Relationships Between Self-Esteem, Social Support and Adolescent Hopefulness

Cynthia D. Connelly

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RELATIONSHIPS BETWEEN SELF-ESTEEM,
SOCIAL SUPPORT AND ADOLESCENT HOPEFULNESS

BY

CYNTHIA D. CONNELLY

A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE
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ABSTRACT

The purpose of this study was to: (a) investigate the relationships among the variables of self-esteem, social support and hopefulness in adolescent females, and (b) determine if significant differences exist between the hopefulness of pregnant and non-pregnant adolescent females.

The framework for this study was derived from the literature and based on the concepts of self-esteem, social support, and hopefulness. Research suggests that social support and self-esteem are key constructs in predicting hopefulness towards the future and were selected as factors in constructing a theoretical framework for the explanation of adolescent hopefulness. The Symbolic Interactionist perspective provided the theoretical basis for the framework and is evident in the conceptualizations of self-esteem, social support, and adolescent hopefulness. Within this framework, the situation of adolescent pregnancy was taken as offering a specific context in which the explanation of hopefulness needed further elaboration. From this framework hypotheses were derived specifically to test with a sample of adolescent females.

This descriptive correlational study utilized a volunteer convenience sample of 149 female adolescents who responded to four questionnaires: Hinds' Hopefulness Scale for Adolescents, Rosenberg's Self-esteem Scale, Norbeck's Social Support Questionnaire, and a demographic and personal data questionnaire.
Data were analyzed using descriptive and multivariate statistical procedures. Findings included statistically significant positive relationships between social support (total functional support) and hopefulness, and social support and SES for the entire sample of adolescent females. T-tests revealed significant differences between the self-esteem, perceived social support, age and SES of the pregnant and non-pregnant subjects. Pregnant adolescent females were significantly older, reported significantly lower SES, and perceived social support, but significantly higher self-esteem. There were no significant differences between the hopefulness levels of the two groups. Multiple regression analysis indicated that of the variables included in the study social support was indicated to explain 3% of the variance in hopefulness while self-esteem explained none. While the framework provided direction, 97% of the variance in hopefulness remains unexplained leaving a wide range of potential variables untapped for future investigation.
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CHAPTER 1

INTRODUCTION

Problem Statement

The concept of hope has intrigued various disciplines for centuries. Philosophers (Marcel, 1951; Pruyser, 1963) have argued what hope is and what it is not; Theologians (Fallon, 1961; Van Kaam, 1976) have described people as "beings of hope" while sociologists and anthropologists have presented the power of hope and its relationship to survival (Tiger, 1959). Psychiatry has associated the lack of hope with depression and suicide (Beck, Weissman, Lester, & Trexler, 1974). Psychologists have identified hope in relation to the fundamental needs of man and the requirement of human satisfaction (Callieri and Frighi, 1968) and have placed hope at the very heart and center of a human being (Lynch, 1965). In the health sciences, hope has been described as one source of strength in all healing processes (Korner, 1970).

In the practice of nursing, hope has been conjectured to be positively correlated with health status (Farran & Popovich, 1990; Hinds, 1985; Nelson-Marten, 1988). It is
further conjectured to have a therapeutic effect upon health outcomes (Hinds, 1985; Parse, 1990). For nursing, hope is a positive concept and as Watson (1979) summarizes "Hope is both a curative and carative factor in nursing" (p. 12).


Stoner (1991) contends that nursing interventions related to hope are at least as complex as the concept
itself. For Stoner (1991) many questions about hope remain unanswered, for example: Is hope an outcome variable or is it an antecedent of some other outcome variable such as quality of life? (Stoner, 1991, p. 55). In essence, although literature abounds in the area of hope and its beneficial effects, there is minimal empirical evidence regarding what facilitates the development of hopefulness. The purpose of this study is two-fold, to: (1) test specific relationships among persons' sociodemographic, internal and external factors suggested as antecedents of hopefulness and (2) determine whether there is a significant difference in hopefulness between two groups: pregnant and non-pregnant adolescent females.

