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Adolescent Mother-Infant Attachment: Self-Identification Of Problems That May Impede The Process

Desiree Snow
Mississippi University for Women

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ADOLESCENT MOTHER-INFANT ATTACHMENT:
SELF-IDENTIFICATION OF PROBLEMS
THAT MAY IMPEDE THE PROCESS

by

DESIREE SNOW

A Thesis

Submitted in Partial Fulfillment of the Requirements
for the Degree of Master of Science in Nursing
in the Division of Nursing
Mississippi University for Women

COLUMBUS, MISSISSIPPI

August 1998

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Adolescent Mother-Infant Attachment:
Self-Identification of Problems
That May Impede the Process

by

Desire Snow



Professor of Nursing
Director of Thesis



Professor of Nursing
Member of Committee

Assistant Professor of Nursing
Member of Committee


Director of the Graduate School

Abstract

As of 1992, nearly 1 out of every 10 births in the United States was to a single adolescent female (National Center for Health Statistics, 1994). Becoming an adolescent parent is known to elicit significant psychosocial changes. Most adolescents are not capable of accepting all of the responsibilities of the maternal role and the attachment process. The theoretical framework of Erikson's Psychosocial Theory reflects the concept of adolescent parenting constituting a potential crisis situation. The adolescent is torn between self-satisfaction and attending to the needs of the infant, which correlates with role confusion, as explained in the developmental stage of role confusion versus self-identity. It is during this stage of development that the mother-infant attachment process is at risk for negative outcome. This study sought to involve the adolescent in identifying problem areas that may impede the mother-infant attachment process. Two research questions directed the study: What are the perceived problems of attachment experienced by the adolescent

mother and is there a difference in perceived problems of attachment experienced by third trimester and postpartum adolescent mothers? The setting for this descriptive study was a private obstetric/gynecology clinic in an urban southern state. The convenience sample (N = 20) consisted of 20 primagravid adolescent females 14 to 17 years of age, who are in their last trimester of pregnancy or 6 weeks postpartum. The tool, Problem Assessment Guide, was utilized. A descriptive analysis using statistics including frequency counts, ranges, means, and standard deviations were used to describe the data. A 74% positive response rate emerged which indicated the initial mother-infant attachment process is positive. The 26% rate of negative response places the attachment process at risk. Major concerns of these adolescent mothers were focused on the newborn, adolescent growth and development, emotions, and socioeconomic support. It is important that the problems which may impede attachment process between a mother and her infant are identified, so that interventions are instituted which promote optimum well-being for the mother-infant dyad as soon as possible. Recommendation for a replication of this study using a

larger number of adolescent mothers in a variety of settings to be conducted for generalization is suggested.

Dedication

To my children,

LaKeisha and David,

who stood by me to the very end,
never doubting and always encouraging,

and to my sister,

Cheron,

for the countless trips to drop off
chapters to my committee chair

I love you guys!

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I acknowledge with much gratitude the direction and unwavering confidence displayed by my thesis committee chair and members, Dr. Mary Pat Curtis, Dr. Linda Sullivan, and Ms. Jessica Alexander. I am particularly appreciative to my committee chair, Dr. Mary Pat Curtis, for her expertise, guidance, and confidence that made this thesis a reality. You only cross paths with an individual of her caliber once in a lifetime. I hope never to lose contact with her.

I acknowledge and thank my professional colleagues who offered their encouragement and support. I also thank my fellow classmates who were able to put competitiveness aside to show genuine concern and encouragement to each other.

And, most of all I thank God who has made all of this possible. For only the grace of God got me in and through graduate school, a professional accomplishment of which I am very proud.

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Chapter I

The Research Problem

American teenagers are more likely to have sex without using any source of protection from sexually transmitted diseases or other forms of birth control than youths of most western nations (Barnett, 1997). According to a Public Health report, one in 10 of American teenage girls will become a parent before reaching her 20th birthday (Barratt, Roach, Morgan, & Colbert, 1996). Teenage pregnancies have been increasing at an unprecedented rate, and there is no consensual solution for preventing these pregnancies. Adolescent parenthood is not a new phenomenon in the United States; however, there seems to be a growing concern about the very young and the potential for negative outcomes of the mother-infant dyad.

Adolescent mothers have been typically depicted as inadequate parents and their children are thought to be at significant risk for maltreatment (Bucholz & Korn-Bursztyn, 1993). This depiction is related to the idea that these adolescent mothers may not have the capacity to

initiate and maintain the attachment process. After the infant is born, the adolescent mother is confronted with multiple concerns that affect her and her infant's well-being. The adolescent is torn between self-satisfaction and attending to the needs of the infant, which correlates with role confusion as explained in Erikson's (1963) developmental stage of identity vs. role confusion. During this stage of development the mother-infant attachment process is at risk for negative outcomes (Diehl, 1997). To facilitate a positive attachment process between mother and infant, the adolescent should be given the opportunity to identify perceived concerns with the attachment process with their health care providers. This study sought to involve adolescents in identifying their concerns about the mother-infant attachment process.

Establishment of the Problem

In the eight psychosocial developmental stages of Erikson (1963), the stage that specifically pertains to the adolescent is the stage of identity vs. role confusion. Identity was defined as a sense of continuity and sameness, and role confusion was defined as doubting one's sexual identity. The role confusion vs. identity stage of development presents the adolescents with choices

that will affect them for the rest of their lives. Choices are brought about when the adolescent is confronted with having to integrate all identification with libido and aptitude for falling in love which is initiated in the identity vs. role confusion stage. "Falling in love pertains to the adolescent's attempt to arrive at a definition of self by forcing the ego image on another, thus seeing it reflected and possibly clarified" (Erikson, 1963, p. 262). The falling in love aspect of this stage is the reason why this is such a crucial period for the adolescent and why choices made during this stage will affect the adolescent for life. Pregnancy may be the result of a situational choice the adolescent has made and may leave the adolescent in a precarious position. The adolescent mother can no longer dwell solely on the needs of self but must take the child's needs into consideration, causing conflict within the mother.

Motherhood should be a time of fulfillment for all involved. When the pregnancy has been planned or the mother is emotionally and developmentally capable of adjusting to new responsibilities, motherhood can be a rewarding time. However, for the adolescent mother who may not be emotionally and developmentally adjusted, the birth

of a child becomes a time of crisis, causing a negative impact on the mother-infant attachment process.

Maternal-infant attachment has been defined as a process in which an enduring affectional bond to a specific child is developed through pleasurable and satisfying mother-child interaction (Mercer & Ferketich, 1994). When the mother is able to accept the responsibilities of the maternal role and to attend to the needs of the infant, a positive mother-infant attachment can be achieved.

"Maternal attachment is a prerequisite to the mother's ability to meet the nurturing needs for the infant's growth and development" (Erickson, 1996, p. 187). Therefore, a positive mother-infant attachment can produce a secure infant who is able to attempt to master the environment and develop a sense of competency, which are the basis for all future cognitive functioning. Whereas, infants involved in a relationship where the mother-infant interaction has not been optimally fostered, the infant is at risk for poor socioemotional growth and developmental deficits (Frodi, Grolik, Bridges, & Broko, 1990).

Researchers have identified such factors as maternal age, socioeconomic support, experience, education, and

growth and development as having an impact on mother-infant attachment process. In a replicated study by Henry (1991), adolescent mothers identified concerns they had with the mother-infant attachment process. These mothers completed a Problem Assessment Guide which was divided into four categories related to current concerns with the attachment process. Further subjects were allowed to identify other problems not addressed in the guide. Henry found that "the highest percentage of unfavorable responses were in socioeconomic support (19%), newborn category (12.88%), adolescent growth and development (5.71%), and the emotion category (5%)" (Henry, 1991, p. 59). Henry concluded that, "many of the findings were supportive of previous research in the areas of maternal-newborn attachment, stressors related to becoming a parent, and identification of problems with attachment in relationship to adolescent parents and their newborns" (p. 60). Since the adolescent mother is ultimately responsible for initiating and maintaining the attachment process, she is the most logical source to identify problems that could impede the attachment process. By allowing the mother the opportunity to identify concerns with the attachment process, primary care providers would have a baseline of

information for assisting and promoting optimum attachment outcome within the mother-infant dyad. The purpose of this study was to involve the adolescent mother in identifying concerns that impede the attachment process.

Significance to Nursing

The nurse clinician has the expertise and means of positively facilitating by using the established roles of provider, advocate, and educator to intervene and guide the adolescent toward resolution. For example, the clinician can provide health care to the mother and infant, direct the adolescent to resources, such as child care, Women, Infants, and Children (WIC), and Medicaid, and educate her on self-care and care of the infant. Early intervention by the nurse clinician can help to prevent child abuse and negligence.

Theoretical Framework

The theoretical frameworks chosen to guide this research were Erikson's (1963) psychosocial development stages and the concept of attachment as described by Klaus, Kennell, and Klaus (1995).

Erikson's Theory of Psychosocial Development. Erikson (1963) identified eight stages of man: (a) basic trust vs.

basic mistrust, (b) autonomy vs. shame and doubt, (c) initiative vs. guilt, (d) industry vs. inferiority, (e) identity vs. role confusion, (f) intimacy vs. isolation, (g) generativity vs. stagnation, and (h) ego integrity vs. despair (Erikson, 1963). Each stage builds on the successful completion of tasks assigned to the previous stage. Those tasks which have been incompletely or unsuccessfully completed can leave the individual with unresolved issues preventing them from successful entrance into the next stage. The identity vs. role confusion stage specific to the adolescent is a very difficult time for the individual and the very last stage of childhood (Erikson, 1963).

During adolescence the individual must relinquish childhood identification to a new kind of identification that is achieved by absorbing sociability and apprenticeship with and among peers (Erikson, 1963). The adolescent is essentially in a state of development that is caught between the learned morality of a child and ethics to be developed as an adult. In trying to fulfill the new obligations presented in this stage, the adolescents no longer are able to hold on to the playfulness of childhood but are forced to make choices

and decisions that affect them for the rest of their lives. When identity has not been established, the adolescent may have self-doubt concerning sexual identity, confusion over occupational identity, and how they are perceived by others. These factors can contribute toward deviant responses from the adolescent and result in role confusion. A positive self-identity requires that the individual establish a certain degree of independence. While the adolescent seeks independence, there is still dependence on the family to fulfill basic daily needs. The conflict between trying to establish independence while still in a dependent state causes the adolescent to rebel against parental authority. The adolescent then turns to peers for interaction. During this rebellious state the teen may choose to engage in sexual activity leading to pregnancy and parenthood. Parenthood is a crisis situation for adolescents because they are thrust into the next developmental stage of generativity (Hurlbut, Culp, Jambunathan, & Butler, 1997).

