indicated that there was indeed a significant difference between the body-images of women with planned versus unplanned pregnancies, with the body-images of women with unplanned pregnancies being more positive. The study demonstrated no significant change in body-image from the fifth to the eighth month of pregnancy. Of the variables of race, educational level, parity, and socioeconomic level, only race was found to be significantly related to feelings about the body. Finally, no significant difference existed between the body-images of the nonpregnant study subjects and those of the pregnant subjects at five months' gestation. Based on these findings, hypotheses 2 and 4 were accepted and hypotheses 1 and 3 were rejected.

CHAPTER 5

SUMMARY OF THE STUDY

This study was conducted to determine the effect of planned versus unplanned pregnancy on the body-image of the pregnant woman. The purpose of the study was to provide clinicians caring for pregnant patients with more information regarding the feelings and attitude changes occurring during this period.

In testing the hypotheses of the study, the investigator examined the difference between the body-images of women with planned versus unplanned pregnancies, the change in the body-image from five to eight months of pregnancy, and the effect of five demographic variables on the pregnant woman's feelings toward her body. In addition, the investigator compared body-images of a nonpregnant control group with those of the pregnant subjects at five months of pregnancy to determine if significant differences existed.

Summary

An explanatory, nonexperimental research design was employed in this study. The study was conducted over a three-month period within three private obstetrician-gynecologists' offices, and all patients eligible for the

study according to the predetermined criteria were asked to participate. Sixty-nine women, all of the eligible participants, were included in the study sample and were divided into three groups. Group 1 consisted of 30 pregnant subjects with planned pregnancies and Group 2 consisted of 19 women with unplanned pregnancies. Group 3 was made up of 20 nonpregnant women used to determine the baseline body-image in the general population. A demographic data form and the Body Cathexis-Self Cathexis Scale (Secord & Jourard, 1953) were utilized to collect the data. Pregnant subjects completed the questionnaires at five and eight months of pregnancy while control subjects received the questionnaires only once.

To determine the significance of the differences in body-image between the women with planned pregnancies and those with unplanned pregnancies, and to determine the difference between the body-images at five and eight months of pregnancy, a two-way analysis of variance was utilized. As a result of this analysis Hypothesis 1 was rejected and Hypothesis 2 was accepted. A one-way analysis of variance technique was used to analyze the effects of the demographic variables on the body-images of the pregnant subjects. The third hypothesis was rejected on the basis of these calculations.

To test the fourth hypothesis, a one-way analysis of variance technique was used to determine the significance of any differences between body-image scores of the nonpregnant subjects and scores of the pregnant subjects at five months of pregnancy. The hypothesis was accepted.

Discussion of Findings

Investigation of the difference in body-image between the two groups of pregnant subjects revealed that there was indeed a significant difference. Women with unplanned pregnancies showed a more positive body-image at eight months of pregnancy than did women with planned pregnancies, although the mean body-image scores for both groups at five months were very similar.

An extensive review of the literature revealed no previous empirical studies regarding this particular aspect of pregnancy, although Deutsch (1945) had theorized that planning or not planning a pregnancy would affect the gravida's attitude toward the pregnancy and toward her body. However, Deutsch did not specify the exact manner in which the gravida's attitude would be affected.

Although one might assume that a woman who planned her pregnancy would be more excited about the pregnancy and more accepting of the physical changes accompanying it, this study does not support such an assumption. Perhaps those

women who have planned their pregnancies are more excited initially and reach their emotional peak earlier in the pregnancy than do those women who have not planned the pregnancy at this time. As the excitement of being pregnant decreases for the gravida, perhaps she begins to resent the changes in her body and doubt that she will ever return to normal. The gravida with an unplanned pregnancy may initially take longer to adjust to the situation and may reach her emotional peak later in the pregnancy. She may actually enjoy being pregnant longer and accept the changes in her body farther into her pregnancy.

Another explanation for the findings of this study may be that personality differences could exist between women who really plan life events, including pregnancy, and those who do not. The personality differences themselves might account for the differences in attitudes toward the body as situations change. Benedek (1970), Bibring (1961), Deutsch (1945), and Venezia (1972) have found that basic personality structure does indeed affect attitudes in pregnancy.

