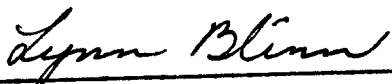
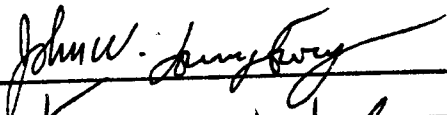
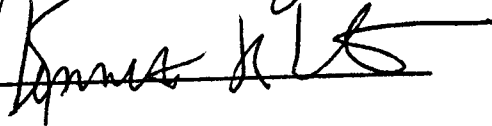


To the Graduate Council:

I am submitting herewith a dissertation written by Susan B. Justice entitled "Needs for Succorance and Nurturance in Pregnant Teenagers." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Psychology.


Sandra Loucks, Major Professor

We have read this dissertation
and recommend its acceptance:

Accepted for the Council:


Vice Provost
and Dean of The Graduate School

NEEDS FOR SUCCORANCE AND NURTURANCE
IN PREGNANT TEENAGERS

A Dissertation
Presented for the
Doctor of Philosophy
Degree

The University of Tennessee, Knoxville

Susan B. Justice

December 1989

DEDICATION

This dissertation is dedicated to my two daughters,
Paula and Heather Justice.
Their patience, enthusiasm, understanding,
and, most of all,
their love
are the brightest stars in all my endeavors.
They are a continual source
of inspiration and insight
and a significant factor
in my desire to learn.

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ABSTRACT

The purpose of this study was to investigate differences in personality characteristics among pregnant and nonpregnant adolescents. The variables measured were needs for succorance, needs to nurture, wellbeing, desires for social closeness, psychosexual drive conflict, and contraceptive knowledgeability. Three groups of adolescents between the ages of 12 and 17, who were not married and from the lowest two socioeconomic classes were studied in order to identify differences on these variables. One group of pregnant adolescents was selected from Florence Crittenton Homes in Tennessee, North Carolina, and South Carolina. A second group of pregnant adolescents was selected through Planned Parenthood in Tennessee and from public schools in South Carolina. The third group consisted of nonpregnant adolescents in public schools in South Carolina. The Personality Research Form was used to measure needs for succorance and needs to nurture. Levels of wellbeing and desires for social closeness were determined by scores on the Differential Personality Questionnaire. The Rorschach was administered to gather data on psychosexual drive conflicts, and contraceptive knowledgeability was measured by a Contraceptive Questionnaire.

Significant differences between group means on succorance needs were found with the pregnant, nonresidential group scoring higher than the nonpregnant group. Both groups of pregnant girls also scored significantly higher than the nonpregnant group on measures of psychosexual drive conflict. The nonpregnant group scored higher than either of the pregnant groups on wellbeing. Significant differences were also found between the two groups of pregnant girls with the pregnant, residential group scoring higher on contraceptive knowledgeability and the pregnant, nonresidential group scoring higher on nurturance and social closeness. The nonpregnant group also scored significantly higher on nurturance and social closeness than the pregnant, residential group. The pregnant, residential group scored higher than the nonpregnant group on contraceptive knowledgeability.

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CHAPTER 1

INTRODUCTION

The incidence of teenage pregnancy has reached alarming proportions in this country over the past fifteen years. It is a problem that has generated a great deal of research but for which we have as yet devised only few viable solutions. It is a problem that affects every segment of society, at least in terms of tax dollars, and it is a problem that often results in negative consequences for the adolescent mother and her baby.

The United States leads nearly all other developed nations of the world in teenage pregnancy: there are 96 pregnancies per every 1,000 girls aged 15-19--more than double the next highest rate of 45 per 1,000 in England. This problem crosses all racial and economic lines. The rate for white adolescents alone is 19 per 1,000 and the rate for black adolescents is 4.5 times greater at 87.1 per 1,000. In the last decade, the birth rate of unwed white adolescents rose 27% (Hayes, 1987). Even more alarming, Forrest (1986) estimates that 43% of all adolescent girls, regardless of marital status, will become pregnant at least once before their twentieth birthday. Finally, although the birth rate among teenagers of all races has increased, the

number of adoptions has decreased from 90% to 10% since 1970 (Levering, 1983).

Teenage pregnancy has always been a problem, but the negative social and economic consequences associated with adolescent pregnancy are increasing. Babies born to teenagers are two to three times more likely to die in their first year of life than babies born to women in their twenties. Unwanted teenage pregnancies are associated with serious health consequences including a greater incidence of prematurity and low birth weight babies, mental retardation, infant and maternal mortality, and physical or emotional neglect and abuse. Six to eight years after birth, the children of adolescent mothers have demonstrated significantly lower intelligence quotients and lower reading levels (Simkins, 1984; Hayes, 1987). Of those adolescents who become pregnant under the age of 17, 80% never finish high school making it extremely hard to find a good job (Baldwin, 1976; Presser, 1980). The suicide rate is ten times higher among pregnant teenagers (Levering, 1983; Ireson, 1984), and a number of studies have concluded that teenage mothers are more likely to be child abusers (Bolton, 1980; Simkins, 1984; Gelles, 1986). Finally, of those teenagers who bear a child, 25% will become pregnant again within a year (Hayes, 1987).

According to Moore and Burt (1982), teenagers who become mothers are disproportionately poor and dependent on public assistance for their economic support. In 1975 it was estimated that 50-56% of the Aid to Families With Dependent Children (AFDC) budget was allocated to households in which the mother was a teenager at the time of her first child's birth. Even more recently, based on estimates of welfare costs directly attributable to adolescent childbearing in 1985, Burt (1986) contends that this expense has nearly doubled in the past 10 years costing the system \$16.6 billion. Moreover, not only are mothers in their teens more likely to be receiving AFDC benefits than older mothers, but the total of their grants is larger, due primarily to the larger size of their families (Block & Dubin, 1981).

Pregnancy is frequently described by those who have studied its impact on the woman's life as a period of psychological crisis (Colman & Colman, 1971; Shereshefsky & Yarrow, 1973; Leifer, 1980; Sacker & Neuhoff, 1982). It is seen as a time wherein the woman is more sensitive and open to her inner processes, fantasies, and dreams; and it is seen as a period of disequilibrium. Pregnancy is also referred to as a developmental task or stage for the female, involving role transitions, identity changes, and rapid physical changes. Pregnancy revives unresolved conflicts from earlier developmental stages (Colman & Colman, 1971;

Shereshefsky & Yarrow, 1973; Ballou, 1978; Leifer, 1980; Fine & Pape, 1982; Hamburg, 1986). Pregnancy can also be subdivided into three distinct stages corresponding to the three trimesters with each characterized by specific physical changes and psychological responses to these and each having certain tasks to be mastered (Colman & Colman, 1971; Fine & Pape, 1982).

Adolescence, like pregnancy, can be understood as a developmental stage and is most often perceived as a time of emotional upheaval, uncertainty, and tumultuous relationships. It is also a time of rapid physical changes and growth. Psychological tasks such as identity formation, separation from the family of origin, and development of a career choice are seen as important aspects of the adolescent experience that must be resolved in some manner as each adolescent makes the transition to adulthood (Russell, 1980; Freeman, 1987).

Clearly then, both the conditions of pregnancy and the state of being an adolescent can be stressful periods of life and the degree of success experienced in each have significant effects on the management of the subsequent stages, motherhood and adulthood. Keeping this in mind, one can imagine the stress that occurs when the developmental stage of pregnancy is superimposed on the developmental stage of adolescence. The pregnant adolescent female is placed in a

double jeopardy situation in which she must simultaneously cope with two emotionally charged conditions.

Newborn infants require considerable amounts of succorance from their caretakers. The relationship between the newborn and mother is essentially a unilateral one in which the infant gives little in return for the succorance received. Therefore, optimal mothering requires a level of psychological development wherein the new mother is able to nurture her infant without feeling deprived or neglected herself. An adolescent mother who sets priority on reciprocity in social relationships is unlikely to be psychologically prepared to nurture a wholly dependent infant (Peterson, Bhaskan, & Barglow, 1982; Peterson & Crockett, 1986).

Although the field is replete with studies of the personality characteristics of pregnant teenagers, none have been found that have focused specifically on the characteristic, need for nurturance, or its counterpart, need for succorance. When addressed, these characteristics, while seen as important and noteworthy, are actually incidental findings in adolescent pregnancy research. Moreover, they are examined in terms of the prepregnant personality of the adolescent and as motivational factors in the choice to become pregnant. Sugar (1976) posits that teenage pregnancy is acting-out behavior on the part of a female who has unresolved conflicts about mothering and a desire to be

mothered. In interviews with 53 pregnant adolescents, Schaffer and Pine (1972) found that all of their subjects held fantasies that they would provide more succorance for their babies than had been given them by their own mothers. Olson and Woroby (1984), in a study of the relationships between mothers and their adolescent daughters who became pregnant, found that these daughters, compared to their nonpregnant peers, experienced less love and attention from their mothers. Finally, Lewis et al. (1973) interpreted teenage pregnancy as the culmination of a teenager's own mother's inability to nurture and support her which increased the girl's wish for closeness, a closeness she hoped to obtain via a baby of her own.

The pregnant adolescent is in a uniquely vulnerable position that could intensify preexisting personality deficits and give rise to new characteristics and needs that will influence her later relationship with her baby. If, for example, the pregnant teenager demonstrates high levels of need for succorance and expects that her baby will satisfy some (or all) of these needs, she may become angry with the infant when the reality of its needs become evident to the point that she becomes neglectful or abusive towards it. On the other hand, she may be so emotionally needy herself that she neglects her own physical health which may in turn have negative consequences for her newborn. Finally, it is

likely that a pregnant teenager who is preoccupied with her own needs for succorance will lack the capacity to engage in any meaningful planning for her and her baby's future in terms of education, career, or prevention of later pregnancies.

This study will conduct a nomothetic examination of personality characteristics of the pregnant teenager. Theoretically, it is these personality characteristics that may place her and her infant at high risk for psychological, medical, and economic complications. The rationale for this study, therefore, is that it is important to know more about the psychological status of pregnant teenagers. Knowing this will lay the groundwork for later longitudinal studies of pregnant adolescent personality variables and maternal-infant outcome. Ultimately, perhaps some of the noted psychological casualties in the adolescent mother/infant relationship can then be prevented.

The perspective for this study incorporates developmental phenomena, and it takes the position that pregnancy in adolescence is disruptive to psychological development. It is the interaction between the psychological aspects of pregnancy and the psychological aspects of adolescence, moreover, that creates the unique psychological profile of the pregnant adolescent.

CHAPTER 2

REVIEW OF THE LITERATURE

The Psychology of Pregnancy

Traditional psychoanalytic theory proffers several explanatory models of psychic functioning: the psychosexual drive model, the object relations model, and the ego psychological model. The psychosexual drive theory of Freud (1924) views psychological functioning as developing out of a biological context in which innate drives are expressed and amended in interaction with significant others in the environment. Oral drives are primary, followed later by anal and phallic drives before the mature genital level of psychosexual functioning is attained. It is through the gratification of drives that psychological structure is developed, conceptualized in functioning as the id, ego, and superego. Psychological conflict and symptom formation result from the various interplays of these psychic components, all the results of the need for drive gratification.

The psychosexual drives most clearly relevant to pregnancy are the oral and phallic drives. Oral drives are centered on the mouth, and conflicts in this area revolve around issues of activity-passivity and dependence-independence. Phallic drives on the other hand, are centered on

the genitals, and conflicts are manifested in the Oedipus complex. According to Freud (1924), the Oedipus complex in girls revolves around her discovery that she lacks a penis, which is disappointing to her and leads to the development of "penis envy". The conflict that develops following this discovery was thought to culminate in her desire to become impregnated by her father. As a result, she would then have a child which would serve as a symbolic representation of the lost penis. For Freud, the substitution of baby for penis represented the most normal course of development for females.

Other personality theorists (Deutsch, 1945; Bibring, 1950; Erikson, 1963; Benedek, 1970) maintain that the experiences of pregnancy and childbirth are best understood from a developmental perspective, and that pregnancy as a developmental stage contains within it the opportunity for personality change, reorganization, and integration. The pregnant woman, in essence, must make the transition from a single individual, relatively free and capable of total self-absorption, to a mother who is irrevocably responsible for another human's life. The tasks inherent in this transition include a change in identity, a reassessment of her relationship with her own mother, and the formation of emotional ties to the fetus. Viewed in this light, the psychological

changes of pregnancy are seen as meaningful and even essential to the subsequent stage of motherhood.

The changing psychological tasks of pregnancy involve incorporation, differentiation, and separation (Colman & Colman, 1971). From this viewpoint, the pregnant woman must first accept the reality of her pregnancy and the fetus as a presence in her body (incorporation); she then must realize that, although it is a part of her, it has a life of its own (differentiation); and finally, she must be prepared to give it up (separation).