Erikson's (1963) psychosocial theory is pertinent to this study because the adolescent has been categorized in the identity vs. role confusion stage. The developmental tasks outlined in the developmental stage do not include

parenting. Parenting is a task of a subsequent developmental stage which helps to validate why adolescents are at risk for poor attachment outcome.

Concept of attachment. According to Klaus et al. (1995), infant attachment is the emotional connection that enables infants to begin to develop a sense of self. A solid sense of identity is essential before the adolescent mother can progress to the next developmental stage or proceed with infant attachment. The concept of attachment was relevant to this present study in conjunction with psychosocial development as they are key issues in developing a positive outcome for the mother-infant dyad.

If a secure bond between mother and child does not take place during infancy, the child is at risk to develop mistrust in the world. Mistrust is where "humans from childhood throughout adult life may develop and cling to the belief that the world is unstable, and that they cannot safely trust others" (Klaus et al., 1995, p. 192). Positive maternal interaction with the mother's infant has been established as a means of establishing trust. Trust is built by the parent or caretaker being responsive for the infant's needs.

Before one can ensure a positive attachment process can occur, knowledge of attachment characteristics is necessary. Attachment is characterized as behavior exhibited between parents or caretakers and child, such as kissing, cuddling, prolonged gazing, and the act of breast feeding (Klaus et al., 1995). The infant has expectations of the mother from the time contact is made. Some of the expectations held by the infant are feeding, diaper changing, warmth, and cuddling.

This researcher chose the psychosocial development stages of Erikson (1963) and infant attachment as the frameworks to guide this study because formation of a secure attachment with the infant can only occur once the mother is able to establish a self-identity. Erikson's (1963) theory identifies the task needed to guide the adolescent toward solid identity whereas Klaus et al. provide criteria needed to establish secure attachment. The two concepts, identity and attachment, are paramount in establishing a positive mother-infant dyad.

Assumptions

The following assumptions were made for this study:

1. The mother-infant attachment process is a natural occurrence.

2. The adolescent mother has concerns about establishing a positive mother-infant attachment.

3. The adolescent is capable of identifying concerns that could impede the mother-infant attachment, utilizing the Problem Assessment Guide.

4. The adolescent mother is capable of mastering the tasks of Erikson's (1963) identity stage.

Statement of the Problem

Adolescent mothers have been thrust into the generativity stage prior to resolving tasks of the identity stage which contributes to role confusion. The lack of resolution places the mother-infant attachment process at risk for poor outcome. Klaus et al. (1995) stated that when parents are able to unselfishly provide an environment that goes beyond the duty of the child's needs, it is more likely that the child will develop a secure attachment to the parent. However, due to the adolescent mother's own lack of development, the attachment process is at risk for poor outcome. Therefore, the problem for this study was the identification of concerns the adolescent mother may have which can impede the attachment process.

Research Questions

The following two research questions guided this study:

1. What are the perceived problems of attachment experienced by the adolescent mother?
2. Is there a difference in perceived problems of attachment experienced by third trimester and postpartal adolescents?

Definition of Terms

Mother-infant attachment:

Theoretical definition: an enduring and lasting affectional relationship between a mother and child.

Operational definition: the relationship between the mother and her child as identified by responses to the Problem Assessment Guide.

Adolescent mother:

Theoretical definition: an adolescent mother between the ages of 14 and 17 years who has given birth to a viable fetus.

Operational definition: an individual between the ages of 14 and 17 years who has delivered a healthy full-term baby vaginally or who is in the last trimester of pregnancy or 6 weeks postpartum.

Problems:

Theoretical definition: interests or concerns of an individual.

Operational definition: interests or concerns identified using the Problem Assessment Guide's four subcategories: adolescent growth and development, emotion, socioeconomic support, and the newborn. Unfavorable responses to questions on the Problem Assessment Guide which ranked 20% or higher were classified as problems.

Chapter II

Review of the Literature

Extensive research has been conducted on the adolescent mother-infant attachment process. Different factors that affect the process in both a positive and negative manner have been investigated. The majority of past research studies have focused on such factors as growth and development, socioemotional support, and the infant as significant variables that impact the attachment process. The current review of research studies encompassed a variety of issues pertinent to situations that could impact the attachment process. Articles reviewed were classified in the categories of psychosocial development and attachment.

Psychosocial Development

Hurlbut, Culp, Jambunathan, and Butler (1997) investigated the relationship between the adolescent mother's self-esteem and knowledge of parenting. Using Erikson's Psychosocial Development as the theoretical

framework, the researchers argued that the mother's parenting skills were at risk if the mother did not have the opportunity to achieve a solid role identity for herself. According to Erikson's theory, "adolescence is a period of struggle to gain a positive role identity" (Hurlbut et al., 1997, p. 639). These researchers hypothesized that adolescent mothers' self-esteem would have a direct correlation to their parenting skill knowledge. Hurlbut et al. assumed that self-esteem was an indicator of the developmental stage of role identity.

The sample consisted of 24 primagravid mothers ranging from 16.1 to 21.1 years ($M = 18.2$) at the time of birth. The adolescents were participants in an ongoing rural midwestern county health department parenting program. Seventy-five percent were white, 17% were black, and 8% were multiethnic. The majority (63%) were attending high school. Of those participating, 61% were living with their parents or stepparents, 22% lived with a boyfriend or husband, 13% lived with others, and 4% lived by themselves. Forty-eight percent were living in households with incomes of less than \$6,000 annually. Each adolescent subject completed a demographic and self-esteem assessment prior to childbirth and repeated the self-esteem

assessment 3 months after the birth of the baby. Also, a parenting skills questionnaire was completed at 3 months and again at 6 months.

The demographic questionnaire consisted of a one-page informational sheet which extracted such data as the mother's race, age, education, and income. The Index of Self-Esteem (ISE) was utilized to test the mother's self-esteem. The ISE is a 25-question instrument which gathers data on how a person feels about himself or herself. Answers are on a Likert type scale of 1 to 5, with 1 representing rarely or none of the time and 5 representing most or all of the time. Sample scores ranged from 25 to 125. Low self-esteem was indicated by high scores while high self-esteem was ranked by low scores. Hudson (cited in Hurlbut et al., 1997) found reliability to be .91 to .95 after testing the ISE on six samples (N = 1,745). Internal consistency of the ISE for an adolescent sample (N = 44) had a Cronbach alpha of .90 (Hubbs et al., cited in Hurlbut et al., 1997). The questionnaire was found to have acceptable discriminant validity which was judged by therapists in an independent clinical diagnosis.

Knowledge of parenting was measured by using the Adult-Adolescent Parenting Inventory (AAPI) (Bavolek,

cited in Hurlbut et al., 1997). The AAPI is a 32-item assessment of parenting and child-rearing practices standardized on 2,000 adults and 6,500 adolescents. The AAPI is divided into four subgroups, consisting of role reversal, empathy, developmental expectations, and corporal punishment. The questions are answered on a Likert type scale, ranging from strongly agree to strongly disagree. Appropriate parenting skills are indicated by high scores, and low scores are representative of poor parenting skills. The results of content validity indicated .96 agreement among the experts relative to completeness and validity regarding the parenting constructs. The AAPI internal reliability ranged from .70 to .86 (expectation, .70; empathy, .75; role reversal, .82; and corporal, .8).

Hurlbut et al. (1997) reported the following results using the Pearson product-moment correlation to test the relationship between self-esteem and parenting skills knowledge (role reversal, empathy, developmental expectations, and corporal punishment), and the SPSS. At the one-month testing a significant negative correlation of $r(24) = -.43$, $p = .02$, emerged between the mothers' self-esteem and their role reversal scores, indicating a

significant positive higher self-esteem and fewer inappropriate role reversals. Findings were significant for the correlations between self-esteem and empathy, $r(24) = -.46$, $p = .01$, and self-esteem and developmental expectations, $r(24) = -.37$, $p = .04$. The correlation for corporal punishment and self-esteem did not reach significance ($p = .05$). For the second testing at 3 months, there was an even higher significant negative correlation, $r(24) = -.51$, $p = .005$, for self-esteem and role reversal. There also was a negative correlation between baseline self-esteem and corporal punishment, $r(24) = -.37$, $p = .04$, while the baseline for empathy and developmental expectation did not change from the one-month testing to the second testing at 3 months. These data supported the hypothesis that the adolescent mother's parenting skill knowledge is directly related to her self-esteem. The significant correlation between a positive sense of self-esteem and appropriate knowledge concerning role reversals was consistent in both testing periods. As the mother gained mothering experience, she was to see the child as an object for gratifying her needs. Therefore, the researchers concluded that the constructs of self-esteem, which is an indicator of role identity, is a

predictor of role reversal. Hurlbut et al. (1997) also concluded that adolescent parenting can only be understood as it relates to the adolescent's stages of development. The researchers' data along with Erikson's psychosocial developmental theory support this point of view, stressing that role identity is a predictor of parenting skills. This study is instrumental to the present study as the constructs of parenting were directly related to role identity which established the point that the adolescent mother must have a solid sense of who she is before she can promote positive parenting skills.

In another study specific factors that produce positive maternal-infant interaction were cited. Diehl (1997) investigated the relationship between the self-esteem of adolescent mothers and their interaction with their infants. The researcher believed that variables, such as education, self-esteem, paternal involvement, and living arrangements, contribute to positive mother-infant interaction. Two hypotheses were proposed: "1. There will be a positive relationship between self-esteem of the adolescent mothers and positive mother-infant interaction. 2. There will be a direct relationship between self-esteem

and adolescent mothers' level of responsiveness to their infants' behavior (contingency)" (Diehl, 1997, p. 89).

The sample (N = 36) was one of convenience and was obtained from an urban school for pregnant and parenting adolescents. The subjects ranged from 13 to 19 years (M = 16.1), and their infants ranged in age from one month to 17 months (M = 6.9). The mothers' years of education ranged from 7 to 11 (M = 9.7). Seventeen mothers (42%) were Caucasian, 13 (36.1%) were African-American, and 6 (16.7%) were Hispanic. One of the subjects was married.

Diehl (1997) used the Nursing Child Assessment Scale (NCATS), Hudson Index of Self-Esteem (ISE), and a brief demographic questionnaire to quantify data. The NCATS measured observational interaction of mother and infant at a standardized age specific teaching situation. NCATS has 73 yes/no responses organized into six subscales, including four parent and two infant subscales. The ISE consists of 25 Likert scale statements, scored at 1 point for "rarely or none" and 5 points for "most or all of the time" (Diehl, 1997, p. 91). Scores could range from 1 to 100 with a score equal to or higher than 30 indicating low self-esteem.