The suggestions presented for this finding are necessarily speculative because of the lack of other empirical study with which to compare the results. However, the findings do emphasize the need for repetition of the study in this area.

The finding that no significant change occurred in the body-images of the pregnant subjects from five to eight months of pregnancy contradicts the findings of Carty (1970), Fawcett (1977), and Moore (1978) whose studies demonstrated that body-image becomes more negative as pregnancy progresses. However, the differences in study populations and methods between this study and the earlier investigations may be too great to make sound comparisons possible.

The previous studies were carried out using clinic rather than private populations. In addition, Moore's (1978) subjects were younger (mean age 22 years) than subjects in the present study and had an average of 12 or fewer years of education. The age and educational levels of Carty's (1970) and Fawcett's (1977) subjects were not given. These studies differed from the present one in that Carty (1970) and Moore (1978) used cross-sectional samples to collect their data rather than following the same subjects throughout their pregnancies, a fact which limits the generalizability of their findings. Similarly, Fawcett (1977) studied pregnant women only in their eighth and ninth months of pregnancy and found that feelings about the body became more negative as delivery neared. However, she did not evaluate her subjects in their first or second trimesters and therefore did not have an adequate baseline

measurement with which to compare changes. Perhaps if the present study had followed the subjects into their last month of pregnancy, the results would have been similar to the studies just cited. However, the differences in sample composition still exist.

In contrast, the finding that body-image did not deteriorate significantly during pregnancy seems to support Fisher's (1974) discovery that women usually adapt very easily to the physical changes in pregnancy. Fisher attributed his findings to the fact that these changes are socially accepted and the female in most cultures is groomed for the pregnant role from childhood. Likewise, Lerner, Raskin, and Davis (1967) have found that in the majority of medically uncomplicated pregnancies, the gravida accepts and even enjoys the changes in her bodily configuration.

Finally, the fact that the subjects involved in this study were married and living with their husbands may have affected their body-image in a positive fashion. Meyerowitz (1970), in a series of studies, found the support of a husband positively enhances the gravida's attitudes toward various aspects of pregnancy. Caplan (1961); Fawcett (1977); and Wenner, Cohen, Weigert, Kvarnes, Ohaneson, and Fearing (1969) have made similar assertions.

Analysis of the data generated in the present study which found no significant differences between the nonpregnant subjects' body-images and the body-images of the pregnant subjects at five months' gestation supports the assertions of Caplan (1961), Fawcett (1977), and Rubin (1970) that body-image in the second trimester will not differ markedly from that of the prepregnant woman. However, these findings would be more reliable if the same subjects had been followed from prepregnancy or first trimester into the second trimester period. The fact that the pregnant and nonpregnant subjects' body-images were so similar at the initial testing, however, does lend more credibility to the assumption that all study subjects were selected from the same population.

The final section of the discussion of the study findings is concerned with the effects of various demographic variables on the body-image of the gravida. Here, again, there are few empirical studies with which to compare the findings.

The only variable which was found to significantly affect body-image in this study was that of race. According to Venezia (1972), although one might surmise that race could affect body-image in pregnancy, this fact has not been adequately investigated. In this study, the investigator thinks that no conclusion can validly be drawn. The

majority of the subjects were Caucasian (87.8%), with only 12.2% being of other ethnic origins. It appears that the results of this analysis were skewed in favor of the small number of non-Caucasian subjects thereby invalidating the finding.

No study was found in the literature with which to compare the present finding that educational level had no effect on body-image. However, the sample in this study was quite homogeneous with regard to years of education, with 71.4% having at least some college education. Perhaps a more heterogeneous sample with regard to this variable would have shown a different result.

The next variable analyzed was that of income level. Kurtz (1969) found that no relationship existed between this variable and body-image. The present study would seem to support his findings. However, Kurtz was not studying pregnant subjects and as a result, the populations cannot be compared without reservation. Gordon (1977) did study pregnant women and felt that socioeconomic status might be related to body-image, but she did not present any definite conclusions regarding the issue because of her small sample size.