Research on the psychological state of pregnant women has been in agreement that a typical phenomenon of pregnancy is an intensified introversion by which the pregnant woman's focus is turned inward and she expresses less interest in and attention towards the external world (Deutsch, 1945; Colman & Colman, 1971; Ballou, 1978; Reading, 1983). According to Helene Deutsch (1945, p. 138), "Pregnant women themselves complain that their former lively and sincere interest in various outside events seems to wane . . . they may continue their accustomed occupations automatically, but inner participation is lacking." In essence, the outer world of the pregnant woman is seen as irrelevant compared to her invisible but profoundly experienced inner world (Colman & Colman, 1971).

This preoccupation of the pregnant woman with her internal world has adaptive functions in terms of her own identity and her relationship with the fetus and is part of the differentiation process. It is through the differentiation process that the pregnant woman begins to acknowledge the individuality of her developing fetus. Around the time of quickening (when the fetal movement is first detected by the pregnant woman), this tendency to introversion is at its peak (Colman & Colman, 1971) and Bibring (1950) interprets this as the woman's attempt to deal with the problem of identity diffusion between herself and her fetus.

Still another typical observation of pregnant women is the presence of a regressive trend, which makes her seem childlike and is often brought about by the physical discomforts of pregnancy and anxiety about the unknown, particularly in relation to labor and delivery (Deutsch, 1945; Shereshefsky & Yarrow, 1973; Ballou, 1978; Leifer, 1980). At these times, she may long for maternal comfort from her own mother or, if that is not available, from her husband. Therese Benedek (1956) views this regressive shift, this need for succorance, in the pregnant woman as evidence of increased dependency needs and also as necessary in activating the woman's childhood sense of her mother, a sense she must reconcile in order to relate effectively to her own child.

Judith Ballou (1978), writing from an object relations perspective, states that these regressive shifts during pregnancy allow for the reemergence of old conflicts while facilitating further resolution. In order to accept and respond to the dependency needs of her child, one of the conflicts that emerges and must be accepted and resolved is the pregnant woman's dependence on her own mother. In Ballou's study, the women who had the most difficulty developing an attachment to their newborns were those women who "did not feel adequately mothered themselves and thus could not respond empathically to the child's dependency needs" (p. 104). Thus it seems that the woman whose own needs for succorance are met can better tolerate the extreme neediness of a tiny infant.

An increase in emotional lability is also characteristic of the pregnant woman. Rapid mood swings that are confusing and distressing to the pregnant woman are commonly reported. Although some pregnant women were subject to unpredictable mood shifts before pregnancy, they report that their mood changes during pregnancy involve swifter cycles with more intense emotional peaks. They also have more difficulty identifying the precipitating factors of the shifts in mood (Leifer, 1980). Overall, the emotional life of the pregnant woman can seem chaotic and foreign to her as her emotions are more easily accessible and less controllable.

The extremes of this emotional lability range from depression to elation so that the pregnant woman's behavior is often characterized as unpredictable. Researchers in the field of pregnancy, however, see these highs and lows not only as normal but necessary in the pregnant woman's struggles with her new identity as a mother and primary nurturer (Colman & Colman, 1971; Shereshefsky, & Yarrow, 1973; Leifer, 1980; Lederman, 1984). On the one hand, the pregnant woman may feel a sense of purposiveness, pride, and accomplishment through her ability to create new life. On the other hand, feelings of depression related to loneliness in her forthcoming role as a caregiver rather than receiver, the inability to be as active as she previously was, and loss of the old self may also be present. Shereshefsky and Yarrow (1973, p. 86) describe this phenomenon when they state that, "The women [in their study] were in the process of giving up much that had been meaningful in the past and at the same time reorganizing their psychological resources to look toward the future."

Also related to depression in pregnancy is the commonly observed fascination with death in pregnant women (Deutsch, 1945). It is as if their close connection to birth and the commencement of life makes them automatically closer to the losing of life through death. Death in childbirth, in fact, occurred quite often in the past and still occurs, though

less frequently, today. In addition, the birth process itself requires that the woman give up part of herself which turns the "giving of life into the losing of life" (Deutsch, 1945, p. 160). Indeed, psychoanalysts have long maintained that it is this aspect of birth, the aspect of loss, that at least partly accounts for postpartum depressions (Colman & Colman, 1971).

In addition to and intertwined with the psychological changes of pregnancy are a host of physical changes and complaints, some of which reflect oral needs and drives in the pregnant woman. Oral needs are defined as needs to be given to and taken care of by others. The focus is on the mouth with an "emphasis on food and incorporation as well as on a passive-dependent orientation to receiving support and guidance from external sources" (O'Neill et al., 1984, pp. 342-343). During pregnancy, weight gain, nausea and vomiting, tiredness, painful and swollen breasts and unusual food cravings represent some of the physical changes and complaints the woman experiences.

In addition to the oral nature of physical symptoms during pregnancy, the degree to which extreme physical symptoms are a reflection of psychological difficulties in adapting to the pregnancy has been the focus of much research (Deutsch, 1945; Reading, 1983; Lederman, 1984).

Nausea and vomiting have attracted the most attention in this respect, followed by weight gain and food cravings.

Historically, psychoanalytic thought provided two theories regarding the presence or absence of nausea and vomiting. The first suggests that nausea and vomiting, when present to an extreme degree, represent unconscious hostility toward the fetus and a wish not to be pregnant (Deutsch, 1945). On the other hand, a complete absence of these symptoms in pregnancy is also viewed with suspicion and as indicative of the woman's denial of her condition (Reading, 1983).

Oral drives are also manifested in extreme weight gains during pregnancy. Extreme weight gain can represent a conscious or unconscious fear that the fetus will somehow die if the mother does not continuously feed it. In this case, the pregnant woman's weight gain is an attempt to preserve and nurture the child. It is also a way of doing something, of gaining some control over her pregnancy, rather than being a passive observer (Colman & Colman, 1971). Early weight gain thus serves as a kind of proof that the baby, still unobservable, is growing and that the mother is capable of taking care of it.

Closely associated with weight gain in pregnancy is the pregnant woman's changing body image which can impact on her sense of wellbeing. As Lederman (1984) points out,

Americans tend to value a female figure that is slender and sylphlike. As pregnancy progresses, dissatisfaction with and anxiety about bodily changes increase as the woman may wonder if she will ever be able to regain her previous figure once the baby is born. By the third trimester, one woman in Leifer's (1980) study reported feeling "like Alice in Wonderland, upon taking the magic pill: growing and growing with no end in sight" (p. 35). Concerns about permanent body damage are also prominent as stretch marks and protruding veins appear, and some women worry about damage to internal organs as the delivery date approaches.

Probably the most dramatic moment in the course of a pregnancy is when the sensation called quickening occurs and the pregnant woman, for the first time, has personal evidence that the fetus is alive. It is this event, moreover, that forces the woman to differentiate herself and the fetus and to recognize its autonomous nature. It also marks the beginning of her preparation for ultimate physical separation from the baby through birth (Reading, 1983).

Thus, it seems that the experience of pregnancy, with its magnitude of physical and psychological correlates, sets the stage for the emergence of strong oral needs and needs for succorance by significant others. It is also true that pregnancy may lower the self-esteem of the pregnant woman whose body image and appearance are of considerable value to

her. Coupled with the physical discomforts she may also experience, it is likely that pregnancy would create a decreased sense of wellbeing at times. Given that this is true for pregnant women, and research shows that it is, one would expect to see even greater manifestations of these characteristics in the psychologically unsophisticated adolescent.

In sum, the developmental stage of pregnancy, when it is successfully worked through, represents a step forward in the life cycle. It is a difficult time in the best of circumstances, however, and should not be undertaken without some degree of maturity, knowledge, and flexibility on the part of the pregnant woman. As Ballou (1978, p. 11) points out, "Childbearing demands that we draw upon our sense of ourselves and our sense of others to come to terms with the need to nurture the new person in our lives." Unfortunately, pregnancy occurs frequently in naive teenagers (and some women as well), who have no well-defined sense of themselves and who are motivated by unrealistic and distorted expectations of the pregnancy experience and the future child. In these circumstances, the pregnancy can be overwhelming with dismal and sometimes fatal consequences for the child. For these females, the pregnancy may foster maladaptive traits which color and interfere with her own personal development

and the development of a positive relationship with her child.

Studies on Teenage Pregnancy

Most research on teenage pregnancy has consisted of attempts to identify the types of girls who are likely to become pregnant by studying adolescents who are already pregnant and comparing them to their nonpregnant peers. In these types of studies, there is no way of knowing how much their present psychological status can be attributed to the pregnancy itself and how much is a function of their prepregnant status. In addition, as Phipps-Yonas, in her review of the literature of teenage pregnancy (1980, p. 408) points out, most researchers "are, after all, viewing individuals who are experiencing considerable stress and who likely are feeling and acting differently than they did in the past." It is also true that, despite the large number of studies in the field, efforts to identify predictors of adolescent pregnancy have been unsuccessful in the sense that there apparently exists no single psychological profile that fits the majority of pregnant teenagers (Phipps-Yonas, 1980).

Teenage pregnancy is disruptive to the teenager's overall development. In particular, it is felt that succorance needs, needs to be taken care of, will be

elevated in the pregnant teenager as a dual consequence of her status as an adolescent and her pregnant condition. As noted earlier, pregnancy itself elicits increased succorance needs in previously independent, self-sufficient women due to their extreme emotional lability, physical changes and discomforts, and regressive tendencies during this period. Most adolescents, though they strive for independence and may appear to "have their act together", are still in need of succorance from family and friends.

The general characteristics of the adolescent lifestyle have been discussed by numbers of researchers and provide insight into the existence of succorance needs in normal adolescents (Eisman & Covan, 1982; Fine & Pape, 1982; Peterson & Crockett, 1986). Although adolescents can appear at times to be tremendously self-centered and egocentric, their insecurity and uncertainty is evidenced by their efforts to obtain reassurance from others. For example, they are terribly concerned about their appearance and wearing the "right" clothes. Fads are followed and abandoned with no apparent order. They worry about the opinions of their friends and the opinions of the latest rock star. Although they purport to be individuals, they slavishly adhere to the hairstyles, language, and fashion of their peers. Moreover, in the opinion of Eisman and Covan (1982), their emotional lability makes them difficult to

live with and difficult to predict. This lability is seen in the adolescent who is at the height of happiness in the morning and at the depths of despair by evening.

Underneath all their grandiosity and apparent self-assurance, it is commonly believed that the adolescent feels at times overwhelmed, uncertain, awkward, and confused by the kaleidoscope of feelings and changes with which she must cope. As a result, she continues to need a great deal of support and succorance from her family and friends, though she may maintain an air of indifference and suspiciousness toward the older generation. Nevertheless, as Eisman and Covan (1982, p. 317) point out, "The strong need for some manner of gaining consistent love, unambivalently given and unambivalently received, is a powerful adolescent motivator." Throughout the literature on teenage pregnancy, the hypothesis is repeated that rather than admit this need to parents, or if parents are unavailable, the adolescent will seek the succorance she needs from other sources, one of which she may imagine will come from a baby of her own.

As noted earlier, pregnancy can be viewed as a developmental task. The general developmental tasks of adolescents are the consolidation of identity, separation from the family of origin, an increased sense of autonomy and individuation, establishment of a career choice, and

development of a relationship with a member of the opposite sex. The conflict that ensues when pregnancy is added to this list has received considerable attention by researchers. Freeman (1987), who studied teenage pregnancy from a developmental perspective, states that pregnancy upsets the needs/resource balance of the adolescent. That is, her needs may become more complicated and extensive due to the adjustment requirements of pregnancy while her resources for meeting these needs become less accessible and more limited.

Schneider (1982), on the other hand, posits that the pregnant adolescent is caught in a developmental bind. While adolescence requires the development of greater independence, pregnancy carries with it a need for the opposite--greater dependence. The conflict this generates leads to much anxiety. According to psychoanalytic theorists, this conflict is considered an oral conflict wherein the individual struggles with desires to be taken care of by others. In a study by Diane de Anda (1983), 130 pregnant adolescents, in a self-administered, close-ended questionnaire, reported similar dependency needs. They responded that prior to their pregnancy, they had frequently anticipated leaving their parents' home to live on their own. Due to their early pregnancy, however, they were forced to depend even more on their parents, particularly their mothers.

Furthermore, one of the things with which the young female adolescent struggles is an attempt to be comfortable with her changing body-image. The pregnant adolescent, however, must also deal with body distortions and concerns about regaining her physical shape after pregnancy. During pregnancy, as in adolescence, a woman's body and significant relationships become the focus of more concentrated attention than is the usual case (Fine & Pape, 1982).

All of the developmental tasks of adolescence are at risk during pregnancy due to the distracting and additional tasks imposed by the pregnancy (Peterson et al., 1982). For example, instead of being free to concentrate on her own needs, the pregnant adolescent must grapple with the needs of another totally dependent entity, the fetus. Rather than gradually relinquishing her ties to her family of origin and developing relationships outside the family, the pregnant adolescent may need to rely even more heavily on her family. As a result, her own needs for succorance are often left unsatisfied.