Overview of the Problem

Erikson (1982) suggests that the roots of hope lie in the infant-mother relationship. McGee (1984) expands this notion by including a maturational component: "Life begins with hope, but as children achieve greater mobility and begin to seek personal goals, the impossible emerges. Through tuition and self-discovery, children learn to discern the power and limitations of themselves and others" (p. 37). Smith (1983) supports the maturational component and contends that hope is a prerequisite for development toward a satisfactory and satisfying adulthood. "Young
people have the world before them and we should normally expect a youthful bias toward hopefulness. However, when the appropriate hopefulness of children and adolescents wavers or is subjected to heavy assault, we have to be seriously concerned" (p. 389). Meissner (1973) identified hopefulness as a developmental achievement (p. 19) with Skolny & Riehl (1974) contending that once it is experienced, it becomes generalized to a commitment of life and growth (p. 44).

McGee (1984) contends that although the basic capacities necessary for hope are assumed, there is a concurrent need for energy, available to invest in the process of hoping. Without an initial energy investment, action to achieve the object of hope is impossible (p. 37). McGee (1984) further points out that the person who is experiencing a critical transition or developmental crisis has a compromised energy source available to invest in expectations for the future. In fact, the more stresses encountered, the fewer resources a person has to deal with a given crisis.

Although theorists argue whether adolescence is a developmental crisis or not (Blos, 1941, 1979; Erikson, 1968; Johnson, 1986; Mead, 1928/1950) they do agree that it is a period of critical transition. Consequently, since the functions of hopefulness are necessary for an evolving life under normal circumstances and critical during crisis
(Hinds, 1985, p. 32), it would seem reasonable to assume that adolescent hopefulness would be necessary for a successful transition.

**Adolescence and Hopefulness**

Havighurst (1974) asserts that young peoples' thinking about the future typically concerns the major developmental tasks of late adolescence and early adulthood, such as future occupation, education, family, and property-related topics, however, not all adolescents are interested in these domains. Adolescents differ according to how much they have planned for the future, the extent to which they believe they can influence it, and how optimistic they are (Nurmi & Pulliainen, 1991). Smith (1983) explains that for the young, hope and optimism are probably a rather tight package. They go together, but they are not synonymous. Hope is the conviction that a good future is possible and worth striving for (Smith, 1983; Hinds, 1984, 1985; Hinds & Gattuso, 1991). Optimism is the conviction that it is a sure thing or a strong possibility (Smith, 1983). Hope is necessary, unless our most despairing fears are to be realized (Smith, 1983). "Hope is essential to empower youth, who in turn embody the hope for us all" (Smith, 1983, p. 398).

Meissner (1973) and Stotland (1969) further conceive hopefulness as a prerequisite for action and as central to any therapeutic outcome. As described by Meissner (1973)
hope is a basic quality of experience and thus becomes a resource for further adaptive functioning and coping. This basic quality of experience in human development is the motive force of change. In other words, a person with hope is able to sense a way out of a difficult situation and believe that change is possible. As stated by Smith (1983) "hopeful individuals are more able to tolerate pain or loss and in general to cope with problems" (p. 389).

**Self-esteem, Social Support, Hope**

Hope is a complex, abstract phenomena which although poorly understood is recognized as a powerful force, and its emergence is theorized to be facilitated by a variety of factors (for example, caring behaviors of nurses, self-esteem, and social support). Self-esteem has been found to be a factor positively correlated with an adolescent's hopefulness (Nurmi & Pulliainen, 1991), however, during the developmental process of changing ideal ego, adolescents may experience problems in relation to the development of self-esteem, consequently this lack of self-esteem may affect the teen's hopefulness (Nurmi & Pulliainen, 1991). In a similar vein, Stoner (1982) contends that social support is the best predictor of patient hopefulness. The implication from this could be interpreted as: raising an adolescent's level of social support will increase the adolescent's hopefulness. In a study of twenty-five high risk behavior (drug abuse) adolescents, Hinds (1985) empirically
supported the theoretical assumption that hopefulness is an internal state that may be influenced by external others. Hinds (1985) found that adolescent hopefulness was influenced by the caring behaviors of nurses which consequently facilitated the adolescent to achieve positive health outcomes. Thus, although the concept of social support was not explicitly stated a theoretical link has been provided.