The fact that the present study did not demonstrate an effect of parity on body-image during pregnancy is in

conflict with the conclusions of Doty (1967) who found that parity significantly affected attitude towards pregnancy and emotions during this period. The study does support Benedek's (1970) and Wenner et al.'s (1969) findings that parity has no effect on attitude in pregnancy. This investigator noted that the difference in mean gravidity (1.878) and mean parity (0.653) in this study indicated that these study subjects had lost previous babies to either spontaneous or deliberate abortion. Perhaps the fact that some of the subjects may have experienced previous losses in pregnancy may also have influenced their attitudes toward the present pregnancy in ways which affected this study's results.

Finally, the finding that feelings toward the pregnancy were not related to body-image in this study supports Venezia's (1972) conclusion that attitude toward the pregnancy does not affect body-image. This finding would have been more credible if attitude toward the pregnancy had been measured with an attitude scale designed for that purpose. However, Venezia (1972) did use such a scale in his study with the results discussed above.

The foregoing discussion of the findings of this study highlights the paucity of empirical research in the area of body-image in pregnancy and the lack of agreement regarding

the current views held on the subject. The need for replication and expansion of the studies in this area is emphasized.

Conclusions and Implications

The conclusions based upon the findings from this study are presented in this section of Chapter 5. Because of the small sample size, the short period of data collection, and the homogeneity of the sample, the findings obtained cannot be generalized beyond the subjects who participated in this study and the conclusions refer to the study sample alone.

The present study revealed that for the subjects included in the sample:

1. Body-image was more positive at eight months' gestation in women with unplanned pregnancies than in women with planned pregnancies.
2. Body-image did not change significantly from five to eight months of pregnancy despite the fact that several other empirical studies have demonstrated such a change.
3. The body-images of pregnant subjects at five months' gestation did not differ significantly from those of a control group of nonpregnant women in the population, a finding which supports similar findings in other empirical studies.

Although the extraneous variable of race was found to be significantly related to body-image no valid conclusion could be drawn because of the skewed distribution of subjects in this category.

The investigator has concluded, on the basis of the findings from this study and a review of other studies in the literature, that one cannot make general assumptions about the attitudes of pregnant women toward their bodies without these assumptions first being empirically tested. There are many variables which appear to affect these attitudes and feelings, some of which have probably not been investigated at all. The psychophysical aspects of pregnancy appear to be more complex than first thought and the psychological processes of pregnancy seem to be somewhat less influenced by physical changes than a cursory review of the literature would suggest.

The findings imply that much more investigation is needed in the area of body-image theory as it applies to the nursing care of the pregnant woman. One cannot at this time be certain about the variables which affect body-image in pregnancy.

In addition, the results of the study caution the nurse against the assumption that women with planned pregnancies will not need as much support and understanding as will

those who did not plan their pregnancies. Although the body-images of these subjects did not become more negative as their pregnancies progressed, this finding does not relieve the nurse of her obligation to provide information and anticipatory guidance for both the gravida and her family, to provide support, and to be alert for any misgivings or concerns which may arise in this area. Similarly, the results of the study do not negate the theory that body-image is an important part of self-concept and will be of concern to the gravida as it is to all women. However, this issue may not be of as crucial import as was previously thought.

Recommendations for Further Study

From the findings of this study as well as a review of the literature, the following recommendations are proposed:

1. The present study should be expanded to include a larger sample and to follow the subjects from initial diagnosis through the ninth month of pregnancy.
2. A similar study should be carried out which compares a clinic and a private population. Conceivably, such a study could more easily assess the effects of race, educational level, and socioeconomic status on the body-image in pregnancy.

3. This study should be repeated with the inclusion of an instrument designed to assess the attitude toward the pregnancy to evaluate the relationship between this attitude and body-image.

4. A study could be done which measures the husband's attitudes toward the pregnancy and his wife's body and correlates these attitudes with the wife's feelings toward her body.

5. A study could be done which compares body-image in pregnancy between unwed women and women who are married and living with their husbands.

6. Finally, a test which measures the basic personality structure of the gravida could be included in a repetition of the present study to investigate this relationship as suggested in the literature.

APPENDIXES

APPENDIX A: Explanation of the Study

EXPLANATION OF THE STUDY

You are being asked to participate in a research project that I am carrying out as a part of my graduate studies at Texas Woman's University in Houston, Texas. I am a registered nurse now concentrating in Maternal-Child Nursing. The purpose of my study is to find out how pregnant women view themselves and their bodies during their pregnancies. I hope to use this knowledge to benefit pregnant women by helping both doctors and nurses to provide helpful information to their pregnant patients about this important aspect of pregnancy. There will be no risk or discomforts associated with participation in this study other than the time it takes to fill out the questionnaire. Nonpregnant women who will fill out the questionnaires will also be very helpful to me.