Other researchers have focused on the difficulties the pregnant adolescent encounters due to the fact that pregnancy is off-schedule in terms of the usual and preferred course of development (Russell, 1980; Fisher & Scharf, 1980; Kuhn, 1982). The adolescent, as a result, is simultaneously faced with a number of individual and family

developmental tasks. She is forced to deal with identity formation, intimacy issues and separation issues at the same time that generativity issues arise as a result of the impending stage of parenthood.

Fisher and Scharf (1980), based on their review of programs available for pregnant teenagers in the U.S. and other countries, conclude that the discrepant timing of pregnancy for the adolescent prohibits her from developing the necessary ego resources that would enable her to adequately nurture a helpless infant. In essence, she is prematurely forced into adulthood while the completion of the tasks of adolescence is left undone. Copeland (1981) and Douvan and Adelson (1966), on the other hand, see pregnancy in adolescence as reflective of an "early foreclosure of personal identity" and associated with emotional privation and limited personality growth.

A major difference between pregnant teenagers and pregnant adults is often seen in the presence and availability of their support systems. Pregnancy in a married, adult woman is an event that is generally welcomed and certainly viewed as an acceptable occurrence by her family of origin, friends, and husband, as well as herself. In other words, it is not culturally or morally deviant behavior. As a result, she is in a position to receive unconditional nurturance and encouragement from these significant others.

She can feel protected and loved at a time when her inner world is chaotic and confusing.

The pregnant adolescent, on the other hand, often finds herself in a situation where she gets even less attention and succorance than she did prior to the pregnancy. She may feel rejected by parents, the baby's father, and her peers. As Freeman (1987) points out, it is vitally important for the pregnant adolescent to maintain ongoing peer relationships, yet it is often the case that peers withdraw and the pregnant adolescent becomes an object of their curiosity. As a result, important developmental issues around friendship and loyalty are not effectively dealt with and the adolescent may feel abandoned and alone and even more in need of succorance.

It is also true that the parents of pregnant adolescents generally react to their daughter's pregnancy with anger, disappointment, and guilt (Sacker & Neuhoff, 1982). Sometimes they elect to send their pregnant daughter away to live with relatives or friends. Or they may insist that she live in a maternity home. For the teenager, this can feel like rejection and lack of love on the part of her parents which only compounds her sense of neediness and vulnerability.

If the baby's father also withdraws and refuses to accept the young teenager's pregnancy, she may feel betrayed

in addition to unwanted and alone. And if school officials put pressure on her to enroll in a different school where she can attend special classes for teenage mothers, her losses increase as do her needs to be taken care of by someone familiar. Ultimately, she may place all of her hopes for succorance in the child she is carrying.

Succorance and Nurturance Needs, Wellbeing,
and Orality in Pregnant Teenagers

The majority of research either mentions anecdotally or speculates about the existence of strong nurturance and succorance needs in their pregnant teenage subjects. These needs are attributed mostly to motivational factors in the risk of or decision, albeit unconscious, to become pregnant or to the teenager's sense of emotional deprivation prior to and concomitant with the pregnancy. A few studies connected these needs to the interactive effects of pregnancy and adolescence, and many saw them as leading in a very direct way to observed outcomes for the babies of these teenage mothers (Greenberg, 1971; Shereshefsky & Yarrow, 1973; Leifer, 1980; Sacker & Neuhoff, 1982; Simkins, 1984). None, however, focused specifically on succorance needs as the subject of investigation, but they were noted as additional findings in their teenage pregnancy research.

One study which included a discussion of succorance needs as a motivator in teenage pregnancy was undertaken by Fox (1981). Her research was designed to study patterns of communication about sex and included interviews with 449 mother-daughter pairs from public schools in Detroit. Based on her findings regarding adolescent sexual behavior and her knowledge about family systems, she posited that teenage pregnancy is a symptom or indicator that the family lacks the resources to deal with the structural problems that result from the concurrent development of two or more of its members. That is, the family, being an interdependent system, may become stressed to the point that it can no longer adequately meet the needs, including needs for succorance, of each of its members. When this happens, the teenager is then motivated to fill these deficits by means of a pregnancy. She may believe that a baby will supply her with someone to love and care for, to nurture, while giving her the attention (succorance) she lacks from her family. According to Fox, implicit in this is that "when the family lacks the social resources to attend to the needs of the teen, the teen will seek to meet them herself through a pregnancy" (p. 114).

Although Fox's sample is large and provides much information about sexual communication between mothers and daughters, it does not necessarily follow that the sexually

active subjects in her study will eventually become pregnant. These girls were not pregnant at the time of her study, and there were no comparison groups of pregnant adolescents in the sample. In addition, her speculations regarding nurturance and succorance needs, while theoretically sound, were not empirically tested.

Needs for succorance are also evidenced in the larger number of crises that adolescent mothers face compared to adult mothers (Sugar, 1979). In a well-designed, longitudinal study, Sugar gathered data on 481 mothers between the ages of 13 and 46, 90% of whom were black and from the lowest socioeconomic group while the other 10% were white and from the middle socioeconomic group. The percentage of crises during pregnancy was calculated from scores on the Holmes and Rahe scale and compared with the birthweight of the infants. From analyses of variance and covariance, and t tests, he found that adolescent mothers experienced significantly more crises during pregnancy with a total of 56% for adolescents compared to 35% for adult mothers. He later concluded that the larger number of complaints by adolescents occurs because they are so needful of care and attention from others (Sugar, Kushner, & Sterne, 1986). This "need for caring and attention" from others may be termed a need for succorance.

Other studies have focused on role reversals between pregnant adolescents and their mothers. Khlentos and Pagliaro (1965) found that in their sample of 100 unmarried adolescent mothers in psychotherapy, there was characteristically a symbiotic relationship between the adolescent mother and her own mother in which the mother was dependent on her daughter for succorance. They concluded that a smothering relationship had impeded the daughter's development of important peer relationships and had left her in need of finding ways to get her own succorance needs met. One of the ways she may do this is through a pregnancy and her own child, who would assume the role with her that she had assumed with her own mother. Nadelson (1975), in the same light, considers adolescent pregnancy as an effort to evade loneliness and isolation. The child becomes, in fantasy, the mother to the teenage "mother/child", signalling the probability of a need to be cared for and succored by the child.

Neither the study by Khlentos and Pagliaro nor the one by Nadelson contain control groups of nonpregnant subjects with whom to compare their observations. In addition, they do not control for socioeconomic class or race, both or either of which may be the salient factors in their findings rather than succorance needs. Their conclusions on this subject, moreover, are not the result of empirical

investigation so that it is impossible to know if succorance needs are significantly elevated in their pregnant subjects or significantly different than succorance needs in nonpregnant adolescents.

Early emotional deprivation is a continuing theme in study after study of pregnant teenagers, regardless of whether it is attributed to the motivation to become pregnant or just cited as an observation based on interviews or conversation with pregnant teenagers. Le Shan (1982), based on her clinical experience with pregnant adolescents, concluded that the pregnant girls she has come into contact with were looking for love rather than sex. Sexual relations were considered complicated and awkward by these girls; it is instead the intimacy and closeness which are significant to the female adolescent. Bolton (1980), in an extensive analysis of pregnancy in adolescence concluded that pregnancy is an attempt to replenish the void created by socioemotional deprivation in the family by producing an object to love. Clark (1967), who studied case histories of pregnant adolescents, refers to premature sexual behavior and pregnancy as "the synthetic substitute for love," the need for which arises from deficient mothering by the girl's own mother.

The above three studies, while arriving at similar conclusions, are largely descriptive and theoretical in

nature and fail to provide control groups for comparison. It is difficult, therefore, to determine whether the emotional deprivation they are reporting would be any different in a similar group of nonpregnant adolescents. The inherent assumption, moreover, that these characteristics are motivational aspects in adolescent pregnancy is speculative given that the girls in these studies are already pregnant. Finally, as in other studies reviewed, socioeconomic class and race are not controlled for.

Several descriptive studies document dependency needs and the urge to be mothered as directly or indirectly expressed by scores of pregnant teenagers (Fisher & Scharf, 1980; Eman, 1983; Levering, 1983; Scott, 1983; Hatcher, 1987). The expectation that the baby will satisfy these needs, moreover, is a telling commentary about their situation. In the words of Fine and Pape (1982, p. 85), "The newborn may be perceived as a novelty rather than a person and childbirth as an occasion to receive, rather than practice, mothering."

Dependency needs can also be defined in terms of needs for succorance and were investigated in another interesting study which included a group of pregnant adolescents who planned to keep their babies, a group planning to place their babies for adoption at birth, a group of nonpregnant adolescents, and parents of adolescents in each of the

categories (Smith, 1977). Smith contended that unmarried adolescents who planned to keep their babies were propelled by the unconscious goal of gratifying needs for dependency through their babies. She examined her hypothesis through administering the Life Interpersonal History Enquiry to pregnant and nonpregnant adolescents and the Parental Attitudes Research Instrument to their parents. Her results indicated that the parents of pregnant adolescents scored higher on authoritarianism than parents of nonpregnant adolescents and that the group of girls planning to keep their babies were more frustrated in terms of their unsatisfied dependency needs. This group also perceived less love and attention from their parents, received less nurturing, than their nonpregnant peers and the pregnant girls who planned to place their babies for adoption. Although a strength of this study is the inclusion of comparison groups, she did not control for socioeconomic class or race so that generalizability of this study is compromised by this omission.

In another case history study of three pregnant teenagers, the issue of sibling rivalry for affection and attention from parents was cited as a motivator in the teenager's pregnancy (Welti, 1975). This study entailed gathering data from structured interviews designed to elicit open ended responses. These teenagers perceived an unequal

share of succorance from their parents and felt that having a baby would gain for them the succorance they desired. Again, it is difficult to determine motivation for pregnancy based on data gathered from already pregnant adolescents. These conclusions are also limited by the absence of control groups containing three similar nonpregnant adolescents.

Orality, which has been studied most extensively by thinkers in the psychoanalytic tradition, is closely related to nurturance in that it is oral needs which are either satisfied or frustrated by the nurturing figure. According to Fisher and Greenberg (1977, p. 86), the central "conflict" with which the infant must grapple involves the issues of "dependence-independence" and "activity-passivity". If the infant is able to successfully resolve this conflict, she or he then has access to sufficient psychological resources to manage ordeals that emerge in later developmental stages. If, on the other hand, the infant is either unduly frustrated or overly gratified during this stage, available energy continues to be focused on the oral conflict leaving fewer resources for later stages. Ultimately, the unresolved oral conflict becomes manifest as character traits or symptoms (O'Neill et al., 1984).

Fromm (1947) describes the oral character as evidenced by clinical manifestations of oral passivity in the following way:

In the receptive orientation a person feels the source of all good to be outside, and he believes that the only way to get what he wants--be it something material, be it affection, love, knowledge, pleasure--is to receive it from that outside source. In this orientation the problem of love is almost exclusively that of "being loved" and not that of loving. . . .

This receptive type has great fondness for food and drink. These persons tend to overcome anxiety and depression by eating or drinking. The mouth is an especially prominent feature, often the most expressive one; the lips tend to be open, as if in a state of continuous expectation of being fed. In their dreams, being fed is a frequent symbol of being loved; being starved, an expression of frustration or disappointment. (pp. 62-63)

Freud (1924) maintained that healthy development involved the relative resolution of oral, anal, and phallic conflicts followed by a movement to the genital stage of development. Adolescence presents a recapitulation of these early developmental issues and until these have been reworked through, the genital level of development cannot be reached. Adolescents who become pregnant may be acting out their oral and phallic conflicts in an unconscious attempt to externalize the conflict and make it more tolerable.

Blos (1957), moreover, explained the teenage mother's heterosexual behavior as defensive against the "regressive pull to the preoedipal mother" with the focal theme being "mother and baby" and the reenactment of a relationship wherein mother and child are one and thus become confused. Evidence for Blos' theory was obtained in a study of 78

adolescent mothers, interviewed both during and after pregnancy by Barglow et al. (1968). They found that prior to pregnancy, these girls reported having been engaged in tremendous struggles with their mothers, followed by a rush back to the mother after the baby was born. They also reported a marked presence of difficulties in the oral sphere in terms of obesity and eating and explained pregnancy and intercourse as meeting overdependency needs via the genital organs. Finally, these researchers maintain that there seemed to be an expectation by these mothers of a role reversal in which the baby would supply all the love rather than receive it. The motivation of the adolescent mother was thus interpreted as an effort to obtain a "love object" in order to forestall a depression or to cure it.

Studies on the sense of well-being of a pregnant teenager generally conclude that the pregnant teenager has lower self esteem, experiences more depression, and encounters more problems than her nonpregnant peers (Kogan, 1965; Patten, 1981; Falk et al., 1981; Held, 1981; Eisman & Covan, 1982). In one interesting study, the California Psychological Inventory (CPI) was administered to three groups of adolescents--a pregnant group who were planning to keep their babies, a pregnant group planning to have abortions, and a control group of nonpregnant girls. The control group scored highest on the wellbeing scale followed

by the abortion group while the group planning to carry their babies to term and keep them scored the lowest. Taking these results a step further, the researchers also discovered that those girls whose pregnancies resulted from casual relationships reported more problems in daily living than those whose pregnancies resulted from serious relationships (Falk et al., 1981).