Diehl (1997) collected data over a 6-month period of time from adolescents enrolled in an alternative education program who had agreed to participate in the study. Upon receipt of a verbal informed consent, each mother met with a nurse who completed a Denver II Developmental Test on the infants. Results for all infants in this study rated within normal expectation. A normal Denver II was required in order for the infant to participate in the study. The NCATS was given to each mother-infant dyad, and the mother had to teach the infant a task according to NCATS protocol. A brief teaching session performed by the mother-infant pair, lasting no more than 5 minutes, under observation by a certified observer, occurred to determine the mother-infant interaction. Once the observation session was completed, an ISE and brief demographic questionnaire were completed.

Diehl (1997) found that the total overall scores for the NCATS ranged from 37 to 72 ($M = 57.8$, $SD = 7.07$), and total parent contingency scores ranged from 20 to 49 ($M = 40.19$, $SD = 5.96$). The total child score was 17.03 ($SD = 5.96$), and maternal contingency scores ranged from 6 to 19 ($M = 15.06$, $SD = 3.24$). Diehl reported a positive relationship between maternal education and maternal

response to distress ($t = .3215$, $p = .028$) and maternal contingency ($t = .2940$, $p = .041$). The researcher also determined the ISE scores ranged from 2.7 to 85.3 ($M = 29.82$, $SD = 18.13$). Fifteen subjects (41%) had scores indicating low self-esteem (30 or higher on the ISE). Mothers with high self-esteem interacted more positively to infants' signs of distress than mothers with low self-esteem, $r = -.03041$, $p = .036$, and older adolescents responded to infant distress cues more than younger adolescents, $t = -.3106$, $p = .033$. Dyads with paternal involvement, as reported by the adolescent mother, had significantly higher total NCATS scores, $t = 2.09$, $p = .044$ and $t = 2.89$, $p = .007$, respectively.

Diehl (1997) concluded that lower levels of maternal education were associated with less than optimum maternal response to infant distress and behavior. Diehl attributed the finding to the alternative educational program the adolescents attended. In this program mothers were given the opportunity to engage in age appropriate activities with their infants and received a videotape and constructive feedback from a nurse. Paternal involvement and education level of the mother had the most significance on positive interaction between the

mother-infant dyad. This study was pertinent to the present study because socioemotional support has an impact on attachment, which is a category explored by this researcher. In the next study the effects of maternal age in relationship to infant attachment were assessed.

Attachment

Broussard's (1995) exploratory study focused on identifying normative behavior in groups of society, specifying racial diversity in children born to adolescent parents pertaining to the attachment process. The following key words were identified by Broussard (1995): infant attachment, adolescent mothers, Ainsworth Strange Situation Procedure, and racial differences. Broussard examined the following questions:

1. What is the infant attachment group distribution in a sample of adolescent mothers?
2. How are infant's gender and race associated with attachment?
3. Is infant's age associated with attachment quality?
4. Is adolescent's maternal age associated with attachment quality?

The sample consisted of 38 healthy full-term infants of primagravid adolescent mothers, all of whom were of low socioeconomic status and ranging in age from 14 to 18 years. Of the 38 infant subjects, 24 were female (8 white and 16 black) and 14 were male (4 white and 10 black). They ranged in age from 12 to 19 months. The subjects were a subset of a larger longitudinal study recruited at the birth of the newborn during the postpartal period of hospitalization. The infant subjects underwent a modified version of the Ainsworth Strange Situation Procedure which consisted of one separation and one reunion instead of the usual two separations and two reunions. The mother and child were placed in a standardized laboratory full of toys for a time frame of 5 minutes of free play; then a stranger entered the room. After approximately three strangers entered, the mother was asked to depart the room with the stranger remaining in the room. After one minute of separation, the mother reentered the room for a 3-minute reunion. If the separation was too much for the infant to tolerate, the separation was cut short. Additionally, the Main's and Solomon's procedure was used to identify disorganized infants not readily identified using the Ainsworth Strange Situation procedure. "Infant

attachment was classified using the Ainsworth Strange Situation for coding" (Broussard, 1995, p. 212). Based solely on their behavior following the separation, the subjects were classified in the following groups:

Secure infants showed interest in proximity or interaction with the mother with no evidence of avoidance, resistance, or disorganization; insecure/avoidant infants showed no interest in interaction with the mother and actively avoided her; insecure/resistant infants showed anger, resistant behavior when interacting with the mother, and insecure/disorganized infants showed odd, dazed, disorganized, disoriented behavior or showed a combination of both avoidant and resistant behavior. (Broussard, 1995, p. 212)

One coder trained by Ainsworth and by Main coded the behaviors via videotape, and another coder independently coded a random selection of tapes of 26% of the assessments. The intercoder agreement was 90%.

Using descriptive and statistical analysis, the researcher determined that the infant attachment group distribution in the sample of adolescent mothers was secure (23.7%), insecure/avoidant (34.2%), insecure/disorganized (31.6%), and insecure/resistant (10.5%). The low severity rate does not support the distribution of security rate of 65% found in other studies. Findings pertaining to the question of how the gender and race of the infant associates with attachment

revealed that white infants were significantly more securely attached than black infants, $\chi^2(1, N = 38) = 6.72, p < .01$. The attachment quality age represented in the study was found by Broussard (1995) to be significant. There were no infants under the age of 14 months who were not securely attached to the adolescent mothers, $\chi^2(1, N = 38) = 4.1, p < .05$. In examining the pattern of distribution within age, 63.3% were found to be insecure over 14 months of age compared to only 31.5% under the age of 14 months. Ages of the adolescent mothers revealed no significant differences.

In conclusion, Broussard (1995) believed that the level of attachment insecurity among the black male in this study may be a contributing factor to the high homicide and other acts of deviant behavior among society's black males. However, the researchers cautioned the reader to view these findings as nonconclusive based on the small sample size. The findings of this study are important to the present study because no differences emerged in attachment among the adolescent maternal age group. This study revealed that positive attachment is possible throughout all groups, respectively.

Levine, Tuber, Slade, and Ward (1991) conducted an exploratory study to investigate how adolescent attachment and object relations were related and what effects they would have on infant attachment. The researchers also examined the possibility of whether or not the quality of the mother-infant relationship could be predicted in a meaningful coherent manner, using the overlapping constructs of object relation and adolescent attachment. Levine et al. also examined the possibility of whether or not the quality of the mother-infant relationship could be predicted in a meaningful and coherent manner, using the overlapping constructs of object relation and adolescent attachment. These researchers predicted that the adolescent's ability to establish a positive mother-infant attachment would be highly related to object relation of the mother.

The sample (N = 42) in Levine et al. (1991) included adolescent mothers and their infants. The adolescents were recruited while pregnant through their schools, health clinics, and social service agencies in New York City. Of the adolescents participating, the majority (75%) were African American. The age of the delivered adolescent mothers ranged from 14 to 18 years, and the average level

of education attained was 10th grade. The sample of infants included 19 (45%) males and 23 (55%) females. Data were collected via personal interview or in private rooms at the Division of Child Development at Cromwell Medical Center. The Adult Attachment Interview (AAI) and the Krohn Object Relation Scale for Dreams were utilized. The AAI was designed to probe the individual for a description of early childhood attachment to significant caregivers through memory and feeling and the organization of the experience. The adolescent mother, while pregnant, completed the Krohn scale which was developed to determine how an individual perceives self in regard to others. The infant subjects were videotaped in a developmental laboratory from behind a one-way mirror utilizing the Ainsworth's Strange Situation classifications for infants of 15 months of age. The infants were briefly separated from their mother and then reunited. The classifications used were securely attached, anxious-avoidant, anxious-resistant, and anxious-disorganized.

Utilizing descriptive and statistical analysis, Levine et al. (1991) found that the association between object relation and adolescent attachment highly related to mother-infant attachment (securely attached, $p < .01$

and securely attached, $p < .05$). There was exact agreement for 62% of the 42 cases (26 out of 42), showing that adolescent attachment and infant attachment were highly related ($p < .001$). The researchers also determined that adolescents who were rated as autonomous had infants who were more securely attached than those adolescents rated nonautonomous.

Levine et al. (1991) concluded that together adolescent attachment and adolescent object relations were significantly related to infant attachment. They also determined that the mother's internal mode of attachment had a direct bearing on her child's attachment to her which had been reflected in previous studies. Object relation and adolescent attachment are issues that coincide with adolescent growth and development of one of the subcategories of this present study. The researcher was exploring the potential for adolescent mothers to identify growth and development issues as concern with attachment in this present study.

Bloom (1995) conducted a descriptive study to investigate the differences of maternal-fetal and maternal-infant attachment from early to late developmental age groups in adolescents. Bloom sought to

explore the type of attachment that developed between mother-fetus and mother-infant across time.

The theoretical framework of Rubin (Bloom, 1995) was utilized to guide the researcher's study. Rubin's work established that maternal identity was accompanied by a progressive series of cognitive operations presented partly through behavior. Rubin also determined that attachment began during pregnancy and continued after delivery. As the woman focuses on her own effectiveness as a mother to include survival and well-being of her child, the relationship becomes more solid (Rubin, 1975, 1984, cited in Bloom, 1995).

Bloom (1995) used proportionate sampling to obtain a total sample (N = 79) representative of all relative ages. Of the 79 subjects initially enrolled in the study, 11 were early adolescents (ages 12 to 14 years), 36 were middle adolescents (ages 15 to 17 years), and 33 were late adolescents (ages 18 to 19 years). The mean gestational age was 13.6 weeks. During initial data collection the majority of the subjects were single and never married (86%) and African American (60%). Thirty-five (71%) subjects were experiencing their first pregnancy while 14 (29%) had previous pregnancies, with only 8 (16%) having

actual previous births. The subjects represented the relative distribution of adolescent deliveries for that region. The final sample ($N = 47$) consisted of 5 early adolescents (12 to 14 years), 22 middle adolescents (15 to 17 years), and 20 late adolescents (18 to 19 years).

Bloom (1995) utilized a longitudinal study design for data collection at four intervals: (a) initial contact, (b) at 20 to 29 weeks gestation, (c) between 30 and 40 weeks gestation, and (d) within one week after delivery. To ensure there were no significant changes in demographic representation of the group, chi-square analysis was used, and despite attrition no changes emerged.