Your participation in my study will be very much appreciated, however, the decision is entirely left to you. If you decide to take part in the study, you are free to withdraw at any time. Your willingness to participate or your decision to drop out will in no way affect your care.

If you do decide to participate, I ask that you fill out the attached questionnaire. If you are pregnant, I will ask you to fill out a similar form during your eighth month

of pregnancy. This form should take from five to ten minutes to complete. It includes questions that are concerned with the way in which you see yourself and a few questions concerning age, educational level, number of children, etc. Any information that you give me will remain strictly confidential and your name will not appear in any part of the reports. Do not sign your name to the questionnaire.

If you agree to take part in my study, please read and sign the consent form in this packet and give it to the office nurse. She will be able to answer any questions you may have. Also, feel free to call me at 783-6263.

Copies of the results of this study will be available to you in your physician's office in about eight months (November, 1980).

Thank you very much for your time.

Margo Scholin, R.N.

APPENDIX B: Consent Form

CONSENT FORM

I hereby agree to complete the body/self concept and demographic data (age, sex, etc.) questionnaires as a participant in this study. Both questionnaires have been explained to me in writing by Margo Scholin, R.N.

I understand that the investigation described in paragraph 1 poses no discomfort to me other than the loss of time required to complete the questionnaires.

I understand that the investigation described in paragraph 1 has the following potential benefits:

1. It will help the investigator to know what aspects of teaching about the body should be emphasized during pregnancy.
2. The investigator will share the results with the study participants so that in future pregnancies they may be better able to understand their own feelings about their bodies.

I understood that no medical service or compensation is provided to subjects by the university as a result of injury from participation in research.

An offer to answer all of my questions regarding this study has been made. I understand that I may withdraw from the study at anytime.

Signature

Date

Witness

Date

APPENDIX C: Demographic Data Questionnaire

Appendix III

DEMOGRAPHIC DATA QUESTIONNAIRE

Code # _____

Before you fill out your questionnaire, I would like you to answer some questions about your background. This information will be strictly confidential. It will help me to interpret the results of this research study. Please complete every item. Thank you.

1. Date of Birth: Year _____ Month _____ Day _____
2. Marital status (circle one): Married Single
3. Race (please circle)
 - a. Caucasian (non-Hispanic)
 - b. Hispanic
 - c. Black
 - d. Oriental
 - e. Indian
4. How many years have you completed in school? (please circle letter)
 - a. Part of grade school
 - b. Grades one through six
 - c. Seventh, eighth or ninth grade
 - d. Tenth or eleventh grade
 - e. High school
 - f. Some college education
 - g. Four-year college degree
 - h. Masters' or doctorate degree; M.D., law degree, etc.
5. Have you had major surgery in the past? If so, what kind(s)?
6. In what range is your family's total annual income? (please circle)
 - a. under \$10,000
 - b. \$10,000 - \$19,999
 - c. \$20,000 - \$29,999
 - d. \$30,000 - \$39,999
 - e. \$40,000 - \$49,999
 - f. \$50,000 or over

7. If you are now employed, in what range is your annual income?
- a. under \$5,000
 - b. \$5,000 - \$9,999
 - c. \$10,000 - \$14,999
 - d. \$15,000 - \$19,999
 - e. \$20,000 - \$24,999
 - f. \$25,000 or over

FOR PREGNANT WOMEN ONLY

8. How many times have you been pregnant? _____
How many babies have you had? _____
9. Was your present pregnancy planned at this particular time? (please circle)
Yes No
Comments:
10. Did both you and your husband desire a baby at this time?
Yes No
Comments:
11. How do you feel about your pregnancy now?
- a. Very unhappy
 - b. Unhappy, but can put up with it
 - c. Have no feelings one way or the other
 - d. Am pleased with the situation
 - e. Feel unusually fortunate to be pregnant.

APPENDIX D: Body Cathexis-Self Cathexis Scale

Code # _____

On the following pages are listed a number of things characteristic of yourself or related to you. You are asked to indicate which things you worry about and would like to change if it were possible, and which things you like or have no feelings about one way or the other.