Another researcher, using the Coopersmith Self-Esteem Inventory, found that adolescents who were attending a day school for pregnant teenagers scored significantly higher on measures of self esteem and saw a brighter future for themselves than their peers living at homes for unwed mothers (Held, 1981). Patten (1981), in addition, found that although the pregnant adolescents in her study experienced low self esteem, their self concepts (perceptions of themselves) were higher than how they believed others perceived them. Her method involved administering the Tennessee Self Concept Scale and the Rosenberg Self Esteem Scale to 37 subjects residing at the Florence Crittenton Home in Nashville, Tennessee. These results were then compared to norms of the general population and found to be significantly lower. Finally, Eisman and Covan (1982) state that pregnancy can exacerbate existing depression in an "already shaky adolescent" causing great hardships and disruptions to her already difficult life.

Studies on the Outcomes of Teenage Pregnancy

The rationale for this study is that high succorance needs may be related to the poor outcomes observed in the children of adolescent mothers. Leifer (1980) states that the evidence is quite impressive in ascertaining that characteristics measured early in a pregnancy are predictive of later attitudes, and that both these factors are correlated with the extent of affective attachment to the infant. Factors found to be predictive of maternal adaptation in one study were ego strength, nurturance capability, and the quality of the marital relationship (Shereshefsky & Yarrow, 1973). It makes sense then that longitudinal studies could also identify the characteristics of pregnant teenagers that lead to the greater incidence of child abuse and other negative consequences observed in this age group.

In the words of Peterson and Crockett (1986, p. 147), "Clearly, competent child rearing requires that a parent have mature judgment, the ability to anticipate the child's needs, and the resources to meet the child's needs, as well as those of the parent. From the start, then, it would seem that adolescent mothers are at a disadvantage developmentally, because they have typically not reached adult levels of cognitive, psychological, and social functioning." A

teenager, for example, whose first priority is gaining peer acceptance and learning about mutuality in social relationships is not likely to be psychologically ready to take care of an infant who is totally dependent in what is an "intrinsically unilateral relationship". Finally, according to Roosa (1982), the studies that have researched the quality of parenting by teenagers have regularly found that adolescent mothers are deficient in both the knowledge and skills necessary for satisfactory caregiving.

As noted earlier, a number of pregnant teenagers perceived their relationship with their own mothers to be lacking in love and attention. That is, they apparently were not adequately nurtured. Greenberg (1971) notes that the transition from perceiving love to being loving is a significant part of the outcomes of teenage pregnancy in that women who have not perceived their own nurturing as sufficient subsequently have problems showing affection for their babies.

Klaus (1970) views the high incidence of child abuse among teenage parents as the culmination of a chain of events. The point of departure in his reasoning is the fact that child abuse increases considerably for children born prematurely if early postnatal separation is also an aspect of the mother-child relationship. Teenage mothers, for a number of reasons, are notoriously negligent in terms of

prenatal care which often results in prematurity and other health problems for their infants. This in turn leads to early enforced separation from the mother which interferes with the attachment and bonding process. Finally, due to these weak attachments, which in turn affect the quality of nurturance a child receives, child abuse can and does occur.

Still other researchers have concluded that child abuse is more prevalent by teenage mothers because the children of these mothers are so often unwanted (Blumberg, 1974) or because these mothers wanted the child for irrational reasons (Steele & Pollack, 1968); i.e., wanting the child in order to satisfy their own emotional needs. In these situations, the child may be resented for its very existence or may be blamed for failing to meet the unrealistic expectations of these emotionally needy mothers, with the mother consequently venting her disappointment and frustration on the child.

The high incidence of negative health problems in the infants of adolescent mothers is attributed to a number of factors, including ignorance (Lancaster & Hamburg, 1986), the egocentrism of most adolescents (Elkind, 1967), and inadequate nurturing capabilities of the young mother (Fisher & Scharf, 1980; Simkins, 1984). The quality of maternal care ranges from severe neglect to normal levels, however, depending on the social structure of the family and

whether the adolescent mother lives alone or with other figures capable of providing succorance for their babies (Furstenberg, 1978).

Although Furstenberg confined his study to black, urban samples, he found that adolescent mothers, who continued to live in the home of the maternal grandmother, furnished a more nurturant atmosphere for their babies than did adolescent mothers who lived alone. The presence of the grandmother freed them to return to work or school and allowed them to divide caretaking responsibilities with another nurturing figure. The positive effect of these multiple caretakers on the child's physical health has been noted by other researchers (Mednick, Brock, & Baker, 1979) and attributed to more satisfactory living conditions and more frequent visits for wellness checkups with physicians (Hayes, 1987).

In addition to improved physical health, the presence of multiple caretakers who provide the children of adolescent mothers with increased levels of succorance results in higher intellectual and cognitive performance by these children (Furstenberg, 1978; Cord, 1978). Furstenberg administered the Preschool Inventory (PSI) to children of adolescent mothers and found that the children of mothers who worked outside the home and shared caretaking responsibilities with another adult scored higher than those

children whose mothers stayed at home with no additional help.

Cord (1978), on the other hand, studied longitudinal data gathered over an eleven year period for the Project Talent Pool and found significant differences in cognitive abilities between the children of adolescent mothers compared to the children of older parents. When makeup of the family was controlled, however, he found that the presence of additional caretakers in the home was correlated with higher academic performance by the child.

Unfortunately, it seems that the teenagers who are least suited psychologically for becoming mothers are those who are having and keeping their children. As the results of the study by Falk et al. (1981) demonstrate, teenagers electing to have abortions scored higher on measures of psychological maturity, self esteem and wellbeing. These researchers, in fact, concluded that the teenagers who decided to assume the motherhood role were dissatisfied individuals who were trying to resolve their problems "through their sexual behavior and decisions regarding motherhood".

Contraceptive Knowledgeability

A final disturbing statistic surrounding teenage pregnancy is the finding that 25% of these pregnant

adolescents will become pregnant again within a year (Furstenberg, 1976; Gispert et al., 1984; Hayes, 1987). Obviously, one of the reasons for this is the ineffective or lack of use of contraceptives. What is not so obvious is the reason these teenagers would take a second chance or deliberately subject themselves to a second pregnancy, and research in this area is sorely lacking. Most of the research, in fact, focuses on the contraceptive behavior of the never pregnant teenager or the teenager experiencing her first pregnancy.

This study contends that rather than lacking knowledge about contraception, the reason for these repeated pregnancies has more to do with the personality characteristics of the teenagers themselves; e.g., increased succorance needs. It is further contended, however, that the level of contraceptive knowledgeability is greater among nonpregnant than pregnant adolescents due to continuing psychological needs and lowered motivation of many pregnant teenagers to learn ways of preventing additional pregnancies.

Furstenberg (1976) points out that a teenager's first pregnancy is often the harbinger of a rapid succession of repeated pregnancies. As a result, the teenager's options for other life work decrease and their major occupation becomes that of mothering. These pregnancies occur, not because the teenager is unaware that contraception exists,

but because they use them inconsistently, incorrectly, or too late (Moore, 1985). In fact, only 13% of the respondents in two studies to questions about the reasons for their failure to use contraceptives cited a lack of knowledge as a relevant factor (Presser, 1974; Cobliner, 1981).

Adrian Copeland (1981) attributes the incidence of repeated pregnancies to arrested personality development in which the teenager maintains the level of development, at least in some areas, that she had during pregnancy. Hayes (1987) supports this viewpoint and states further that the adolescent who is an effective user of contraception believes that she has control over the events in her life. Pregnancy often diminishes this belief as the teenage mother finds her life increasingly affected by the presence of a child.

Finally, Gispert et al. (1984) conducted a study of single versus multiple pregnancy teenagers in order to identify factors that might allow prediction of which teenagers would become pregnant again. They interviewed 341 unmarried pregnant adolescents about various facets of their pregnancies, including their attitude toward and use of contraceptives. Two years after the initial interview, they were able to obtain follow-up data on 187 of these subjects, 58 of whom had become pregnant one or more times in the

interim. These 58 multiple pregnancy girls were matched on demographic variables with 58 of the single pregnancy group, and all were interviewed on two more occasions.

The findings of the Gispert et al. (1984) study were that adolescents who were pregnant for the second or third time reported more positive attitudes toward but less consistent use of contraceptives than the single-pregnancy group. Attributing this finding to continuing emotional deprivation in the multipregnancy adolescent, they suggest that one avenue for prevention of second pregnancies might be to give special attention to the improvement of the adolescent's relationship with her mother or to the development of a positive relationship with another maternal figure if the current mother-daughter relationship is irreparable. The implication is that meeting the teenager's succorance needs through adult interpersonal relationships may prevent her from seeking to meet them herself through the maladaptive solution of a second or third pregnancy. It may also motivate her to increase her knowledgeability of contraception in order to prevent later pregnancies.

Summary

The present study is an attempt to empirically investigate personality characteristics of pregnant adolescents, including the need for succorance, the need to

nurture, feelings of wellbeing, desire for social closeness, and oral drives and characteristics. It is also an attempt to determine whether level of knowledgeability regarding contraceptives is different between pregnant and nonpregnant adolescents.

Theorists writing about the psychology of pregnancy and researchers in the field of teenage pregnancy comment about the existence of succorance and nurturance needs during pregnancy and evidence of a decreased sense of wellbeing in this population. Increases in oral physiological needs and feelings of sickness are also described as resulting in vulnerability and regression and manifested as dependency conflicts. All of the studies found, however, set out to investigate other variables and none attempted to empirically measure the existence of these characteristics.

Most of the studies reviewed were based on case histories, interviews, or material gathered from adolescents in psychotherapy. Many studies do not provide adequate control groups such as the nonpregnant peers of these girls. The possibility that there are differences between pregnant adolescents who live in maternity homes and those who live in their own homes during pregnancy has not been investigated either. In addition, many of the measures studied are confounded by other variables, such as race and socioeconomic class, that are also highly correlated with teenage

pregnancy. Generalizability is always compromised when these variables are not controlled.

Another common error in the existing research is the conclusion made by researchers that the findings they make based on their studies with pregnant adolescents reflect the prepregnant status of these girls and are antecedent factors in the decision to become pregnant. The condition of pregnancy creates a unique psychological situation and may be a qualifying factor in the findings of any research on teenage pregnancy.

Only longitudinal studies will provide accurate answers regarding causality and outcome in teenage pregnancy. The present study is an attempt to provide one link in this process. If pregnant teenagers can be shown to have higher needs for succorance, for example, then longitudinal studies of this variable might enable researchers to connect this characteristic with observed outcomes for the children of these adolescent mothers. Programs addressing these needs in this population could then be developed and perhaps would experience some success in alleviating the negative outcomes associated with teenage pregnancy.

CHAPTER 3

METHOD

Participants

Subjects were 60 pregnant and 30 nonpregnant adolescents between the ages of 12 and 17, none of whom were married (see Table 1 for a summary of the characteristics of the groups). The 60 pregnant subjects included a group of 30 who were residents of homes for unwed mothers and will hereinafter be referred to as the pregnant, residential group; and a second group of 30 who were living at home with their parents or guardians and will be referred to as the pregnant, nonresidential group. Pregnant, residential subjects were recruited from Florence Crittenton Agencies in the Tennessee, North Carolina, and South Carolina areas. Pregnant, nonresidential subjects were recruited from Planned Parenthood in Knox County and middle schools and high schools in Charleston, S.C. Nonpregnant subjects were recruited from middle schools and high schools in Charleston, S.C., with an attempt made to match the groups in terms of age. The racial composition of the subjects in the pregnant, residential group was 50% white and 50% black; in the pregnant, nonresidential group, it was 56% white and 44% black; and in the nonpregnant group, it was 60% white and

Table 1. Characteristics of the 3 Groups of Adolescents

	Pregnant, Residential (N=30)	Pregnant, Non- Residential (N=30)	Nonpregnant (N=30)
Age	15.9	15.9	15.7
IQ Estimate*	94.3	98.7	99.9
Race			
White	15 (50%)	17 (57%)	18 (60%)
Black	15 (50%)	13 (43%)	12 (40%)
Socioeconomic Class**			
4 (Lower Middle)	15 (50%)	17 (57%)	23 (77%)
5 (Lower)	15 (50%)	13 (43%)	7 (23%)

*As measured by the Otis Lennon Test.

**As measured by Hollingshead's 2 Factor Index of Social Position.

40% black. Socioeconomic status plays a role in the etiology, experience, and outcome of teenage pregnancy. Hence, the decision was to limit participation to only the lower and lower middle socioeconomic groups. The determination of social class was based on Hollingshead's two factor index of social position (1957).