Data were collected using the Maternal Fetal Attachment Scale (MFA) and Avant's Maternal Attachment Assessment Strategy (MAAS). The MFA was a 5-point Likert scale that yielded five distinct mean scores on five subscales of attachment. The MAAS consisted of postpartum observation of the mother and infant during a 15-minute feeding to measure maternal attachment.

Bloom (1995) used descriptive and statistical analysis and found that the MFA data showed moderate maternal attachment in the population, with a total mean score of 3.36 ($SD = 0.48$, range 1 to 4.88). Observation of

maternal-infant interaction the first week after delivery denoted various attachment behavior on subscales, with a mean score for total maternal attachment of $SD = 20.45$, range -16 to 166. Behaviors ranged from intense absorption with the infant to almost complete adulation. No significant differences emerged between the first two test periods. However, there was a significant correlation ($p < .05$) noted during the third trimester between the affectionate behaviors, $r = .32$, and caretaking behavior after delivery, $r = .34$, indicating the effects of maternal attachment contributes positively to maternal-infant attachment. No other relationships were found.

In conclusion, Bloom supported the idea that maternal-fetal attachment and maternal-infant attachment do exist in adolescents. Also noted, few age-related differences were found among the different adolescent groups despite the cognitive and developmental differences in age. This study is congruent with a previous study which depicted very little relevance to the age of the adolescent mother and her ability to establish attachment with her infant.

The last study of review involves the adolescent father in the attachment process. Wilson (1990) conducted

a descriptive study to allow adolescent fathers the opportunity to identify problems with attachment that may occur between the adolescent father and his newborn. The researcher defined the following terms: attachment as "a unique relationship between two people that is specific and endures through time" (Klaus & Kennell, cited in Wilson, 1990, p. 2). Problems of attachment were identified in the Problem Assessment Guide which included four subscales: adolescent growth and development, emotion, socioeconomic support, and the newborn (Wilson, 1990).

The theoretical framework of Erikson's psychosocial theory and the concept of infant attachment were chosen to guide Wilson's (1990) study. Erikson's psychosocial theory establishes the idea that the adolescent developmental stage of identity vs. role confusion is a period of difficulty, especially if the adolescent does not accomplish the designated tasks of this developmental stage. The primary tasks for this developmental stage are accepting physiological maturation, defining sex role, identifying career goals, becoming independent from family, and developing social values as a guide in an adult world (Erikson, 1963, cited in Wilson, 1990).

According to Erikson, if identity, which is defined as a sense of continuity and sameness, is not established, role confusion will emerge. Once the individual has entered into the role of parenthood, this confusion stands a chance of interfering with the infant attachment process. Attachment is the enduring affection connecting a parent with a child. However, if the adolescent is focused on fulfilling the needs of himself instead of the needs of the child, the attachment process is less than optimum. Therefore, the purpose of this study was to give the adolescent father the opportunity to self identify problems with the attachment process.

Wilson's (1990) sample (N = 18) included adolescent first-time fathers whose children were born in a large teaching hospital in a major southern city. Wilson personally contacted the participants. Criteria for the father's inclusion in the study were as follows: The father was 16 to 20 years old and able to speak and comprehend English. The child's characteristics were that the child must be at least 36 weeks gestational age, with no congenital abnormalities or surgical requirements, and admitted to the newborn nursery. Of the 8 fathers, 12 (67%) were black and 6 (33%) were white. Their ages ranged

from 16 to 20 years with a mean age of 18 and a standard deviation of 1.16 years. Educational level ranged from 3 years of college to completion of the eighth grade, with an average of 12th grade completion. Eight fathers were employed full-time, 7 were blue-collar workers, 2 fathers were employed part-time, and one was neither employed nor a student. Thirteen percent of the fathers were single, 5 had been married for a time frame of 2 weeks to 8 months with the average length of marriage being 4 months. Three of the fathers attended prenatal classes ($M = 4$, $SD = 1.14$). All of the newborns were delivered vaginally. The majority (78%) of the fathers were present for the birth of the baby, and 4 (29%) were present at the delivery. Ten (56%) of the babies were male, and 8 (44%) were female. With a range of 2,750 to 3,940 grams, the mean birth weight was 3,296 grams. The age of the baby ranged from 37 to 42 weeks gestation ($M = 39.5$, $SD = 1.34$ weeks).

Subjects completed the Problem Assessment Guide on a day prior to the newborn's discharge with the exception of the day of delivery. The questionnaires were placed in an unmarked envelope and returned to the researcher. The problem assessment tool was divided into the four subcategories of adolescent growth and development,

emotion, socioeconomic support, and the newborn. The tool consisted of 40 declarative questions scored by assigning 1 point for agree and 0 for disagree on all positively worded questions; negatively worded questions were scored opposite. The possible range of scores was from 0 to 40. The higher the adolescent father scored, the more positively attached he was likely to be to the newborn. There were two open-ended questions which allowed the adolescent father the opportunity to make known any concerns not previously covered with the problem assessment.

Using descriptive and statistical analyses, Wilson (1990) found that the area with the most unfavorable responses was the socioeconomic category, growth and development ranked second, newborn ranked third, and the emotion category had the least amount of unfavorable responses. The highest unfavorable response to any one question was item 16 under socioeconomic support. Occupation identity and independence are major factors in this developmental stage; however, very few of the fathers in this study were equipped to support a child without help from other sources. Most fathers responded positively

in the newborn and emotional support categories which is a good indication that positive attachment will take place.

Wilson (1990) concluded that from the number of low unfavorable responses in growth and development it would appear that the fathers were in control of the situation, mainly acceptance of the responsibilities that go along with caring for a newborn. However, this in itself could be a point of role confusion considering the majority of the fathers had not established a solid career at the time of the childbirth. This could signify that the father is falsely accepting responsibilities that he cannot fulfill. Wilson (1990) also suggests that the responses of participants in this study provided support for previous research in the area of father-newborn attachment. The researcher believes that in lieu of the number of positive responses by the adolescent fathers, which indicates that there is great possibility of positive attachment between the adolescent father and his newborn, fathers did express concern over some items which could interfere with attachment. It is important that the father is given the opportunity to express his concerns to ensure that every opportunity exists to improve the attachment process. As Wilson (1990) found it important that the adolescent

father be given the opportunity to identify concerns that could impede the father-infant attachment process, the present researcher found it necessary to explore the adolescent mothers' concerns with attachment. In identifying concerns, the adolescent mother would be providing the health care provider with information that could possibly improve the overall well-being of the mother-infant dyad.

The research studies reviewed in this chapter addressed issues pertinent to psychosocial development and attachment relevant to the adolescent mother and her infant. Such topics covered were growth and development, socioemotional support, object relations, and factors that produce positive interaction within the mother-infant dyad. Several of the literature reviews included in this study indicate that there is a great likelihood of the adolescent mother identifying concerns with the attachment process.

Chapter III

The Method

The purpose of this study was to allow adolescent mothers the opportunity to identify concerns that may impede the mother-infant attachment process. Establishment of potential problem areas may provide a baseline for nurse practitioners to assist and promote optimum attachment outcomes for the mother-infant dyad. A description of the design, subjects, instrumentation, data collection procedure, and limitations are presented in this chapter.

Design of the Study

A descriptive approach was utilized to investigate concerns of young mothers which could negatively impact the mother-infant attachment process. This method is appropriate for the current research as descriptive studies are focused on providing information that gives insight for the occurrence of a particular situation and provide a basis for further research (Polit & Hungler, 1995). The adolescent mother is often unprepared to accept

the responsibility that is associated with childbirth due to an interruption in her developmental stage. When the adolescent is unable to establish a solid self-identity, she may be unable to promote a secure infant attachment. By soliciting participation of adolescent mothers, issues that impact a positive outcome for the dyad may be more definitely captured.

Setting, Population, and Sample

The facility chosen for data collection was a private southeastern state obstetrics/gynecology clinic located in a small urban city which draws from the rural communities surrounding it. There is one hospital in the local area with another one 25 miles west of this location and another facility located 20 miles northeast of that location.

The population included primagravid adolescent females between the ages of 14 and 17 years, who were in their third trimester of pregnancy or 6 weeks postpartum. For inclusion in the study, the postpartum adolescent mother must have delivered vaginally at full term (37 to 42 weeks gestation) an infant weighing at least 2,500 grams and admitted to the newborn nursery at the time of delivery. The newborn could not have congenital

abnormalities and could not have required any type of surgical intervention. The sample was comprised of all subjects who met the criteria and were willing to participate during data collection. The actual sample (N = 20) consisted of 9 adolescent mothers who were up to 6 weeks postpartum and 11 third trimester adolescents.

Instrumentation

A demographic form and the Problem Assessment Guide were used to collect data. The Problem Assessment Guide developed by Wilson (1990) was based on problems identified by adolescent parents. The Problem Assessment Guide is divided into four subcategories: adolescent growth and development, emotion, socioeconomic support, and the newborn. The questionnaire consists of 40 declarative statements. There are approximately an equal number of positively and negatively worded statements. The subjects respond to each statement as either agree or disagree (Wilson, 1990). The questionnaire also contains two open-ended questions. One allows the subject to identify any concern not previously covered by the questionnaire, and the second allows the subject to identify the most important problem at the present. Because Wilson designed the Problem Assessment Guide for

the adolescent father originally, there were modifications in wording made by this researcher. For items 2, 17, 21, 26, and 32, the word *father* was substituted with the word *mother*, and in item 19, "becoming a father has made me a man" was changed to "becoming a mother has made me a woman."

For the positively worded statements, a score of 1 was assigned to each response answered as agree and 0 assigned for the disagree response. For the negatively worded statements, the opposite was instituted; 0 for agree responses and 1 for disagree. The subjects could score as little as 0 or as high as 40 on the questionnaire. The higher the score, the better the chance of positive attachment with the mother-infant dyad.

Wilson (1990) established content validity for the Problem Assessment Guide. Wilson had a panel of four experts in the areas of pediatric and maternal newborn and sociology to concur on the validity of the Problem Assessment Guide. Wilson (1990) had the experts to examine the Problem Assessment Guide for comprehensiveness, readability by adolescents, and to see if the statements adequately reflected the categories to which they had been assigned. A concurrence of 75% was required based on the

formula A/A+D (A = agreement, D = disagree) by the expert panel in order for an item to remain in the guide (Wilson, 1990). Originally the Problem Assessment Guide contained 45 statements. Four items did not meet the 75% requirement and were deleted. Another statement was deleted because the directionality could not be agreed upon, leaving the assessment with the present 40 statements. To assess comprehensiveness, three male adolescents were asked to read the assessment guide and circle any items not understood. There were no revisions needed in reference to comprehensiveness. Each of the 40 declarative statements was assigned to one of the four subgroups and a directionality assigned based on the expert's advice. Wilson (1990) found an overall reliability coefficient of $r = .71$.