Consider each item listed on the following pages and encircle the number next to the item which best represents your feelings about yourself according to the following scale:

1. Strongly dislike and wish change could somehow be made.
2. Don't like but can put up with.
3. Have no particular feelings one way or the other.
4. Definitely like; am pleased with.
5. Consider myself particularly or unusually fortunate.

So that you will be able to judge each item carefully in terms of the above statements, the scale will be at the top of each page. Judge each item carefully. Do not use the same number for each item. There are no right or wrong answers on this questionnaire.

1. Strongly dislike and wish change could somehow be made.
2. Don't like but can put up with.
3. Have no particular feelings one way or the other.
4. Definitely like; am pleased with.
5. Consider myself particularly or unusually fortunate.

hair 2 3 4 5	width of shoulders 2 3 4 5
facial complexion 2 3 4 5	arms 2 3 4 5
appetite 2 3 4 5	breasts 2 3 4 5
hands 2 3 4 5	eyes 2 3 4 5
distribution of hair (over body) 2 3 4 5	hips 2 3 4 5
nose 2 3 4 5	resistance to illness 2 3 4 5
physical endurance 2 3 4 5	legs 2 3 4 5
muscular strength 2 3 4 5	appearance of teeth 2 3 4 5
waist 2 3 4 5	sex drive 2 3 4 5
energy level 2 3 4 5	feet 2 3 4 5
back 2 3 4 5	sleep habits 2 3 4 5
ears 2 3 4 5	voice 2 3 4 5
age 2 3 4 5	health 2 3 4 5
chin 2 3 4 5	sex activities 2 3 4 5
body build 2 3 4 5	ankles 2 3 4 5
profile 2 3 4 5	posture 2 3 4 5
height 2 3 4 5	face 2 3 4 5
tolerance for pain 2 3 4 5	weight 2 3 4 5

1. Strongly dislike and wish change could somehow be made.
2. Don't like but can put up with.
3. Have no particular feelings one way or the other.
4. Definitely like; am pleased with.
5. Consider myself particularly or unusually fortunate.

sex (male or female) | 2 3 4 5

sex organs | 2 3 4 5

fingers | 2 3 4 5

skin texture | 2 3 4 5

1. Strongly dislike and wish change could somehow be made.
2. Don't like but can put up with.
3. Have no particular feelings one way or the other.
4. Definitely like; am pleased with.
5. Consider myself particularly or unusually fortunate.

sense of humor | 2 3 4 5

degree of independence | 2 3 4 5

temper | 2 3 4 5

ability to express self | 2 3 4 5

self-understanding | 2 3 4 5

artistic talents | 2 3 4 5

moods | 2 3 4 5

general knowledge | 2 3 4 5

imagination | 2 3 4 5

popularity | 2 3 4 5

self-confidence | 2 3 4 5

ability to accept criticism | 2 3 4 5

memory | 2 3 4 5

thriftiness | 2 3 4 5

personality | 2 3 4 5

ability to concentrate | 2 3 4 5

self-assertiveness | 2 3 4 5

ability to express sympathy | 2 3 4 5

conscientiousness | 2 3 4 5

generosity | 2 3 4 5

sensitivity | 2 3 4 5

ability to lead | 2 3 4 5

intelligence | 2 3 4 5

athletic skills | 2 3 4 5

happiness | 2 3 4 5

creativity | 2 3 4 5

love life | 2 3 4 5

sex appeal | 2 3 4 5

skill with hands | 2 3 4 5

gracefulness | 2 3 4 5

first name | 2 3 4 5

number of fears | 2 3 4 5

capacity for work | 2 3 4 5

ability to meet people | 2 3 4 5

vocabulary | 2 3 4 5

self-discipline | 2 3 4 5

1. Strongly dislike and wish change could somehow be made.
2. Don't like but can put up with.
3. Have no particular feelings one way or the other.
4. Definitely like; am pleased with.
5. Consider myself particularly or unusually fortunate.

handwriting | 2 3 4 5

willpower | 2 3 4 5

emotional control | 2 3 4 5

ability to make decisions | 2 3 4 5

self-consciousness | 2 3 4 5

APPENDIX E: Agency Consents

TEXAS WOMAN'S UNIVERSITY
COLLEGE OF NURSING

AGENCY PERMISSION FOR CONDUCTING STUDY*

THE C. A. Kaepfel, M.D.