Volunteers were recruited in three different ways. At Planned Parenthood, letters to teenagers and their parents (see Appendix A) and Parental Consent forms (see Appendix B) were distributed by employees to all adolescents who met the age requirements for the study. If they were interested, they called the researcher on the telephone and met with her to discuss further their participation and to obtain Informed Consent (see Appendix B) and then made appointments for the testing. At the Florence Crittenton Agencies, the directors first met individually with each girl that fit the criteria for the study and gave them a copy of the letter to teenagers. If the girl expressed an interest and willingness to participate, the directors then mailed the letter to parents and parental consent forms to the parents of these girls. Once the consent forms were returned, the experimenter then met with the girls as a group and gathered Informed Consents and demographic data. At the middle school and high schools, either the principals or guidance staff produced a list of eligible girls by searching on

their computers for students who were eligible for free lunches and were the correct age. Letters to the teenager and their parents and Parental Consent forms were then distributed to each of these girls. When parental consent forms were returned, the experimenter met with the resultant group and gathered Informed Consents and demographic data and set up appointments for the data collection. Four pregnant subjects from Florence Crittenton Agencies dropped out of the study before completing the tests for various reasons: the birth of their babies (2 subjects), being confined to bed rest (1 subject), or deciding to return to her parents' home (1 subject).

Testing Procedures

All of the tests with the exception of the Rorschach were administered in group settings by the experimenter. The Rorschach was then administered individually by the experimenter. Total testing time per subject was approximately 4 hours.

Instruments

Otis-Lennon School Ability Test. The Otis-Lennon School Ability Test (O-LSAT) was formulated by Arthur S. Otis and Roger T. Lennon in 1967. This instrument evolved out of research on the attributes involved in a person's ability to acquire and retain information. It was designed

to yield information concerning a student's ability relative to other students of the same age and grade level. It also yields a score known as the SAI which is similar to and highly correlated with IQ scores. The SAI has a mean value of 100 and a standard deviation of 16. The standard error of measurement is 4 SAI points for any given age group.

The Otis-Lennon was standardized using a national standardization program of 130,000 United States students enrolled in grades 1 through 12 in 70 school systems. Reliability estimates using the Kuder-Richardson and test-retest procedures have ranged from .91 to .95.

Description. There are 5 levels of the O-LSAT based on performance expectations for different grade levels. Each version consists of 80 multiple choice items and is administered in group settings. For this study, only the Intermediate (Grades 6-8) and Advanced (Grades 9-12) Forms were used.

Scores were obtained and translated into SAI scores by using the table provided for this in the O-LSAT Manual. Only subjects with a minimum SAI score of 85 were used in this study. It was felt that the Personality Inventories, in order to be adequately understood, required an intellectual capacity of that level.

The Cornell Index. The Cornell Index was developed at Cornell University and has been used primarily as a quick

screening device for noting the presence of personality disturbances in individuals taking it. The test was standardized using male military personnel during World War II but has demonstrated success in differentiating types of women as well and shows moderate correlations with various scales of the Minnesota Multiphasic Personality Inventory. It has a Kuder-Richardson reliability of .95, obtained after testing 1,000 subjects at five different locations in the United States (Weider, Brodman, Mittlemann, Wechsler, Wolff, 1946).

Description. The Cornell Index, Form N2, contains 101 yes-no questions and is scored for general abnormality only. It can be administered in groups, and scoring is accomplished by applying a stencil and noting the number of encircled "yes's" and "no's" appearing in the slots. The scoring level of 23 is used to detect persons with severe or moderately severe personality disturbances (Weider et al., 1946). This is the level that was used for this study. This test was selected as a screening device for this study to detect significant psychopathology of the subjects and eliminate those subjects from the study.

Differential Personality Questionnaire. The Differential Personality Questionnaire (DPQ) was developed by Auke Tellegen. This instrument, which was first published in 1982, evolved through factor analysis and represents an

attempt to clarify both structure and content of the self-view domain. The test was constructed through a process of successive approximations in which constructs and data were allowed to shape one another. In this way, constructs served as guides to item selection and data on the items resulted in the revision or consolidation of constructs (Tellegen, 1982).

The DPQ has been correlated with other personality inventories, including the California Psychological Inventory (CPI), the Eysenck Personality Questionnaire (EPQ), and the Personality Research Form (PRF). Its measures have adequate internal consistencies, and retest reliabilities after a 30 day interval range from .82 to .92. The measures have also demonstrated meaningful relationships to other test and nontest variables (Tellegen, 1982).

Description. The DPQ contains scales that represent 11 personality dimensions and 3 "higher-order" traits. It also allows for the computation of 6 validity scores which help to identify questionable records. It contains 300 true-false questions which can be answered in a group format.

The eleven personality dimensions measured by the DPQ are: wellbeing, social potency, achievement, social closeness, stress reaction, alienation, aggression, control, harmavoidance, traditionalism, and absorption. The 3

higher-order traits, which were derived through factor analyses of the 11 primary factor scales, are positive affectivity, negative affectivity, and constraint. Each of these scales has proven to be more strongly associated with two or three of the primary scales. The 6 validity scales help in the identification of invalid records due to a person's attempt, for example, to look better or worse than they actually are. These scales include: associative slips, unlikely virtues, desirable response inconsistency, true response inconsistency, variable response inconsistency, and index of invalid responding.

This study investigated scores on the wellbeing and social closeness scales while taking into consideration scores on the 6 validity scales.

Personality Research Form. The Personality Research Form (PRF) was developed by Douglas N. Jackson in 1964. It represents "an application of developments within the areas of personality theory, personality assessment, and test theory to personality test construction" (Jackson, 1984). The goals of developing sets of personality scales that would be useful in personality research and in identifying personality traits in settings such as schools, guidance clinics, and businesses were based on the expectation that careful attention to theory can lead to rigorous and valid assessments of personality characteristics.

The PRF was developed out of theory rooted in Henry Murray's personality theory. It was designed to measure normal personality traits and thus was standardized on normal populations. It has demonstrated high reliability, having test-retest reliability coefficients ranging from .89 to .94. In addition, validity studies have demonstrated that the scales of the PRF are accurate measures of the personality constructs (Jackson, 1984).

Description. There are six formats of the PRF, some of which are briefer than others. They may be used interchangeably, or combined to maximize reliability. The form used in this study was form AA which contains 440 true-false questions and yields scores on 20 personality dimensions and 2 validity scales.

The twenty personality scales of the PRF, form AA, are: achievement, affiliation, aggression, autonomy, dominance, endurance, exhibition, harmavoidance, impulsivity, nurturance, order, play, social recognition, understanding, abasement, change, cognitive structure, defence, sentience, and succorance. The 2 validity scales, infrequency and desirability, are used to detect those subjects whose responses indicate carelessness, poor comprehension, noncompliance (Infrequency scale), or a desire to be seen only in a favorable light by others (Desirability scale).

This study considered scores obtained on the nurturance and succorance scales as well as the validity scales.

Questionnaire on Contraceptives. The Cohen version (1980) of the Questionnaire on Contraceptives was adopted intact for use in this study with the pregnant subjects. For the nonpregnant subjects, however, a second questionnaire was designed by this researcher that contained only minor modifications for two of the sections. These modifications included the addition of question 3 which allows for the fact that some respondents may not be sexually active and a space for providing reasons for the nonuse of contraceptives if they are sexually active. The only other change included the addition of choice "d" to question 4 which states again that they are not sexually active (see Appendix C).

Questions on this instrument elicit information on knowledgeability of contraceptive effectiveness, previous sex education training, and attitudes toward the use of birth control. The scoring system, designed by Cohen, demonstrates an interrater reliability of .98, $p < .01$ (Cohen, 1980). Subjects get two scores on this test--one that reflects their attitude toward contraceptive use and the other reflecting their knowledge about contraceptives. This study considered only those scores reflecting knowledgeability (question numbers 6, 10, 11, and 12).

Rorschach Psychodiagnostic. The Rorschach was formulated as a psychodiagnostic technique by Herman Rorschach in 1922, and its development was essentially independent of theory. It is a test of cognition and perception and is useful in differentiating various personality types. Although the Rorschach is a projective test, attempts at standardization in scoring systems and administration, and volumes of research and clinical applications of it, have resulted in the development of norms for all age groups and a widespread use of it with clinical populations.

Description. The Rorschach is an individually administered test consisting of ten cards with pictures of inkblots on them. Subjects are asked to respond to them one at a time and later to explain their responses. Depending on the scoring system used, a wide variety of information can be obtained from an analysis of subjects' responses. Information relating to interpersonal expectations, imaginative qualities, cognitive complexity, attention to detail, articulate ability, and presence of psychosexual drive content represents just some of the aspects looked at by interpreters of this test. Taken together, the Rorschach can provide quite a comprehensive picture of an individual's style and ability to function.

Administration. Instructions for administration of the Rorschach were taken from the Rorschach text by Alvin Burstein and Sandra Loucks (1988). In the first phase, the free association phase, subjects are asked to tell the examiner what the blot looks like to them. They are encouraged to spend as much time as needed and to give more than one response per card. Once this task is completed for each of the cards, the second phase begins. The second phase is called the inquiry and is an attempt to discover the subject's psychological experience in associating to the blots. In the inquiry phase, each of the cards are presented to the subject a second time and the task for the subject is to justify her response by telling the examiner what about the blot brought her particular response to mind. In this way, the examiner hopes to gain information about the subject's emotional and cognitive experience during the task.

Scoring. The scoring system that will be used for this study is the one developed by Alvin Burstein and Sandra Loucks and now known as the Burstein-Loucks system. This system is rooted in psychoanalytic theory and as such, takes into account a number of important aspects evidenced on the Rorschach test, like psychosexual drive content, that other scoring systems have overlooked or ignored.

This system was developed to try and overcome some of the confusion and inconsistencies that have troubled other scoring systems including those of Exner, Beck, Piotrowski, and Klopfer (Burstein & Loucks, 1988). It was also developed as an instrument derived from a conceptual model, psychoanalytic theory, and thus allows for wider interpretation of personality dimensions instead of isolated characteristics. The authors advocated, furthermore, that their system be normed on specific criterion groups as opposed to "normal" or pathological personalities (Burstein & Loucks, 1988).

The Burstein-Loucks scoring system allows for scores on 168 dimensions. One of those dimensions is psychosexual drive content. Underlying the provision of a scoring category for psychosexual drive content is the notion that all behavior can be seen as provoked by basic psychosexual drives and their derivatives. It is also believed that these drives are usually defended against, sometimes poorly and in other cases, quite well.

For the purposes of this study, responses were scored only for the presence of psychosexual drive content, a score that is derived by inspecting each response on the Rorschach and determining whether it contains *oral content (which

*For a complete listing of the types of responses included in this score, see Rorschach's Test: Scoring and Interpretation (Burstein & Loucks, 1988, pp. 95-98).

includes references to food, food sources, lips, biting, teeth, and so on), anal content (which includes references to feces, dirt, rectums, and so on), or phallic content (which includes references to the genitals, sexual intercourse, and so on). In addition, each of these responses that contain references of a direct biological nature are scored "o" for overt, and those containing symbolic references to the drive content are scored "c" for covert. The total number of these responses are then compared to the total number of responses on the entire record which is then computed as a percentage called the PD%.

All records were first scored by the researcher and then double scored by another person who is well-acquainted with the Rorschach and the Burstein-Loucks system. Finally, any discrepancies between the two scorings were reconciled by a third expert scorer with any remaining discrepancies taken to the authors of the scoring system for final arbitration.

This time-consuming scoring procedure serves as a reliability check in that the Rorschach, due to the vastness and complexity of systems used to score it and the fact that it is not a scoring system that uses numbers, is basically unsuitable for traditional reliability measures. In one recent study using this system, interrater reliability on

Human Movement was 91.67%; on Human Emotion, 80.77%; and on Human Content, 92.00% (Winecoff, 1988). Scoring reliability for this study, using the Psychosexual Drive Percent, was 94.2%.

Demographic inventory. This inventory was used to gather information on age, ethnicity, and family background of the subjects. This information then enabled the researcher to classify subjects according to their socioeconomic level, using Hollingshead's two-factor index of social position (1957).

Statistical Procedures

The statistical procedures that were used in this study were t tests and simple correlations. The independent variable, pregnancy, was conceived as the following dichotomy: (1) Nonpregnant, and (2) Pregnant, for most analyses, but pregnancy groups were further separated into residential vs. nonresidential for subanalyses.

The dependent variables, need to nurture, need for succorance, social closeness, wellbeing, and psychosexual drive conflict, were operationally defined based on their scores on the following instruments: (1) the Differential Personality Questionnaire, (2) the Personality Research Form, and (3) the Rorschach Test. The dependent variable,

contraceptive knowledgeability, was operationally defined on the basis of scores on the Questionnaire on Contraceptives.