The literature provides further potential theoretical links between social support, self-esteem and hope; for example, Roberts (1984) summarizes that "theorists agree that social support includes affirmation of esteem and worth, perceptions that one is cared for, and information and guidance in problem-solving" (p. 160). Rosenberg (1989) reports that the availability of supportive reference groups, both family and peers fosters self-esteem among adolescents. Yarcheski and Mahon (1989) found that self-esteem and social support had a direct effect on positive health practices of adolescents, and that social support had a direct effect on self-esteem. Dunst, Vance, and Cooper (1986) found higher self-esteem was related to less dense social networks whose members provided a greater number of types of support. Higher self-esteem and social support were identified as potential determinants in reducing "at risk" conditions associated with teenage pregnancy (Dunst et al, 1986). Foote, Pizazza, Holcombe, Paul, and Daffin
(1990) found correlations between hope, self-esteem, and social support among adults with Multiple Sclerosis. Statistically significant positive correlational relationships were found between social support and self-esteem, self-esteem and hope, and social support and hope (Foote et al., 1990). This relationship has not been investigated among adolescents.

Justification of the Problem

Adolescents are having increasing contact with nurses due to multiple health concerns (Adams, 1983; Bearinger & Gephart, 1987; Hinds, 1985). Adolescents currently comprise 15% of the population (Hinds, 1985; Trends, 1986) and are expected to increase in numbers dramatically in the mid 1990s (Bearinger & Gephart, 1987; Hollinger, 1988). One particular group of adolescents increasing in number and requiring professional intervention are pregnant adolescent females.

Although there are many health and educational programs designed for adolescents the number of female adolescents who become pregnant each year continues to rise. It is predicted that by the year 2000, 4 out of ten adolescent females between the ages of 14 and 18 will become pregnant and 50% of that number will give birth (Boyce, Schaefer, & Uitti, 1985; Bearinger & Gephart, 1987; Castiglia, 1990; CDF, 1987, 1990; Frager, 1991; McAnarney, 1985; Porter, 1990). Another staggering statistic is that those
adolescents giving birth under the age of 16 appear to be more likely to bear a second child within the next 2 years than older teens or women in their 20s (Matsuhashi et al., 1989). Adolescent pregnancy presents a complex situation involving many factors and resulting in many untoward outcomes for the adolescent, her child, the family, and the community at large (Frager, 1991; Hollinger, 1988; Kellinger, 1985). The young woman and her baby are often at risk for a wide variety of social, economic, health, and educational problems which has been well documented (Anastasiow, 1987; Davis, 1989; Frager, 1991; Teti & Lamb, 1989; Walter, Carter, Papp & Silverstein, 1988; Yoos, 1987). For many pregnant adolescents the attainment of their full potential is prevented.

The Children's Defense Fund (CDF) views adolescent pregnancy as a symptom of a pervasive lack of hope and too few positive life options. The CDF (1987, 1990) posits that hope is one of the best contraceptives to assist adolescents in avoiding early pregnancy. Since hope is the link between the present and the future for adolescents and is central to adolescent's behavior and morale (Smith 1983), the CDF (1987) believe that "Young people with hope and positive life options are more likely to delay early parenting" (p. 2). This proposed relationship, however, lacks empirical support.
Smith (1983) contends that "hope is the most untenable for youths in the ghettos of central cities" (p. 396), thus the emergence of social problems: drug abuse, vandalism, teenage parenthood. As explained by Dryfoos (1984) a disadvantaged youngster with no hopes or aspirations cannot understand how having a baby will adversely affect her life. As a consequence adolescent pregnancy has been thought to disproportionately affect poor and minority adolescents.

The notion that teenage pregnancy and childbirth is primarily a black urban problem in the United States is deeply imprinted in the public mind, however, black teenage pregnancies do not represent the majority of teen pregnancies (Davis, 1989; Dunn, 1987; Meyers, 1991; Morrison, 1985), in reality the incidence of white adolescent childbirth is much greater (342,183 vs 156,855 in 1983) (Trends, 1986). The majority of research with pregnant adolescents focuses on urban and minority populations, frequency of contraceptive use, with emphasis for interventions being placed on education and availability of contraceptives, yet the incidence of adolescent pregnancy continues and the number of repeat pregnancies within two years increases.

Davis (1989) contends that adolescent pregnancy is a social problem that is an outcome of modern society and must be viewed within the context of a number of societal problems (such as drug abuse, poverty, isolation) affecting
adolescents across ethnic, social and racial boundaries. Adolescent pregnancy is not unique to inner city youth.