A demographic form adapted from Wilson's (1990) descriptive data form was utilized to obtain descriptive data on the mother. Data concerning the mother's age, race, marital status, length of marriage, occupation, education, age of newborn's father, previous experience caring for infants and children, sex preference before birth, childbirth class attendance, and the number of previous contacts made with the baby were collected

(Wilson, 1990). The demographic form also includes information in respect to the adolescent's mother relationship with her family, specifically with her own mother and the newborn's age at the time of the interview, birth weight, gestational age, and sex.

Procedures

With approval from the Committee on Use of Human Subjects in Experimentation of Mississippi University for Women (see Appendix A) and verbal permission from private physician, medical records were reviewed prior to scheduled appointment time to select the appropriate subject. At the time prospective subjects checked in for regular scheduled appointments, the researcher approached the mother to inquire about willingness to participate in the study. Prospective subjects and parents were given a verbal and written explanation of the study (see Appendix B). Upon signing a consent form, participants completed the Demographic Questionnaire and Problem Assessment Guide in the screening area (see Appendices C and D). It took approximately 20 minutes to complete the forms. Participation was on a volunteer basis, and the participants were informed that discontinuation at the mother's request could take place at any time with no

reflection on the care they received from their physician. Upon completion of the Demographic Questionnaire and the Problem Assessment Guide, the two tools were coded numerically to ensure anonymity of the subjects and consent forms were destroyed.

Data Analysis

Descriptive analyses were used to (a) describe the subjects according to age, race, marital status, length of marriage, education, occupation, previous experience caring for infants or young children, presence at the hospital during delivery, presence in the delivery room, sex preference before birth, prenatal class attendance, number of previous contacts with the newborn, and the subject's relationship with her family, specifically, with her mother, (b) describe the newborn related to age at the time of the interview, sex, race, birth weight, and gestational age, and (c) summarize the responses regarding the problems identified with attachment between the adolescent mother and her newborn. The following were reported as frequencies and percentages: race, marital status, occupation, income level, sex of the newborn, sex preference before birth, prenatal class attendance, previous experience with infants or children, type of

delivery, presence at the hospital during delivery, presence in the delivery room, family relationships, and relationship with own mother. The following were reported using ranges, means, and standard deviations: age of the adolescent mother, age of the newborn's father, age of the newborn at the time of the interview, length of marriage, education, number of prenatal classes attended, number of the mother's siblings, and number of previous contacts with the newborn.

Responses to the Problem Assessment Guide were tabulated and reported as frequency counts and percentages. Unfavorable responses to questions which ranked 20% or higher were classified as problems. Unfavorable responses meant that the adolescent mother disagreed with a positive statement or agreed with a negative statement. Options which did not apply were marked not appropriate (NA) by the subject. Unfavorable responses were identified as problem areas which could impede the mother-infant attachment process. The two open-ended statements were reported verbatim.

Overall totals reported were calculated by dividing the total number of frequencies by the total number of possible responses from each category. The sample (N = 20)

was multiplied by the total number of possible responses for each category. Total number of possible newborn category responses was 15 (15 possible responses x 20 subjects = 300 total possible responses). Total number of possible responses for socioeconomic support category was 10 (10 possible responses x 20 subjects = 200 possible total responses). Total number of possible responses for the emotion category was 8 (8 possible responses x 20 subjects = 160 total possible responses). Total number of possible response for the growth and development category was 7 (7 possible responses x 20 subjects = 140 total possible responses (for raw data see Appendix E).

Limitations

There were two notable potential limitations to this study, sample bias and instrumentation error. The potential for sample bias exists because of the convenience sampling design, small sample size, and recruitment setting. However, all of these factors must be considered as limiting the generalization of the findings. The sample was inclusive of the adolescent developmental stage by ages and represented two ethnic groups. The potential limitation for instrumentation error was based on the fact that the reported reliability of

$r = .71$ was for a male adolescent population. The instrument was used with female adolescents representing pre- and postpartum classification. Use of this instrument had merit as it was designed for adolescents and addressed potential problems with attachment. No other tool existed which determined the self-identified concerns experienced by adolescent mothers.

Chapter IV

The Findings

The purpose of this descriptive study was to identify problems that may impede the attachment process between the adolescent mother and her infant. The Demographic Questionnaire and the Problem Assessment Guide were utilized to solicit concerns perceived by the adolescent mother. This chapter presents a description of the sample and data analysis.

Description of Sample

Of the 20 adolescent mothers who comprised the sample, 15 (75%) were black and 5 (25%) were white. The adolescents ranged in age from 14 to 17 years, with a mean age of 15.37 years. The adolescent mothers' educational levels ranged from completion of seventh grade to completion of the 11th grade, with an average of a 10th grade education. Fifteen (75%) of the mothers were full-time students and unemployed, and 5 (25%) were no longer attending school. All of the adolescents were living at home with a family member. The average income of the

adolescents who were employed was at or less than \$5,000 per year.

None of the adolescent mothers attended a childbirth class; however, one attended a child care class. The adolescent fathers' ages ranged from 15 to 20 years, with a mean age of 17.56 years. The majority of the adolescents (n = 18, 90%) had siblings. Previous experience caring for newborn and children was estimated by the mothers as extensive (n = 3, 15%), little (n = 10, 50%), or no experience (n = 8, 45%). Two (10%) adolescents failed to answer the question. The mothers were asked to rate their knowledge of newborn care as good, fair, or poor. Seven (35%) mothers rated their knowledge as good, 5 (25%) rated their knowledge as fair, 5 (25%) rated their knowledge as poor, and 3 (15%) declined to answer the question.

For the postpartum group, all of the newborns were delivered vaginally. The newborns' gestational ages ranged from 37 to 42 weeks. The mean gestational age was 38.78 weeks. The age of the newborn ranged from 4 to 5½ weeks at the time of participation in this study, with a mean age of 4.6 weeks. Thirteen (65%) of the mothers stated they had a sex preference, the remaining had no preference. Ten (50%) of the mothers preferred a boy and 3 (15%) preferred

a girl. Three (35%) of the newborns were female and 6 (65%) were male. The newborns' weight ranged from 6 pounds to 8 pounds 1 ounce, with a mean age of 7.8 pounds. All of the fathers were present at the hospital at the time the newborn was born.

The adolescent mothers were questioned about their relationship with their own parents. Sixteen of the adolescents were raised by their natural family. Eleven (55%) were raised by both parents. Two (10%) were raised by mother only. One (5%) was raised by father and his family. Three (15%) were raised by another family member, and 3 declined to answer the question. When questioned as to the reason why the adolescent was not brought up by both parents, one (5%) stated her parents were separated, 2 (10%) stated their parents were divorced, 1 (5%) stated her parents were deceased, 2 (10%) offered other unspecified reasons, and 3 (15%) declined to offer an explanation. All of the adolescents stated that they were still close to their childhood family.

The adolescents who knew their own mothers were given a list of adjectives and asked to check any that might describe their mother. Table 1 represents these choices.

Table 1

Adjectives Chosen by Adolescent Mothers to Describe Their Mother, Presented in Frequencies and Percentages

Adjective	f	%
Positive		
Affectionate	10	50.0
Carefree	4	20.0
Conscientious	8	40.0
Kind	10	50.0
Intelligent	8	40.0
Strong	13	65.0
Negative		
Cold	2	10.0
Inconsistent	5	25.0
Irresponsible	4	20.0
Stingy	2	10.0
Strict	3	15.0

Data Analysis

Two research questions guided this study. Data were collected using the Problem Assessment Guide, which provided information about problems that could negatively impact the attachment process. Zero to 40 was the possible range of scores for the Problem Assessment Guide. The higher the score, the more positive the mother's chances of successful attachment with the newborn. The mother's overall scores ranged from 18 to 40. The third trimester mothers' scores ranged from 18 to 29, and the postpartum mothers ranged from 22 to 40. Third trimester mothers' scores indicated a high potential for negative attachment, and some postpartum mothers demonstrated risk for a negative attachment process. Some mothers achieved maximum scores which indicated a high potential for a positive attachment to their newborns. Only unfavorable responses to questions which ranked 20% or higher were classified as problems. Unfavorable responses meant that the adolescent mother disagreed with a negative statement. Unfavorable responses were identified as problem areas which could impede the mother-infant attachment process. Data were analyzed using descriptive statistics including frequencies, percentages, and ranking.

Research Question 1

The first research question was the following: What are the perceived problems of attachment experienced by the adolescent mother? Only unfavorable responses to questions which ranked 20% or higher were classified as problems. The overall unfavorable response rate constituted 26% of the total responses. Of the four categories, the most unfavorable responses were for adolescent growth and development (31%) followed by socioeconomic support (26%). Specific analysis by category follows.

Newborn. The newborn category has the largest number of statements assigned. There was a total of 15 (37.5%) declarative statements. The major unfavorable responses were "My baby already has a personality of his/her own" (n = 10, 50%), "I talk to my baby each time I am with him/her" (n = 6, 30%), "I am afraid to touch my baby," (n = 6, 30%), "I feel my baby knows who I am" (n = 6, 30%), and "I am afraid to care for a baby this small" (n = 6, 30%). The overall total of unfavorable responses was 21% in this category.

Socioeconomic support. The next category with the largest number of declarative statements was socioeconomic support. This category had a total of 10 (25%) statements. The major unfavorable responses were "I wish someone would tell me what to do" (n = 9, 45%) and "no one knows what I am feeling now" (n = 9, 45%), and "I need someone to talk to about my feelings" (n = 14, 70%). The overall total of unfavorable responses was 26.5% for this category.

Emotion. Emotion, the third category, had a total of 8 (20%) statements assigned. The major unfavorable responses were, "It is hard for me to love my baby this soon" (n = 15, 75%), "I already feel like a mother" (n = 8, 40%), and "I don't feel like this baby is really mine" (n = 6, 30%). The overall total of unfavorable responses for this category was 23%.

Growth and development. The category with the least amount of declarative statements assigned was growth and development. The total number of statements was 7 (17.5%). The major unfavorable responses were "This baby has already tied me down" (n = 10, 50%), "Sometimes I feel like running away from all of these problems," (n = 10, 50%), and "Becoming a mother has made me a woman" (n = 9, 45%). The overall total of unfavorable responses for this

category was 31%. Raw data responses for all four categories are found in Appendix E.