Hypotheses of the Study

Hypothesis I. There will be a significant positive relationship between teenage pregnancy and need for succorance. Specifically, pregnant teenagers will demonstrate a significantly higher level of need for succorance than nonpregnant teenagers on the succorance scale of the PRF.

Hypothesis II. There will be a significant positive relationship between teenage pregnancy and need to nurture. Specifically, pregnant teenagers will demonstrate a significantly higher level of need to nurture than nonpregnant teenagers on the nurturance scale of the PRF.

Hypothesis III. There will be a significant positive relationship between teenage pregnancy and desire for social closeness. Specifically, pregnant teenagers will demonstrate a significantly higher score on the social closeness scale of the DPQ than nonpregnant teenagers.

Hypothesis IV. There will be a significant negative relationship between teenage pregnancy and psychological wellbeing. Specifically, pregnant teenagers will demonstrate a significantly lower score on the wellbeing scale of the DPQ than nonpregnant teenagers.

Hypothesis V. There will be a significant positive relationship between teenage pregnancy and presence of psychosexual drives. Specifically, pregnant teenagers will demonstrate a significantly higher number of oral, anal, and phallic responses and thus a higher PD% on the Rorschach than nonpregnant teenagers.

Hypothesis VI. There will be a significant negative relationship between teenage pregnancy and knowledgeability regarding contraception. Specifically, pregnant teenagers will demonstrate a significantly lower score on contraceptive knowledgeability on the Questionnaire on Contraceptives than nonpregnant teenagers.

CHAPTER 4

RESULTS

All of the hypotheses of the study, concerning expected differences between pregnant and nonpregnant adolescents, were investigated by computing the means and standard deviations of their scores on the dependent variables. Table 2 contains the means and standard deviations of all the dependent variables investigated in this study. Differences between means were analyzed using one-tailed t tests since all of the hypotheses predicted directionality. To reduce the possibility of a Type I error, alpha level was set at .03.

The first hypothesis of the study predicting that pregnant adolescents would score higher on need for succorance than nonpregnant adolescents was supported ($t = 1.81$, $df = 88$, $p < .04$). Further analysis demonstrated that there were no significant differences between the pregnant residential and nonpregnant adolescents in succorance needs. Rather, the significant difference between groups occurred between the nonpregnant group and the pregnant nonresidential group with the pregnant group scoring higher than the nonpregnant group (see Table 3).

The second hypothesis of the study predicting that pregnant adolescents would score higher than nonpregnant

Table 2. Means and Standard Deviations of Dependent Variables for Pregnant and Nonpregnant Adolescents

	Nonpregnant (N=30)		Combined Pregnant (N=60)		Pregnant, Residential (N=30)		Pregnant, Non- Residential (N=30)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Succorance	11.3	3.0	12.5	2.9	11.8	2.7	13.2	3.0
Nurturance	16.0	2.0	13.8	3.5	12.6	3.5	15.1	3.2
Social Closeness	16.6	3.5	14.7	3.8	13.4	3.7	16.0	3.5
Wellbeing	17.0	3.3	13.9	4.3	14.2	4.2	13.6	4.3
Rorschach PD%	13.6	10.0	19.4	13.7	19.3	15.8	19.4	11.5
Contraceptive Knowledgeability	21.3	5.4	22.7	5.6	24.3	5.4	21.0	5.4

Table 3. Means, Standard Deviations, and Results of t Tests for Differences Between Nonpregnant and Pregnant, Nonresidential Groups

	Pregnant, Nonresidential		Nonpregnant		
	Mean	SD	Mean	SD	t^a
Succorance	13.2	3.0	11.3	3.0	2.42**
Wellbeing	13.6	4.3	17.0	3.3	-3.36**
PD%	19.4	11.5	13.6	10.0	2.10*

^adf = 58

*p < .02

**p < .01

adolescents in the need to nurture was not supported by this study. In fact, the reverse was shown to be true ($t = 3.01$, $df = 88$, $p < .001$). Nonpregnant adolescents scored significantly higher in the need to nurture. Subanalyses demonstrated that there was no significant difference between the pregnant, nonresidential group and the nonpregnant group. As seen in Tables 4 and 5, there was a significant difference between pregnant, residential and nonpregnant teenagers in nurturance needs, with the nonpregnant group scoring higher than the pregnant residential group. A two-tailed t test comparing nurturance scores of the two pregnant groups resulted in a significant difference found between groups, with the pregnant, nonresidential group scoring higher than the pregnant, residential group. Thus, the significant finding in the primary hypothesis results from the fact that pregnant, residential adolescents were significantly lower in the need to nurture.

The third hypothesis that pregnant teenagers would demonstrate greater needs for social closeness than nonpregnant teenagers was not supported. Again, the reverse was shown to be true ($t = 2.26$, $df = 88$, $p < .013$). Nonpregnant adolescents were higher in the need for social closeness than were pregnant adolescents. As with nurturance, subanalyses demonstrated that there were no

Table 4. Means, Standard Deviations, and Results of t Tests for Differences Between Nonpregnant and Pregnant, Residential Groups

	Pregnant, Residential		Nonpregnant		
	Mean	SD	Mean	SD	t
Nurturance	12.6	3.5	16.0	2.2	-4.46**
Social					
Closeness	13.4	3.7	16.6	3.5	-3.38**
Wellbeing	14.2	4.2	17.0	3.3	-2.82**
PD%	19.3	15.8	13.6	10.0	1.67*
Contraceptive					
Knowledgeability	24.3	5.4	21.3	5.4	2.18*

* $p < .02$

** $p < .01$

Table 5. Means, Standard Deviations, and Results of t Tests for Differences Between Pregnant, Residential and Pregnant, Nonresidential Groups

	Pregnant, Residential		Pregnant, Nonresidential		
	Mean	SD	Mean	SD	t
Nurturance	12.6	3.5	15.1	3.2	-2.86**
Social					
Closeness	13.4	3.7	16.0	3.5	-2.71**
Contraceptive					
Knowledgeability	24.3	5.4	21.0	5.4	2.41*

* $p < .02$

** $p < .01$

significant differences between the pregnant, nonresidential adolescents and the nonpregnant group in the need for social closeness, but that there were significant differences between the pregnant, residential and nonpregnant and between the two pregnant adolescent groups on the need for social closeness (see Tables 4 and 5). Thus, it would appear that pregnant, residential adolescents are significantly lower in the need for social closeness, accounting for the significant finding in the central hypothesis.

The fourth hypothesis predicting that pregnant adolescents would demonstrate a lower sense of wellbeing than nonpregnant adolescents was supported by these data ($t = 3.44$, $df = 88$, $p < .001$). Subanalyses resulted in findings of significant differences between each pregnant group separately and the nonpregnant group, but not between the pregnant adolescent groups (see Tables 3 and 4).

The fifth hypothesis predicting that pregnant adolescents would be higher in psychosexual drive conflict manifestation than nonpregnant adolescents was supported ($t = 2.05$, $df = 88$, $p < .02$). As indicated in Tables 3 and 4, each pregnant adolescent group scored significantly higher than the nonpregnant group, but were not significantly different from each other in psychosexual drive conflict manifestation. A closer examination of the types of drive conflict manifestations revealed that the highest proportion

of their drive responses were concentrated in the oral sphere, indicating conflicts in dependency and passivity/activity issues (see Table 6). The responses of the pregnant, nonresidential group consisted of 107 responses containing psychosexual drive content, with 66% of these due to indicators of orality. The responses of the pregnant, residential group consisted of 100 responses containing psychosexual drive content with 63% of these due to indicators of orality. The responses of the nonpregnant group consisted of 79 responses containing psychosexual drive content, with 52% of these due to indicators of orality. When these differences in oral scores were investigated in a t test, they were found to be significant with the pregnant, residential group scoring significantly higher than the nonpregnant group ($t = 2.38$, $df = 58$, $p < .025$) and the pregnant, nonresidential group scoring significantly higher than the nonpregnant group ($t = 2.27$, $df = 58$, $p < .025$).

The sixth hypothesis predicting that pregnant adolescents would demonstrate less knowledge of contraceptives than nonpregnant adolescents was not supported. There were no significant differences between the combined pregnant groups and the nonpregnant adolescents on this variable. However, subanalyses revealed significant differences between the two groups on contraceptive

Table 6. Raw Scores and Percentages of Oral, Anal, and Phallic Components of the PD% on the Rorschach for All Groups

	Nonpregnant (R=18.9)		Pregnant, Residential (R=17.8)		Pregnant, Nonresidential (R=16.0)	
	Raw Scores	% of ΣPD	Raw Scores	% of ΣPD	Raw Scores	% of ΣPD
Oo	26		35		32	
Oc	15		28		39	
EO	41	52%	63	63%	71	66%
Ao	0		0		1	
Ac	18		14		9	
EA	18	23%	14	14%	10	9%
Po	1		2		10	
Pc	19		21		16	
EP	20	25%	23	23%	26	24%
ΣPD	79		100		107	
PD%	13.0		19.3		19.4	

knowledgeability with the pregnant, residential group scoring higher (see Table 5). The pregnant, residential group also scored significantly higher than the nonpregnant group on this variable (see Table 4).

Appendix D contains the results of the Questionnaire on Contraceptives. The questions reflecting knowledgeability, numbers 6, 10, 11, and 12, were scored and empirically investigated for this study. The results of question 6, which reflects the amount of formal sex education the girl has been exposed to, indicate that 57% of the pregnant, residential group had completed or were currently taking a class on sex education compared to 30% of the nonpregnant girls and 25% of the pregnant, nonresidential girls.

Questions 10 and 11, which asked subjects to list methods of birth control that girls and boys could use, resulted in the finding that the pregnant, residential group was able to list a total of 96 acceptable methods for girls and 43 for boys while the nonpregnant group listed a total of 66 for girls and 42 for boys. The pregnant, nonresidential group thought of 63 methods for girls and 37 for boys. Of interest also is that only the nonpregnant group listed solutions such as "hope and pray", and "pretend nothing ever happened" as birth control methods for girls. Withdrawal, as a birth control method for boys, was listed by 8 of the

nonpregnant group, 6 of the pregnant, nonresidential group and 4 of the pregnant, residential group.

The correct answers to question 12 are false except 12-f which is true. All of the groups were fairly closely matched in their answers to these questions except for 12-a which was incorrectly answered by 17% of the nonpregnant and 20% of the pregnant, nonresidential group compared to only 7% of the pregnant, residential group. Interestingly, answers to 12-c and 12-g were evenly divided within each group of girls with approximately one-half in each group believing that withdrawal by the male during intercourse reduces the likelihood of becoming pregnant and that fate determines whether a girl gets pregnant or not, regardless of the birth control method used.

Because of the significant differences in socioeconomic status between nonpregnant and pregnant groups, a post-hoc analysis of these findings was done in which the scores of the two socioeconomic groups were isolated and compared. As Tables 7 and 8 indicate, the significant differences were still retained on all of the variables, indicating that the variation between the groups could be explained by their pregnancy status and were not confounded by socioeconomic status.

Table 7. Means, Standard Deviations, and Results of t Tests for Differences Between Pregnant and Nonpregnant Adolescents in the Lower Middle Socioeconomic Group (Group 4)

	Pregnant (N=32)		Nonpregnant (N=23)		t^*
	Mean	SD	Mean	SD	
Succorance	12.9	3.0	10.8	2.8	2.63
Nurturance	13.1	3.5	15.5	2.0	-3.24
Social					
Closeness	14.3	3.4	16.2	3.5	-2.02
Wellbeing	13.5	4.3	16.8	3.3	3.24
Rorschach PD%	19.4	13.2	13.8	6.51	2.07

* $p < .025$, $df = 53$

Table 8. Means, Standard Deviations, and Results of t Tests for Differences Between Pregnant and Nonpregnant Adolescents in the Lower Socioeconomic Group (Group 5)

	Pregnant (N=28)		Nonpregnant (N=7)		t^*
	Mean	SD	Mean	SD	
Succorance	13.4	2.5	11.6	1.7	2.22
Nurturance	13.39	3.1	16.4	2.0	-3.23
Social					
Closeness	13.2	3.8	16.0	2.3	-2.52
Wellbeing	14.1	2.9	16.2	2.07	2.21
Rorschach PD%	18.5	7.4	12.8	6.4	2.03

* $p < .025$, $df = 33$

CHAPTER 5

DISCUSSION

Two of the hypotheses of this study were supported unequivocally: pregnant adolescents have a lower sense of psychological wellbeing than do nonpregnant adolescents and pregnant adolescents evidence a higher level of psychosexual drive conflict than do nonpregnant adolescents. One of the remaining hypotheses was partially supported and three were not. Overall, the results obtained in this study are supportive of previous research on the relationship of pregnancy and adolescence to succorance, wellbeing, and orality but contradict findings on the need to nurture, social closeness, and contraceptive knowledgeability.