GRANTS TO Margo Scholin, B.S.N.
a student enrolled in a program of nursing leading to a
Master's Degree at Texas Woman's University, the privilege
of its facilities in order to study the following problem.

A study of the effect of planned versus unplanned pregnancy
on the body-image of the pregnant woman as outlined in the
research proposal.

The conditions mutually agreed upon are as follows:

1. The agency (may) (may not) be identified in the final report.
2. The names of consultative ~~or~~ administrative personnel in the agency (may) (may not) be identified in the final report.
3. The agency (wants) (does not want) a conference with the student when the report is completed.
4. The agency is (willing) (unwilling) to allow the completed report to be circulated through interlibrary loan.
5. Other _____

Date: 3/25/80

[Signature]
Signature of Agency Personnel

Margo Scholin
Signature of Student

[Signature]
Signature of Faculty Advisor

*Fill out & sign three copies to be distributed as follows:
Original - Student; First copy - Agency; Second copy - TWU
College of Nursing.

TEXAS WOMAN'S UNIVERSITY
COLLEGE OF NURSING

AGENCY PERMISSION FOR CONDUCTING STUDY*

THE Odorindo Mendes-Neto, M.D.

GRANTS TO Margo Scholin, B.S.N.
a student enrolled in a program of nursing leading to a
Master's Degree at Texas Woman's University, the privilege
of its facilities in order to study the following problem.

A study of the effect of planned versus unplanned pregnancy
on the body-image of the pregnant woman as outlined in the
research proposal.

The conditions mutually agreed upon are as follows:

1. The agency (may) (may not) be identified in the final report.
2. The names of consultative or administrative personnel in the agency (may) (may not) be identified in the final report.
3. The agency (wants) (does not want) a conference with the student when the report is completed.
4. The agency is (willing) (unwilling) to allow the completed report to be circulated through interlibrary loan.
5. Other _____

Date: 3/25/80

[Signature]
Signature of Agency Personnel

Margo Scholin
Signature of Student

[Signature]
Signature of Faculty Advisor

*Fill out & sign three copies to be distributed as follows:
Original - Student; First copy - Agency; Second copy - TWU
College of Nursing.

TEXAS WOMAN'S UNIVERSITY
COLLEGE OF NURSING

AGENCY PERMISSION FOR CONDUCTING STUDY*

THE H. G. Scholin, M.D.

GRANTS TO Margo Scholin, B.S.N.
a student enrolled in a program of nursing leading to a
Master's Degree at Texas Woman's University, the privilege
of its facilities in order to study the following problem.

A study of the effect of planned versus unplanned pregnancy
on the body-image of the pregnant woman as outlined in the
research proposal.

The conditions mutually agreed upon are as follows:

1. The agency (may) (may not) be identified in the final report.
2. The names of consultative or administrative personnel in the agency (may) (may not) be identified in the final report.
3. The agency (wants) (does not want) a conference with the student when the report is completed.
4. The agency is (willing) (unwilling) to allow the completed report to be circulated through interlibrary loan.
5. Other _____

Date: 3/6/80

[Signature]
Signature of Agency Personnel

Margo Scholin
Signature of Student

[Signature]
Signature of Faculty Advisor

*Fill out & sign three copies to be distributed as follows:
Original - Student; First copy - Agency; Second copy - TWU
College of Nursing.

APPENDIX F: Texas Woman's University Investigation
Committee Consent

TEXAS WOMAN'S UNIVERSITY
HOUSTON CAMPUS
HUMAN RESEARCH REVIEW COMMITTEE
REPORT

STUDENT'S NAME Margo Scholin

PROPOSAL TITLE The Effect of Planned Versus Unplanned Pregnancy
on the Body-Image of the Pregnant Woman

COMMENTS: _____

DATE: 3/14/80

John Myers
~~Disapprove~~ Approve

James L. Robinson
~~Disapprove~~ Approve

Donald H. Hahn
~~Disapprove~~ Approve

Susan E. DeWitt
~~Disapprove~~ Approve

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REFERENCES

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