Research Question 2

The second research question was the following: Is there a difference in perceived problems of attachment experienced by third trimester and postpartum adolescents? There were several items from the Problem Assessment Guide that suggest that postpartum adolescents are more likely to identify unfavorable responses than third trimester mothers. These data are presented by category.

Newborn. The third trimester adolescent group had a total of 25 (7%) unfavorable responses in this category. Their major unfavorable response was, "My baby already has a personality of his/her own" which may indicate that they feel that the baby is not an individual with a separate identity. The adolescent postpartum group had a total of 40 (12.5%) unfavorable responses in this category. Their major unfavorable response was, "I am afraid to care for a baby this small" which may indicate their feelings of inadequacy or apprehension of the mother role (see Table 2).

Table 2

Number of Unfavorable Responses for the Category of Newborn by Question and Group,
Presented in Frequencies and Percentages

Response	Group	Rank	f	%
1 ... personality of own.	Trimester	1	5	45.0
	Postpartum	3	5	34.0
5 ... want to hold . . .	Trimester	3	3	27.0
	Postpartum	7	2	23.0
8 ... talk to baby each time. . .	Trimester	2	4	36.0
	Postpartum	4	2	23.0
9 ... afraid to touch ...	Trimester	3	3	27.0
	Postpartum	2	4	44.0
12 ... learn how to care ...	Trimester	3	3	27.0
	Postpartum	4	2	23.0
13 ... baby knows who I am ...	Trimester	2	4	36.0
	Postpartum	4	2	23.0

TABLE 2 (continued)

Response	Group	Rank	f	%
14 ... afraid to care for a baby this small	Trimester	5	0	0.0
	Postpartum	1	6	66.0
15 ... At 1st my baby looked beautiful.	Trimester	5	0	0.0
	Postpartum	4	2	23.0
22 ... looks normal	Trimester	5	0	0.0
	Postpartum	6	0	0.0
24 ... satisfied just to look at baby ...	Trimester	5	0	0.0
	Postpartum	2	4	44.0
27 ... want to see baby	Trimester	4	2	23.0
	Postpartum	4	2	23.0
31 ... want to touch my baby	Trimester	0	0	0.0
	Postpartum	5	1	11.0
36 ... At 1 st my baby looked ugly.	Trimester	5	0	0.0
	Postpartum	3	3	34.0
38 ... want my baby's father present	Trimester	4	1	9.0
	Postpartum	3	3	34.0
40 ... happy my baby ... is a girl/boy	Trimester	4	1	9.0
	Postpartum	4	2	23.0

Socioeconomic support. The third semester adolescent group had a total of 19 (9.5%) unfavorable responses in this category. Their major unfavorable response was, "I need someone to talk to about my feelings," which may indicate a need to validate or communicate unsure or new emotions. The postpartum adolescent group had a total of 34 (17%) unfavorable responses in this category. Their major unfavorable response was, "I wish someone would tell me what to do," which may be interpreted as hesitation, insecurity, or fear of the new mother role (see Table 3).

Emotion. The third trimester adolescent group had a total of 15 (9.3%) unfavorable responses in this category. Their major unfavorable response was, "It is hard for me to love my baby this soon" (82%), which may be interpreted as not fully accepting the reality of life of the fetus. The postpartum adolescent group had a total of 28 (17.5%) unfavorable responses in this category.

There were two major unfavorable responses, "I try to spend as much time as possible with my baby" (n = 6, 67%), and "It is hard for me to love my baby this soon" (n = 6, 67%), which may indicate their willingness in relinquishing care of the infant to another (see Table 4).

Table 3

Number of Unfavorable Responses for the Category of Socioeconomic Support by Question and Group, Presented in Frequencies and Percentages

Response	Group	Rank	f	%
2 ... father and I talk a lot about baby ...	Trimester	3	2	18.0
	Postpartum	6	2	11.0
10 ... wish someone would tell me what to do	Trimester	3	2	18.0
	Postpartum	1	7	78.0
16 No one knows what I am feeling now.	Trimester	2	4	45.0
	Postpartum	2	5	56.0
20 ... plan to support my baby.	Trimester	4	1	9.0
	Postpartum	6	1	11.0

(table continues)

TABLE 3 (continued)

Response	Group	Rank	f	%
25 ... family has been a lot of help since ...	Trimester	4	1	9.0
	Postpartum	7	0	0.0
28 ... don't get along ...	Trimester	5	0	0.0
	Postpartum	5	2	22.0
29 ... need someone to talk to ...	Trimester	1	9	82.0
	Postpartum	2	5	56.0
32 ... can't talk to my baby's father about the baby.	Trimester	5	0	0.0
	Postpartum	3	4	44.0
33 ... need the social worker to help ...	Trimester	5	0	0.0
	Postpartum	4	3	33.0
35 I can't turn to my family for ...	Trimester	4	1	9.0
	Postpartum	4	3	33.0

Table 4

Number of Unfavorable Responses for the Category of Emotion by Question and Group, Presented in Frequencies and Percentages

Response	Group	Rank	f	%
4 ... spend as much time ... with my baby.	Trimester	4	0	0.0
	Postpartum	1	6	67.0
6 ... don't feel like this really is my baby.	Trimester	4	0	0.0
	Postpartum	4	2	22.0
17 I already feel like a mother.	Trimester	2	4	36.0
	Postpartum	2	4	44.0
18 ... feel so helpless when I am with ...	Trimester	4	0	0.0
	Postpartum	3	3	33.0
21 ... a mother is a happy achievement.	Trimester	3	1	9.0
	Postpartum	3	3	33.0
30 I want to take my baby home.	Trimester	4	0	0.0
	Postpartum	4	2	22.0

TABLE 4 (continued)

Response	Group	Rank	f	%
34 I already feel close to my baby.	Trimester	3	1	9.0
	Postpartum	4	2	22.0
37 ... hard for me to love my baby.	Trimester	1	9	82.0
	Postpartum	1	6	67.0

Adolescent growth and development. The third trimester adolescent group had a total of 7 (64%) unfavorable responses in this category. Their major unfavorable response was "becoming a mother has made me a woman," which may be marker of their physical, mental, and emotional immaturity. The postpartum adolescent group had a total of 26 (18%) unfavorable responses. Their most unfavorable response was "Sometimes I feel like running away from all of these problems," which may indicate they were in the correct stage of maturity with adult stage responsibilities (see Table 5).

The Problem Assessment Guide contained two open-ended questions. The first question was, "Are there any problems you are facing at this time which were not identified in this questionnaire?" Six (30%) postpartum mothers answered no, 3 (15%) postpartum mothers answered yes, and all (55%) of the third trimester mother group answered no.

One of the postpartum mothers stated that she "was having a hard time finding someone to watch her child while she attended school," which may be interpreted as finishing school is a priority for the mother. Another mother stated that, "I am tired all of the time from caring for my baby," which may indicate the mother is not receiving

Table 5

Number of Unfavorable Responses for the Category of Adolescent Growth and Development by Question and Group, Presented by Frequencies and Percentages

Response	Group	Rank	f	%
3 ... already tie me down.	Trimester	2	5	45.0
	Postpartum	2	5	56.0
7 I wish my baby had been born.	Trimester	4	0	0.0
	Postpartum	2	5	56.0
11 ... feel like running away from all ...	Trimester	3	3	27.0
	Postpartum	1	7	78.0
19 ... has made me a woman.	Trimester	1	7	64.0
	Postpartum	4	2	22.0
23 I want my baby to count on me.	Trimester	3	1	9.0
	Postpartum	3	3	33.0
26 I want to be a good mother.	Trimester	5	1	11.0
	Postpartum	4	2	22.0
39 ... won't be able to finish school.	Trimester	3	1	9.0
	Postpartum	1	6	67.0

expected social support from family members or significant other. The last postpartum mother identified a socioeconomic support issue which was that she and the baby's father no longer had a relationship which may indicate that the mother would like to reestablish a relationship with the baby's father if possible.

The second question was "What is the biggest problem you are facing at the time?" One (11%) postpartum adolescent identified she would not be able to finish school as planned because she had to find a job. One (11%) postpartum adolescent had planned on getting married after the infant was born; however, her parents would not consent to the marriage, and one (11%) postpartum adolescents stated that she was having a hard time finding employment which indicates the mother cannot financially support the infant.

In summary, this chapter addressed a description of subjects included in the study and the analysis of data obtained using the Demographic Questionnaire and the Problem Assessment Guide. The purpose of the study was to give adolescent mothers the opportunity to respond to questions which may be markers for potential problems with the attachment process. Two research questions were

interpreted using statistical information. Chapter V presents further interpretation of these findings and recommendations for further study.

Chapter V

The Outcomes

Adolescent parenthood is not a new phenomenon in the United States; however, there seems to be a growing concern about the very young and the potential for negative outcomes of the mother-infant dyad for this age group. The purpose of this descriptive study was to allow the adolescent mother the opportunity to respond to statements which negatively impact the attachment process between the mother and infant. The theoretical framework consisted of Erikson's (1963) Theory of Psychosocial Development and the concept of attachment as described by Klaus, Kennell, and Klaus (1995). Two research questions guided this study. Data were collected using the Demographic Questionnaire and the Problem Assessment Guide. The Problem Assessment Guide consisted of 40 agree/disagree items divided into four categories: newborn, socioeconomic support, emotion, and adolescent growth and development. There also were two open-ended questions included on the Problem Assessment Guide.

Data were analyzed with descriptive statistics including frequencies, percentages, and ranking. The possible range of scores was 0 to 40. The mothers' scores ranged from 18 to 40. Interpretation of the findings, conclusions, implications for nursing, and recommendations are presented in this chapter.

Summary of Findings

The sample consisted of 20 adolescents who were first-time adolescent mothers between the ages of 14 and 17 years who received care at a private practice obstetrics/gynecology clinic located in a southern state. Five (25%) of the sample were white, and 15 (75%) were black. The average educational level was 10th grade.

For the first research question, What are the perceived problems experienced by the adolescent mother? adolescents identified several statements as problems because they were answered as an unfavorable response. Major problems are discussed by category. For the newborn category, mothers identified that their baby did not have a personality of his or her own, which indicates that the mother may not have been aware of the development of a newborn. For the socioeconomic category, mothers indicated that they did not get to talk with the father of the

child, which means the mother is probably not receiving the support she expected from the baby's father. For the adolescents' growth and development category, mothers identified "this baby has already tied me down," which can be interpreted as the mother feeling overwhelmed with the responsibilities of motherhood. For the last category, emotion, the statement, "it is hard for me to love my baby this soon," was chosen which may mean that mothers have not accepted the infant as a reality.