Given that previous research suggests that succorance needs are elevated during pregnancy due to the physical discomforts of pregnancy and anxiety about the unknown and that succorance needs are higher and motivational in the adolescent population, it is interesting that these results indicate that needs for succorance are elevated in pregnant adolescents who continue to live at home but not in those pregnant adolescents who elect to live in maternity homes during their pregnancies. This study is unique in its division of subjects into residential and nonresidential categories. This study also controlled for socioeconomic

status, race, and IQ so that differences cannot be accounted for by these subject variables. It appears then that either there may be environmental factors at maternity homes that play a role in meeting the succorance needs of their residents or there may be preexisting differences in psychological attributes between the population of girls and their families who choose maternity homes as a solution and the girls and families who choose to remain at home.

The maternity homes in this study did indeed make special efforts to nurture their residents by providing individual care and attention, individual counseling, and regular medical checkups. An emphasis was placed on giving hugs and letting the girls know they were cared about. The group camaraderie among the residents themselves provided another source of succorance and social closeness for the girls as they shared problems and empathized with each other's situation. Boyfriends and families were allowed regular visits and planned group activities were frequent occurrences.

The pregnant adolescent who continued to live at home, on the other hand, also continued to attend public schools where they were a visible minority. The reactions of their peers to their condition likely ranged from ridicule to rejection to envy. Regardless, they were inevitably singled out, based upon their condition, with few others like

themselves with whom to identify. At home, they were surrounded by the same caretakers they had always had and often were responsible for babysitting younger siblings.

The families of the pregnant adolescents who go to maternity homes may be more resourceful in terms of their awareness of available public assistance than the families of the pregnant adolescents who stay at home. Rather than feeling rejected by the decision to send them away, these girls may interpret the decision as a sign of caring about their welfare. Or, they may find the escape from a negative situation at home a relief and the subsequent succorance received at the maternity home satisfying and sufficient. They may also view the move as a sign of their independence from their families which is one of the things most adolescents strive for.

Wellbeing, defined as a positive feeling about one's self and one's future, is an important variable in teenage pregnancy. It may color the teenager's perception of other events in her life and may be influential in her present and future choices. Consistent with expressed views in the literature, pregnant adolescents demonstrated a lower sense of wellbeing than their nonpregnant peers. Although the physical changes and discomforts of pregnancy may contribute to this sense that all is not well, it may also represent preexisting personality differences between the two groups.

Researchers in the area of teenage pregnancy have found differences in wellbeing between pregnant teenagers and their nonpregnant peers as well as differences between groups of pregnant teenagers. It is thus not clear whether adolescents who become pregnant are motivated by a desire to feel better about themselves and the pregnancy increases or decreases their discontent or whether the pregnancy itself elicits these feelings. This finding nevertheless clearly points to the need for finding ways to improve the pregnant adolescent's self-esteem and wellbeing, particularly if it also has an effect on her growing fetus and her later relationship with her baby.

In addition, the pregnant adolescent's sense of wellbeing may be a determining factor in her choice to keep her baby, have an abortion, or place it for adoption. Her decision may thus be based on an unrealistic appraisal of her own capabilities, it may rest on her belief of the way others will perceive her, or it may be based on an assumption that the presence of a baby will cause her to feel better or worse. If she decides to keep her baby, moreover, and continues to feel a lowered sense of wellbeing, she is not as likely to be able to adequately provide for the succorance needs of her baby.

The finding that pregnant adolescents in both groups are more conflicted regarding oral needs than nonpregnant

adolescents is consistent with the literature on increased orality during pregnancy and the literature on orality in pregnant teenagers. The higher levels of oral needs demonstrated by these pregnant adolescents may be manifested by increased dependency and depression, both of which result primarily from oral conflicts. Oral conflicts develop from inadequate nurturance in infancy. Thus, these girls have likely experienced early emotional deprivation in their own upbringing and may now expect their babies to rectify this deficit.

In addition, the "oral character" is one who perceives that all good things come from external sources, and she relies on others to take care of her needs. This is the person who expects others to make her happy rather than utilizing internal resources and for whom the important aspect of a relationship is being loved by the other rather than giving love to the other. For the pregnant teenager, regardless of whether the pregnancy elicited these increased oral needs or whether her oral needs represent preexisting characteristics, she finds herself in a situation of needing others while being expected to grow up and nurture another completely dependent individual.

Although oral needs and needs for succorance are similar, the findings in this study that pregnant and nonpregnant groups differ on orality and only nonpregnant

and pregnant, nonresidential groups differ on succorance may be explained by differences in the tests used to measure these variables. The Rorschach, an unstructured and ambiguous test compared to the PRF, which is structured and objective, may be a more sensitive indicator of the presence of oral needs. In addition, tests such as the PRF are typically seen as providing a measure of more conscious, surface traits while projective tests, like the Rorschach, allow one to measure derivatives of more unconscious, depth traits.

The decreased succorance scores of the pregnant, residential girls may thus be due to the fact that they were not frustrated regarding these needs at this point in time and so were unaware of them on a conscious level. This does not preclude the fact that they are still basically needy, dependent individuals whose focus is most often on receiving rather than giving.

In light of previous theory regarding the change in identity that occurs during pregnancy, in which the woman's focus shifts from self to others, the finding that the nonpregnant girls in this study demonstrated a greater need to nurture others than the pregnant, residential girls is disturbing. It is also puzzling, given that previous research has posited that nurturance needs are higher and motivational in the pregnant adolescent population. This

finding may be an indication that the nonpregnant girls and the pregnant, nonresidential girls have attained a higher level of maturity than the pregnant, residential girls although neither group has likely reached the developmental stage of generativity. If this is true, it appears that some of those teenagers who are least prepared psychologically for the motherhood role are those who are becoming pregnant and having children.

On the other hand, maternity homes may provide different experiences for pregnant adolescents than they would have if they remained at home with their parents. It may be that having other pregnant peers around on a daily basis enables them to partially resolve needs to nurture by taking care of each other. Nonpregnant adolescents and pregnant adolescents living at home do not have equal opportunities in this area. There may also be fundamental differences between the two pregnant groups and/or their families that account for this finding.

Still another consideration regards previous research on the need to nurture. Although it has been posited that during pregnancy the identity of the adult woman shifts from one who primarily receives nurturing to one who is capable of nurturing, this supposition has not been subjected to empirical tests. It may also be the case that there is a confusion in the definition of the terms "succorance" and

"nurturance" in some of the previous research. These terms tend to be used interchangeably although they do not have the same meaning. The end result of this confusion may be a false assumption that the need to nurture others is elevated in the pregnant adolescent population.

In a similar vein, desire for social closeness was a characteristic more commonly seen in the nonpregnant adolescent and the pregnant adolescent who continued to live at home during her pregnancy than it was in the pregnant adolescent residing in maternity homes. A high scorer on the social closeness scale of the DPQ is broadly defined as someone who is warm and loving, outgoing, and looks to others for encouragement and assistance. An examination of items on the DPQ that would result in an elevation on this scale included such items as, "I usually like to spend my leisure time with friends rather than alone," "Often I go a whole morning without wanting to speak to anyone" and "I prefer to work alone." It appears, therefore, that this scale is an indicator of differences in introversion and extroversion in addition to measuring needs to be comforted by others.

The higher desire for social closeness among nonpregnant adolescents is puzzling. Developmental literature, which generally views adolescence as a time during which the individual begins to move away from parents

and her or his immediate family while peers become increasingly important, provides one explanation. From this perspective, desire for social closeness is a normal developmental occurrence during adolescence.

On the other hand, some pregnant adolescents, while having similar desires for peer companionship, have more limited options in this area. Maternity homes provide the opportunity for daily peer interaction to a degree that neither the pregnant, nonresidential girls or the nonpregnant girls can attain. Another possibility is that the two groups of pregnant adolescents may not be homogeneous. For example, those adolescents who go to maternity homes during pregnancy may have been more introverted and timid prior to pregnancy than those adolescents who remain at home during pregnancy. Such factors might even have been influential in the decision of some pregnant adolescents to go to a maternity home in the first place.

This study also found that pregnant adolescents who live in maternity homes were more knowledgeable regarding contraception than pregnant adolescents who continue to live at home. They were also more knowledgeable than the nonpregnant group. Again, it seems that maternity homes have done a good job taking care of their residents by educating them on contraception or it may be that these girls had this knowledge prior to entering the maternity

homes. The high incidence of repeated pregnancies seen among adolescents may thus be less prevalent among those pregnant adolescents who live in maternity homes. On the other hand, if, as previous research suggests, the reason for repeated pregnancies has less to do with knowledge about contraception and more to do with personality characteristics of the pregnant adolescent, then repeated pregnancies should occur at the same rate among both groups of pregnant adolescents.

Some interesting adjunctive findings on the Contraceptive Questionnaire include the fact that the majority of adolescents in all three groups either agreed or strongly agreed that accessibility of contraceptives is a problem. In addition, an overwhelming majority of each group (97% of the nonpregnant, 93% of the pregnant, nonresidential, and 100% of the pregnant, residential) stated that birth control methods should be taught in school. Finally, some of their answers regarding birth control methods, such as withdrawal, rhythm, and denial, point to the need for more accurate information as does their belief that fate, rather than birth control, determines whether a woman will become pregnant.

Although socioeconomic class is highly correlated with the incidence and possibly the outcome of teenage pregnancy, the finding in this study that the lowest two socioeconomic

classes do not differ significantly on the variables measured is important. Given that both of these groups subsist at poverty level, however, the finding is not surprising. This does not, of course, rule out the likelihood that there are major differences between the groups in this study and middle and upper class pregnant teenagers. In terms of designing intervention programs, it appears that pregnant teenagers in both of the lower socioeconomic classes need similar types of assistance.

Discussion of the Clinical Implications

The clinical implications of this research are essentially derived from the finding that succorance needs, wellbeing, and orality are important factors in the dynamics of adolescent pregnancy. Wellbeing and orality, in particular, are global differences between pregnant and nonpregnant adolescents suggesting a need for intervention in these areas. The need for succorance, on the other hand, is different among pregnant adolescents, depending on whether they live in maternity homes or their own homes over the course of their pregnancy.

Intervention with pregnant adolescents is dependent upon several resources. The primary resources include parents, school personnel, and community agencies. Together, these individuals could examine various strategies

for gratifying the succorance needs of those pregnant adolescents living at home and the decreased sense of wellbeing and increased oral conflicts that all pregnant adolescents experience. The type of contribution from each of these resources would, of course, hinge upon whether the goal aimed for is primary or secondary intervention.

Primary intervention (i.e., decreasing the prevalence of adolescent pregnancy) is contingent upon identifying those girls who are likely to become pregnant. Thus far research has been unable to isolate factors that distinguish these girls from those who don't become pregnant. Most studies that have attempted to do this have been retrospective in nature, and their findings are thus confounded by the experience of pregnancy itself. Longitudinal studies would clarify this situation, but studies of this type are lacking.

The most logical and viable intervention efforts are likely to be in the area of secondary prevention. Pregnant adolescents exhibit a decreased sense of wellbeing, an increase in oral needs, and some pregnant adolescents have increased succorance needs. Consequently, a major objective for secondary prevention is the development of nurturing relationships wherein the pregnant adolescent can get her succorance needs met. Maternity homes like Florence Crittenton have been successful in doing this, and other

workers in the field of adolescent pregnancy might benefit by their example. A second objective is to help the pregnant adolescent become aware of and resolve her oral conflicts. A third objective is to help the pregnant adolescent find ways of improving her self-esteem and overall sense of wellbeing. Through individual therapy and group therapy, the adolescent can explore her oral conflicts and life options available to her as well as improving her feelings about herself. In this way, her decisions during pregnancy are more likely to be based on an adjusted and realistic appraisal of events.

Education regarding what the adolescent mother can expect from her baby may also be helpful. This type of education can be offered at public schools and can be facilitated by teachers and school counselors. Hands on experience could provide additional reality testing in those schools that include child care programs. The rationale for this type of education would be to encourage the adolescent to seek other sources to meet her oral and succorance needs once she understands that the baby will not be able to consistently do this for her. Education in the area of contraception might also prove helpful in preventing repeated pregnancies as well as paying attention to the feelings of adolescents that contraceptives are not readily available.

The importance of parental involvement needs to be considered also. Parents of pregnant adolescents need to be reached and made aware of the oral conflicts and succorance needs of their daughters and their feelings of despair about themselves and their futures. Some parents will profit from available resources while others will likely be inaccessible. For those adolescents whose parents can't be reached, the development of surrogate maternal figures could be promoted or coordinated by helping professionals.

Secondary prevention should also be concerned with teaching pregnant adolescents effective parenting techniques which foster the development of wellbeing and enhance the child's feelings of being adequately nurtured. Such training could serve as an avenue for preventing negative outcomes in the mother/child relationship as well as second and third generation repetitions by the children of these children. Ultimately, such programs could reduce the incidence of adolescent pregnancy in the next generation, if oral conflicts, needs for succorance and lowered feelings of wellbeing are found to be causal factors in adolescent pregnancy. At the very least, they may alter the pregnancy experience for future adolescents who become pregnant.