The second question, Is there a difference between perceived problems of attachment experienced by third-trimester and postpartum adolescents? revealed several statements identified by the adolescent. The postpartum adolescent mothers were more likely to agree with a negatively worded or disagree with a positively worded statement than the third trimester adolescents. For the newborn category, the postpartum mothers indicated that the infant is too fragile, constituting fear of handling the infant. For the socioeconomic category, the postpartum mothers felt overwhelmed with the decisions that had to be made by a parent. For the growth and development category, postpartum mothers indicated a desire to abandon the role

of motherhood. For the last category, emotion, postpartum mothers were not pleased with their new role.

Discussion

The findings of this study must be viewed with caution as the sample size was small and the instrument lacked reliability and validity. Additionally, findings were subject to the researcher's interpretation of negative responses to items on the instrument. Although this study focused on identification of unfavorable responses, the overall total of unfavorable responses was 74%, which indicates that the process of mother-infant attachment is a positive experience for these mothers.

These findings are partially supported by Broussard (1995) who conducted an exploratory study which focused on identifying normative behavior in groups of society in children born to adolescents pertaining to attachment. Broussard (1995) concluded that positive attachment is possible throughout all age groups.

An overall 26% constituted the number of unfavorable responses for the adolescent group, which indicates a potential risk of negative attachment between the mother and her infant. The highest percentage of unfavorable responses was in the adolescent growth and development

with an overall total of 31%. The second highest category of unfavorable responses was socioeconomic support with an overall total of 26%. Emotion ranked third for unfavorable responses, and newborn category ranked last with the least amount of unfavorable responses. These percentiles are not surprising since researchers Frodi et al. (1990) supported the issue that infants in a relationship where the mother-infant attachment has not been optimally fostered, the infant is at risk for poor socioemotional growth and development. Wilson's (1990) study on father-infant attachment and problems that may exist also cited socioeconomic support and growth and development issues as factors that could negatively impact the attachment process.

This researcher does note that ranking of problem areas was different for the postpartum adolescents who actually had time to experience motherhood. Postpartum adolescent percentage of unfavorable responses was generally higher or more realistic than the third trimester adolescent. This viewpoint is comparable with Wilson (1990) whose sample of fathers were already involved in care of the newborn.

In another study Bloom (1995) investigated the differences in maternal-fetal and maternal-infant attachment from early to late development groups in adolescents. Bloom (1995) sought to explore the type of attachment that developed between adolescent mothers across time. In conclusion, Bloom supported the idea that maternal fetus and maternal-infant attachment do exist in adolescents. This finding is congruent with the present study's result that adolescent mothers, both postpartum and third trimester, are capable of positive attachment.

The newborn category, which had the largest number of statements assigned, was found to be the category with the least amount of unfavorable responses identified as problems with the attachment process. This finding may reflect a positive attachment between the mother and infant or the beginning of the process for an affectional relationship for this dyad. Another possibility is that the mother is more concerned with issues directly related to herself as reflected by statements in other categories. This result is dissimilar to Wilson (1990) who concluded that the newborn category ranked third for unfavorable responses and indicated the area with the most at-risk issues. The difference in the rankings for the study may

be due to the fact that the present study is comprised of 55% third trimester adolescents who may not be focused on the baby, but on themselves. Additionally, the sample used positive adjectives to identify their own mothers. The researcher projects that these adolescents had a good relationship or attachment these adolescents had to their mothers who are good role models. Both groups of mothers identified fear related to caretaking and lack of knowledge issues. None of the adolescents reported attendance at a class for newborn care. The researcher proposes that adolescent mothers need guidance in caring for and handling the newborn. Adolescents may not have the knowledge or understanding to meet the basic physical needs of child care which is essential to promote positive attachment.

The socioeconomic support category ranked second for unfavorable responses for the present study. This category reflected areas, such as family, father of child, education, and living arrangements. Social support was perceived by these mothers as not adequate enough to ease their anxieties of adolescent parenthood and develop a mothering identity. These mothers who had an average of a 10th grade education may have expected more or different

help from their parents or significant other. Diehl (1997) believed that variables, such as education, self-esteem, paternal involvement, and living arrangements, contribute to positive mother-infant attachment. Diehl (1997) concluded that maternal education and paternal involvement had the most significance on positive interaction between the mother-infant dyad. These conclusions partially support current study results.

The adolescent growth and development category which had the least amount of statements was identified as the category with the highest amount of unfavorable responses. These results are not surprising since statements like "this baby has already tied me down" and "sometimes I feel like running away from all of these problems" as being directly correlated to developmental issues of the mother. Although both adolescent groups identified these statements unfavorably, the researcher believes it is crucial to pay attention to the postpartum responses since they have already been confronted with the reality and responsibilities of child care. According to Erikson's (1963) Theory of Psychosocial Development, the adolescent attempts to form an individual identity by becoming independent from the family and establishing realistic

career goals. The complication of motherhood may cause the adolescent to rely heavily on family members and constitute even more changes in career goals.

Hurlbut et al. (1997) conducted a study investigating the relationship between the adolescent mother's self-esteem and knowledge of parenting. The researchers hypothesized that adolescent mother's self-esteem would have a direct correlation to their parenting skill knowledge, with the assumption that self-esteem was an indicator for the developmental stage of identity versus role confusion. Data supported the hypothesis that the adolescent mother's self-esteem would have a direct correlation to their parenting skill knowledge, with the assumption that self-esteem was an indicator of the developmental stage of role identity. Although the present study did not look at self-esteem specifically, Erikson theorized that self-esteem and role identity are reciprocal entities. The third trimester and the postpartum mothers in the present study demonstrate a significant level of role confusion by identifying the desire to running away from their existing problems with motherhood and a need to talk to someone about their present feelings.

In another supportive study, Levine et al. (1991) investigated how adolescent attachment and object relation were related and what effects they would have on infant attachment. The researchers predicted that the adolescent's ability to establish positive mother-infant attachment would be highly related to object relation of the mother. Levine concluded that together adolescent attachment and adolescent object relations were significantly related to infant attachment. These researchers also determined that the mother's internal mode of attachment had a direct bearing on her child's attachment to her. Object relation and adolescent attachment are issues that coincide with adolescent growth and development. Object relation pertains to the ability of the individual to separate want and desires for self to fulfill the needs of another individual. In the case of attachment, the ability of the mother is to set aside her wants and desires to care for the needs of the infant. Based on the responses by the adolescents in the present study, the author believes the adolescent feels it would be easier to escape parenthood by running away from all the perceived problems or the adolescent desires to have someone to whom they can express their concerns. This

implies to the researcher that the adolescents do not have the necessary coping skills needed to adjust to motherhood.

Emotion. The emotion category has the third largest numbers of statements assigned and was ranked third for unfavorable responses in this study. The statement, "It is hard for me to love my baby this soon" was identified as the major problem for this category. According to Klaus et al. (1995), early attachment between an adolescent mother and her infant might be hindered if the adolescent is unable to be attentive to the needs of the infant. The adolescent mother may not have the knowledge or understanding to meet the needs of the newborn. The majority of the mothers reported little or no experience handling or taking care of a newborn. However, most of the mothers responded positively concerning their newborn indicating positive emotions towards their baby.

Conclusions

The following conclusions were derived from the findings in this study. The adolescents, both third trimester and postpartum, identified 74% of the statements assigned to the Problem Assessment Guide with favorable responses which indicates that the initial mother-infant

attachment process is positive for this sample. Broussard (1995), who concluded that positive attachment is possible throughout all age groups, partially supports these findings. According to Klaus et al. (1995), the categories that presented the adolescents with the most concern were the socioeconomic support and adolescent growth and development indicating that these mothers are overwhelmed with the responsibilities of motherhood.

There is a difference in the perceived concerns experienced by third trimester and postpartum adolescents. For the statements identified as problems, the postpartum adolescents were more likely to agree with a negatively worded statement or disagree with a positively worded statement than third trimester adolescents. Adolescent postpartum mothers, who actually had time to experience motherhood, identified a higher frequency of problems than third trimester adolescents. This finding is comparable to Wilson's (1990) study whose sample of fathers were already involved in the care of the newborn. Erikson's (1963) Psychosocial Development Theory was pertinent to this study because the problems identified by the adolescent are the issues that are instrumental in the adolescent attaining a solid identity. According to Erikson (1963),

the adolescent major task for this developmental stage are independence, self-esteem, role identity, and career. The 26% of unfavorable responses indicate at risk or negative risk for attachment. If the mother does not accomplish the tasks for her developmental stage prior to assuming tasks in another development stage, role confusion will emerge, which appears to be the case with the adolescent mothers in this present study. Her selection of such statements as "I wish someone would tell me what to do" and "sometimes I feel like running away from all of these problems" are indicative of role confusion.

Implications for Nursing

A number of implications emerged from this study. Implications for practice, research, education, and theory are discussed.

Nursing practice. The findings from this research study can be utilized by nurses from various settings. It is important that nurse practitioners identify potential problems with the mother-infant process in order to optimize family function. The nurse practitioner can facilitate change within the mother-infant dyad by directing her to community resources to alleviate some of the problems. Primary areas of concern for this sample

were finances, social support, and education. All of the areas identified are major issues for the adolescent developmental stage to help identify adolescent mothers who are at risk for negative mother-infant attachment. An increased understanding of the concerns of the adolescent mother will help the nurse practitioner to establish interventions aimed at optimizing the attachment process. The nurse practitioner should use the role of counselor so that the adolescent can validate her concerns. For issues beyond the mother's capabilities, the nurse practitioner can use the role of advocate to initiate change within local, state, and national policies to improve access to health care and education.

Nursing research. The majority of previous research on the attachment process is aimed at interaction between the mother and infant; however, more studies need to be conducted focusing on the concerns of the mother since she initially controls attachment between her and the infant. At this time no instrument exists that allows the adolescent to identify problems with the attachment process. Development of a reliable instrument to assess and identify problems would be beneficial to the mother-infant dyad and health care providers. Information derived

from research will add to the body of knowledge nurses require to stay current with issues relevant to these mothers seeking health care.

Nursing education. As nurses continue to provide services to adolescent mothers, the need to be more understanding of issues that concern the adolescents is relevant in helping the adolescent reach a resolution. The nurse practitioner can be instrumental in directing the adolescent to information for coping, parenting, and support groups. In order to ensure the adolescent maintains a positive outcome, education is a valuable tool at the disposition of the nurse practitioner.

Nursing theory. Theory is based on research. The appropriateness of using Erikson's Theory of Psychosocial Development emerged with the findings of this study. The adolescent mothers identified socioeconomic support and growth and development issues as the major problems which coincide with the task Erikson (1963) identifies within his theory. This theory reveals valuable information the nurse practitioner can use when dealing with the adolescent population. Adolescent mother concerns are different from the adult mothers, and care should be individualized accordingly. Without a developmental

theory, the nurse practitioner could find it hard trying to relate to the adolescent mother who requires special attention in dealing with her problems.

Recommendations

Several recommendations for future study exist:

Research

1. Replication of this study utilizing a larger sample of adolescent mothers in a variety of settings should be conducted for generalization of the findings.

2. Development of an instrument which measures adolescent mothers' problem areas pertinent to the attachment process.

3. Replication of study with third trimester adolescent mothers to assess the mother through the attachment process.

4. Replication of study with a postpartum adolescent group to assess concerns with the mother-infant attachment process.

Practice

1. Implementation of interventions such as parent classes to promote a positive maternal-child attachment.

2. Implementation of a developmental assessment tool to identify areas of strength and risk for the mother-infant dyad.

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APPENDIX A

APPROVAL OF COMMITTEE ON USE OF HUMAN
SUBJECTS IN EXPERIMENTATION OF
MISSISSIPPI UNIVERSITY FOR WOMEN



**MISSISSIPPI
UNIVERSITY
FOR WOMEN**

Columbus, MS 39701

Division of Nursing
Taylor Hall
W Box 910
Office (601) 329-2299
BSN Program 329-7301
ASN Program 329-7311
MSN Program 329-7333

April 8, 1998

Ms. Desiree Snow
c/o Graduate Program in Nursing
Campus

Dear Ms. Snow:

I am pleased to inform you that the members of the Committee on Human Subjects in Experimentation have approved your proposed research with the following statement added to the consent form, "I hereby agree to participate."

I wish you much success in your research.

Sincerely,


Susan Kupisch, Ph.D.
Vice President
for Academic Affairs

SK:wr

cc: Mr. Jim Davidson
Dr. Mary Pat Curtis

APPENDIX B

LETTER TO PARENTS/GUARDIAN AND
CONSENT FORM OF PARTICIPANT

Dear Parent/Guardian:

My name is Desiree Snow, and I am currently a registered nurse and a graduate student at Mississippi University for Women. I am conducting a study to identify areas of concerns new mothers have regarding mother-infant attachment. By allowing your daughter to participate in the study, she would be providing health care providers with valuable information needed to assist the adolescent mother-infant dyad in obtaining overall health for the family unit. Your daughter will complete a questionnaire consisting of 40 declarative statements and two open-ended questions requiring her to write her answer in the space provided.

You would be giving me, Desiree Snow, permission to review your daughter's chart and use her questionnaire in the study. Your approval or refusal to allow your daughter to participate will not interfere with the care she receives from her physician. Her identity will never be revealed. At the time she receives her questionnaire, a number will be assigned for identification purposes. If at any time she wishes to withdraw from the study, she may do so. By your signing the attached form, you agree to your child's participation in this study.

Thank you,

Desiree Snow

Consent Form

My name is Desiree Snow, and I am a registered nurse and graduate student at Mississippi University for Women. I am currently conducting a study to identify areas of concern new mothers have regarding mother-infant attachment. By identifying your concerns you would be providing health care providers valuable information needed to assist the adolescent mother-infant in obtaining overall health for the family unit. You will complete a questionnaire consisting of 40 declarative statements and two open-ended questions requiring you to write your answers in the space provided. You will be giving me, Desiree Snow, permission to review your chart and use your questionnaire in the study. Your acceptance or denial to participate will not interfere with the care you receive during your admission at this facility. Your identity will never be revealed. At the time you receive your questionnaire, you will be assigned a number for identification purposes. If at any time you wish to withdraw from the study, you may do so.

By signing this form, I agree to participate in this study.

Sign Here: _____

APPENDIX C
DEMOGRAPHIC QUESTIONNAIRE

Demographic Questionnaire

Please answer the following questions. If you believe that a particular question does not apply to you, place N/A (not applicable) in the space provided.

1. Today's date:_____ 2. Delivery date:_____
3. Newborn's birth weight:_____
4. Newborn's gestational age:_____
5. Newborn's age today: _____
6. Newborn's sex: Male_____ Female_____
7. Father's age:_____ 8. Your age: _____
9. Marital status:_____
10. Race
 - _____ a. White
 - _____ b. Black
 - _____ c. Hispanic
 - _____ d. Oriental
 - _____ e. Other
11. Last grade completed in school:

4	5	6	7	8		9	10	11	12
(Grammar school)						(High school)			
12. Occupation
 - _____ a. Student
 - _____ b. Other (please explain):_____
13. Annual income
 - _____ a. Less than \$5,000
 - _____ b. \$ 5,000-\$10,000
 - _____ c. \$11,000-\$15,000
 - _____ d. \$16,000-\$20,000
 - _____ e. \$21,000-\$25,000
 - _____ f. More than \$25,000

14. How many sisters and/or brothers do you have?
Sisters:_____ Brothers:_____
15. How much experience do you have taking care of young children, such as babysitting or caring for younger brothers and sisters?
16. How much experience have you had handling and/or taking care of a newborn?
_____ a. Extensive experience
_____ b. Little experience
_____ c. No experience
17. How would you rate your knowledge of baby care?
_____ a. Good
_____ b. Fair
_____ c. Poor
18. Do/did you attend childbirth classes? Yes____ No____
Do/did you attend a baby care class? Yes____ No____
19. Will/was the baby's father present at the hospital when the baby was born? Yes____ No____
20. Do you want to have a: Boy____ Girl____ No preference____

To answer the following questions, check (✓) the correct letter:

21. Were you brought up
_____ a. by both parents?
_____ b. in a family other than your natural family?
_____ c. in a number of different?
_____ d. your father and his parents?
_____ e. in an institution?
22. By whom were you brought up?
_____ a. Both parents
_____ b. Your mother only
_____ c. Your father only
_____ d. Your mother and her parents
_____ e. Your father and his parents
_____ f. Relatives
_____ g. Other

23. If you answered #22 b-g, why were you not brought up by both parents?
- a. Parents were separated.
 - b. Parents were divorced.
 - c. Both parents died.
 - d. Other
24. You
- a. are still close to your childhood family.
 - b. are no longer very close to your childhood family.
 - c. do not seem to care at all.
 - d. do not like to see your childhood family.
25. Check (✓) the adjectives below which most apply to your mother?
- a. Affectionate
 - b. Carefree
 - c. Cold
 - d. Conscientious
 - e. Inconsistent
 - f. Intelligent
 - g. Irresponsible
 - h. Kind
 - i. Stingy
 - j. Strict
 - k. Strong

Adapted from Wilson (1990)

APPENDIX D
PROBLEM ASSESSMENT GUIDE

Problem Assessment Guide

Directions: Please check (✓) the answer which best describes/represents your feelings at the present time by circling the appropriate answer. Put N/A (not applicable) for any questions that you feel do not apply to you at this time.

	Agree	Disagree
1. My baby already has a personality of his/her own.	_____	_____
2. My baby's father and I talk a lot about our baby.	_____	_____
3. This baby has already tied me down.	_____	_____
4. I try to spend as much time as possible with my baby.	_____	_____
5. I want to hold my baby.	_____	_____
6. I don't feel like this baby is really mine.	_____	_____
7. Sometimes I wish my baby had never been born.	_____	_____
8. I talk to my baby each time I am with him/her.	_____	_____
9. I am afraid to touch my baby.	_____	_____
10. I wish someone would tell me what to do.	_____	_____
11. Sometimes I feel like running away from all of these problems.	_____	_____
12. I want to learn how to help care for my baby.	_____	_____
13. I feel my baby knows who I am.	_____	_____

14. I am afraid to care for a baby
this small. _____
15. At first, my baby looked
beautiful to me. _____
16. No one knows what I am feeling
now. _____
17. I already feel like a mother to
my baby. _____
18. I feel so helpless when I am
with my baby. _____
19. Becoming a mother has made me
a woman. _____
20. I plan to support my baby. _____
21. Becoming a mother is a happy
achievement. _____
22. My baby looks normal to me. _____
23. I want my baby to be able to
count on me. _____
24. I am satisfied to just look at my
baby without touching him/her. _____
25. My family has been a lot of help
since my baby has been born. _____
26. I want to be a good mother to my
baby. _____
27. I wanted to see my baby as
soon as he/she was born. _____
28. I don't get along with anyone
any more. _____
29. I need someone to talk to about
my feelings. _____
30. I want to take my baby home. _____
31. I want to touch my baby. _____

32. I can't talk to my baby's father about the baby. _____
33. I need the social worker to help me with my problems. _____
34. I already feel close to my baby. _____
35. I can't turn to my family for help. _____
36. At first my baby looked ugly to me. _____
37. It is hard for me to love my baby this soon. _____
38. I want/wanted my baby's father to be present when my baby is/was delivered. _____
39. I won't be able to complete school because of the birth of my baby. _____
40. I am happy my baby is a boy/girl. _____
41. Are there any problems you are facing at this time which were not identified in this questionnaire?
 _____ Yes
 _____ No

If "yes," explain:

42. What is the biggest problem you are facing at this time?

APPENDIX E

RAW DATA OF UNFAVORABLE RESPONSES
BY CATEGORY AND QUESTION NUMBER
USING FREQUENCY AND PERCENTAGES

Raw Data of Unfavorable Responses by
Category and Question Number Using
Frequency and Percentages

Question	f	%
Newborn		
1	10	50.0
5	5	25.0
8	6	30.0
9	6	30.0
12	5	25.0
13	6	30.0
14	6	30.0
15	3	15.0
22	0	0.0
24	4	20.0
27	3	15.0
31	1	5.0
36	3	15.0
38	4	20.0
40	3	15.0
Socioeconomic Support		
2	4	20.0
10	9	45.0
16	9	45.0
20	2	10.0
25	2	10.0
28	2	10.0
29	14	70.0
32	4	20.0
33	3	15.0
35	4	20.0

RAW DATA (continued)

Question	f	%
Emotion		
4	6	30.0
6	2	10.0
17	8	40.0
18	3	15.0
21	4	20.0
30	2	10.0
34	3	15.0
37	15	75.0
Adolescent Growth and Development		
3	10	50.0
7	5	25.0
11	10	50.0
19	9	45.0
23	4	20.0
26	2	10.0
39	4	20.0