Suggestions for Future Research

There are several possibilities for research in the area of adolescent pregnancy that would be significant

additions to the findings of this research. Many of the problems need to be addressed in longitudinal research while others can be addressed in the context of a cross sectional design.

Since the results of this study apply only to pregnant adolescents in the lowest two socioeconomic classes, it would be helpful to know, in designing intervention programs, if pregnant adolescents in middle and upper class groups look the same. Or, are there other characteristics and psychological needs that require more attention? The results of these tests might also be different depending on the particular trimester of pregnancy the adolescent is in during testing. For example, oral and succorance needs may be higher during the last three months of pregnancy due to the extreme physical changes that have taken place by that time and the increasing awareness that the baby is an imminent reality. Wellbeing may also fluctuate through the course of pregnancy.

It would also be interesting to compare pregnant adolescents to pregnant adults on some variables in order to gather age differences in the pregnancy experience. Still another comparison group that could highlight psychological differences would be a group of nonpregnant adolescents

residing in group homes similar to the maternity homes of the pregnant, residential group in this study.

Given that pregnant adolescents who go to maternity homes look different from pregnant adolescents who continue to live at home during their pregnancies, research that further explores differences in these two groups in terms of the pregnancy experience and outcome, might be informative. For example, what types of families choose maternity homes for their daughters and what types of adolescents make these choices? Are the medical, cognitive, and social outcomes for the offspring of adolescents better or worse when their mothers were residents of maternity homes during pregnancy? Do repeated pregnancies occur less often among pregnant adolescents who stayed in maternity homes?

Follow-up studies can also be of benefit. Therefore, it would be informative to find out if the high succorance needs demonstrated by the group of pregnant, nonresidential adolescents is maintained once pregnancy ends. Although oral needs have been investigated during and after pregnancy, it would also be interesting, in a longitudinal study, to empirically measure oral drives prior to, during, and after pregnancy. It would also be valuable to know if succorance needs and oral conflicts during pregnancy are correlated with later negative outcomes.

Finally, although longitudinal studies provide the only accurate answers regarding causality and outcome in teenage pregnancy, there is still a need for studies such as this one representing attempts to measure various personality characteristics. Characteristics such as harmavoidance, needs for attachment, achievement needs, and assertiveness are just a few of the personality variables that might yield fruitful information in this complex field of knowledge.

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APPENDIXES

APPENDIX A

LETTERS TO TEENAGERS AND PARENTS

May 30, 1988

Dear Teenager,

I am a graduate student at the University of Tennessee, and I am doing a project on teenage pregnancy. In order to do this, however, I will need your help.

Mrs. Bremseth has kindly offered to give this letter to residents whom she thought might be interested in working with me.

The project will require about 4-1/2 hours of your time and involves taking a series of 3 personality tests designed to identify your special needs during pregnancy. It also includes a test of different problem solving styles and a questionnaire on contraceptives.

I am hoping that the information we learn from this project will be of help in understanding the characteristics of adolescent mothers that lead to good relationships with their babies and that it will also be useful in future efforts to set up programs and policies for pregnant teenagers.

If you decide to participate, please understand that your identity will not be revealed to anyone under any circumstances and all test answers will be totally confidential.

Thank you for taking the time to read this letter, and I hope to meet you soon.

Sincerely,

Susan B. Justice

May 30, 1988

Dear Parents,

As a graduate student at the University of Tennessee, I have decided to do a project on teenage pregnancy as part of the requirements for getting my degree in clinical psychology.

I need some teenagers to volunteer to help me with this project and would like to ask your daughter if she would be interested. I need your permission in order for her to participate, however, and am writing this letter to you to tell you a little about the project.

The project will require about 4-1/2 hours of your daughter's time and will require that she complete 3 personality tests, a test of problem solving styles and a questionnaire on contraceptives.

All the information I gather will be totally confidential, and your daughter's name will not be used.

The purpose of the study is to identify the special needs of pregnant teenagers as a group so that we can better understand the characteristics of the teenage mother that lead to the observed outcomes in their later relationships with their babies and so that we can set up the type of future programs that are most helpful to them.

If you have any questions, please feel free to ask either Mrs. Bremseth or myself. We want to be certain that you understand and agree with your daughter's participation. I would appreciate it if you would discuss this with her and let us know what you decide as soon as possible.

Sincerely,

Susan B. Justice

APPENDIX B

PARENTAL CONSENT AND INFORMED CONSENT FORMS

PARENTAL CONSENT

I have granted permission for my daughter (please print full name) _____ to participate in the research on teenage pregnancy which will be conducted by Susan Justice. I understand that this research is part of her doctoral dissertation.

I understand that the research will involve a series of personality tests and questions regarding contraceptive practices and pregnancy, and that data will be collected by group and individual administration within the school setting.

I understand that the identity of my daughter will not be revealed under any circumstances, that only generalized conclusions will be drawn from the study.

I understand that my daughter's participation in this research is voluntary, rather than compulsory, and that she may withdraw at any time.

If I have any questions regarding this research I may contact Susan Justice at 803-772-7949 or Mr. Jim Atkinson at 763-1533.

Signature of Parent or Guardian

Phone Number

INFORMED CONSENT

I am conducting a research project on teenage pregnancy as part of my doctoral dissertation. The goal of this research is to increase understanding of the personality characteristics of pregnant teenagers in order to find ways of improving the later mother/infant relationship. Your participation in this research, should you decide to become involved, would help researchers and therapists better understand which characteristics of adolescent mothers contribute to observed outcomes in their relationships with their babies.

This project involves a series of psychological tests and questionnaires. You will first be given a brief IQ test and a test to determine your level of psychological functioning. These will take approximately 30 minutes to complete. You will then be asked to complete 2 personality tests, a contraceptive questionnaire, and a general information form in a group setting. This will require approximately two to two and one half hours. I will then contact each of you individually to set up an appointment to take a third personality test that will require another hour to complete.

There will be no risks or discomfort to you resulting from your participation in this research. All tests except one are of the paper and pencil variety. The third personality test will require that you respond to various printed stimuli with the researcher recording these responses. The researcher will be available both before and after the data collection to answer your questions.

The information which is collected in this research will be used to understand the personality of pregnant teenagers as a group rather than each person as an individual. In this respect, your identity will be anonymous, and all the information obtained will be held in the strictest confidence. I am asking that each person remember that your name is not important in this research. PLEASE DO NOT WRITE YOUR NAME ON TEST MATERIALS. All test materials will be kept in a locked cabinet to which only the project director has access.

Please understand that your participation in this project is completely voluntary and in no way relates to or influences the treatment services you are receiving here. Also, if you agree to take part in this research, please

understand that you are free to withdraw at any time without penalty.

Your participation in this study may be helpful in the further understanding of the pregnant adolescent personality. Information as to the general results and conclusions of this study will be provided to you if you so desire.

If you have any questions at this point, or at any point later in the study, please do not hesitate to ask me. You will be given a copy of this informed consent to keep, should you wish to contact me at any time about this research project.

Susan B. Justice
Graduate Student in Psychology

Address: 902 Pine Springs Road
Columbia, S.C. 29210

Telephone: 803-772-7949

I have read the above statement and agree to take part in this project.

Signature _____ Date _____

APPENDIX C

QUESTIONNAIRE ON CONTRACEPTIVES

1. Do any of your friends do anything about birth control?
_____ no _____ yes
2. Have you used contraceptives? _____ no _____ yes
3. If you answered no to question 2, answer the following:
I have not used contraceptives because:
_____ (a) I am not sexually active
_____ (b) I don't know where to get contraceptives
_____ (c) My boyfriend doesn't think contraceptives
are necessary
_____ (d) I don't believe I will get pregnant
_____ (e) Other reasons; please state _____

4. If you used contraceptives or encouraged your boyfriend
to use contraceptives, then think back during the last
3 months. Have you used or encouraged your boyfriend
to use contraceptives:
_____ (a) for every sex relation?
_____ (b) for some but not every sex relation?
_____ (c) not used a method of birth control
_____ (d) I am not sexually active
5. If you are sexually active, about how many times a week
do you have intercourse? If you are not sexually
active, put a 0 in the blank provided.
_____ times per week
6. Have you had a course in school in Sex Education or
Family Life Education or Social Living?
_____ (a) Yes. I have finished such a course.
_____ (b) I am presently taking such a course.
_____ (c) I have had some discussion of sex educa-
tion in other classes but no separate
class.
_____ (d) No.
7. Do you think information about birth control methods
should be taught in school? _____ no _____ yes

8. It's OK to talk about using contraceptives. Getting them is something else again:
 _____ Strongly agree _____ Disagree
 _____ Agree _____ Strongly Disagree
9. About how many of your girlfriends have been pregnant?

10. What methods of birth control do you know of that girls use? Write down all the ways you know that a girl can try to keep herself from getting pregnant.
- _____
- _____
- _____
11. Write down all the ways you know of that a boy can try to keep a girl from getting pregnant.
- _____
- _____
- _____

READ EACH STATEMENT BELOW. IF YOU THINK IT IS TRUE, CIRCLE T. IF YOU THINK IT IS FALSE, CIRCLE F. THIS IS NOT A TEST. JUST ANSWER WHETHER YOU THINK THE STATEMENT IS TRUE OR FALSE.

12. T F If a girl holds back her feelings and doesn't come (reach a climax) in sexual intercourse, she is less likely to get pregnant.
- T F If a girl washes herself out by taking a douche right after sexual intercourse, she won't get pregnant.
- T F If a boy pulls his penis out of a girl (withdraws) before he reaches a climax, she is less likely to get pregnant.
- T F If a teenager has sexual intercourse for a month or so without getting pregnant, this means she probably isn't too likely to get pregnant for a while.

- T F Once a girl starts taking the birth control pill she probably won't be able to have babies later on, even when she stops the pill.
- T F A rubber (condom) usually works to keep a girl from getting pregnant.
- T F There are no methods of birth control a couple can really trust; if it's meant (fated) for a girl to get pregnant she will anyway.
- T F Even if a girl is not taking the birth control pill regularly, if she takes a few pills after having sexual intercourse, it will probably keep her from getting pregnant.
- T F Even if a girl is not taking the birth control pill regularly, if she takes a few pills when her period is overdue it will help to prevent pregnancy.
13. About how many times a month have you had intercourse?
_____ times a month.
14. About how many times have both you and your boyfriend talked about birth control? _____

APPENDIX D

RESULTS OF QUESTIONNAIRE ON CONTRACEPTIVES

Question Number	Nonpregnant	Pregnant, Nonresidential	Pregnant, Residential
1. No	9	10	7
Yes	21	20	23
2. No	14	17	13
Yes	16	13	17
3. (a)	9		
(b)	0		
(c)	2		
(d)	1		
(e)	1		
4. (a)	8	3	1
(b)	9	9	8
(c)	4	16	19
(d)	10		
*5.	1.3	2.4	2.4
6. (a)	8	7	14
(b)	1	0	3
(c)	10	12	6
(d)	11	10	7
7. No	1	2	0
Yes	29	28	30
8. Strongly Agree	10	4	5
Agree	8	20	15
Disagree	7	5	4
Strongly Disagree	5	1	6
9.	66	102	114
10. Pill	21	17	25
Abstinence	13	15	11
Foam	9	7	12
IUD	7	4	9
Diaphragm	7	10	17
Sponge	5	7	17
Jelly	2	1	5
Sterilization	2	2	
Suppository	1	1	
Rhythm	1	1	1
Hope & Pray	1		
Pretend nothing ever happened	1		
Keep your legs close	1		
Jello	1		
Oral Sex		1	
Douche		1	

Question Number	Nonpregnant	Pregnant, Nonresidential	Pregnant, Residential
11. Condoms	29	25	28
Abstinence	11	9	12
Withdrawal	8	6	4
Sterilization	2	3	3
Ask her to protect	1	2	
Oral Sex		1	
12.			
a True	5	6	2
False	25	24	28
b True	3	2	3
False	27	28	27
c True	16	15	16
False	14	15	14
d True	3	7	4
False	27	23	26
e True	1	3	1
False	29	27	29
f True	23	24	23
False	7	6	7
g True	11	15	14
False	19	15	16
h True	0	2	0
False	30	28	30
i True	3	2	2
False	27	28	28
*13.	5.2	8.5	5.9
*14.	2	6.3	1.7

*Mean for these scores.

VITA

Susan Brown Justice was born in Marion, North Carolina, on January 24, 1949. She attended elementary schools in Cheyenne, Wyoming; Hampton, Virginia; and Tachikawa, Japan. She attended high school in Charleston, South Carolina; Hampton, Virginia; and Marion, North Carolina, and graduated from Marion High School in May 1967. She attended the University of North Carolina at Asheville and received a Bachelor of Arts degree in psychology in May 1984.

She entered the graduate school of the University of Tennessee in Knoxville, Tennessee, in September of 1984 to study clinical psychology. She received her Doctor of Philosophy degree with a major in clinical psychology in December 1989 after an internship at the William S. Hall Psychiatric Institute in Columbia, South Carolina.