Historically, various theories, developmental, environmental, cultural, psychological, personality (Davis, 1989; Stafford, 1987) and many variables (for example, inner city life, poverty, lack of education, single mother head of household, age, culture, history of abuse, religion, self-esteem, peer group affiliation, etc.) have been identified in the literature as being related to adolescent pregnancy and repeat adolescent pregnancy. A review of the literature finds no empirical evidence linking the concept of hope with adolescent pregnancy. It should be noted however, that considering the complex behavioral patterns and developmental changes which occur during adolescence it is unlikely that a single factor will be isolated which alone holds the answer to the perplexing problem of adolescent pregnancy. However, if the CDF views hope as integral to prevention of early motherhood, empirical evidence to support this contention is needed. The question is raised: Is there a difference in the hopefulness of pregnant and non-pregnant adolescent females?

The purpose of this study is twofold, to: (a) test a theoretical model specifying relationships among the variables of social support, self-esteem and hopefulness in adolescent females and (b) determine if differences exist
between the two groups on social support, self-esteem and adolescent hopefulness.

Significance to Nursing

The development of the science of nursing requires the establishment of a strong theoretical base upon which to develop knowledge, conduct research and guide nursing practice (Chinn & Kramer, 1991; Gortner, 1990; Kim, 1983, 1987, 1989). This ongoing development requires the identification of new and established concepts, operationalization of the concepts with development of propositional statements, and testing of hypothesized relationships (Reynolds, 1971).

The concept of hopefulness is of interest to nursing as it is conjectured to be (1) positively correlated with health status and (2) influenced by the behaviors of others (Hinds, 1985; Vaillot, 1970; Watson, 1979). The implication is that the presence of hopefulness may be viewed in the context of a patient's health-related behavior. Thus, an understanding of hopefulness within the context of adolescence and the specific knowledge of what contributes to the adolescent hopefulness may provide an essential basis for the design of effective nursing interventions for adolescents.

This study may also contribute to our understanding of adolescent hopefulness in relation to adolescent pregnancy. By comparing the two groups of adolescent females, (pregnant
and non-pregnant) valuable insight may be gained which can assist nursing to develop realistic strategies when addressing one of the major challenges stated in The Health Objective for the Year 2000, "to reduce pregnancies among girls aged 17 and younger to no more than 50 per 1000 adolescents" (Public Health Services, 1990).

The specific aims of this study are to investigate adolescent hopefulness and to develop new knowledge which will enhance the understanding of adolescent hopefulness and to increase positive health outcomes in adolescent females. The focus of this study is on self-esteem and social support and how they affect adolescent hopefulness. The present study expands the previous work conducted with hopefulness in adolescents by (1) including two variables (social support and self-esteem) that may affect adolescent hopefulness and (2) sampling adolescents who have been associated with lack of hopefulness - pregnant adolescent females, and compare with non-pregnant adolescent females.

The theoretical framework presented in Chapter 2 presents the concepts and predicted relationships. The preliminary testing of this framework will contribute to the body of nursing knowledge related to adolescents and adolescent nursing theory development by exploring internal and external variables that affect adolescent hopefulness. Implications for clinical practice are that data from this
study will add to the scientific base for nursing interventions with adolescent females.
CHAPTER II

THEORETICAL AND EMPIRICAL CONSIDERATIONS

The conceptual framework underlying this study is derived from the literature and based on the concepts of adolescent hopefulness, self-esteem, and social support. The framework describes the effect of selected environmental and personal variables on adolescent hopefulness.

Literature related to the concepts of hopefulness, self-esteem, and social support is treated across the disciplines of psychology, sociology, education, theology, medicine and nursing. Discussion will be organized topically as follows: Hopefulness, self-esteem, and social support with integration of adolescence throughout. This division is pragmatic and an attempt will be made to demonstrate the interrelatedness of these topics.

Hopefulness

Pandora, the first mortal woman, was sent by Zeus as a punishment to mankind for the theft of fire by Prometheus. Pandora was dispatched to her husband, Epimetheus, on earth, with a chest which she was warned not to open. Curiosity, however, had been built into Pandora's character thus she was unable to resist and opened the box. Upon opening the lid she released all human ills into the world. Although she quickly slammed the lid shut only one thing was left— that was HOPE.
Hope, says the myth, is what makes the rest of our human cares and troubles bearable. (Pandora's Box).

**Conceptualizations**

Hope is a concept commonly used by all persons in everyday life (Stanley, 1978, p. 1): it is a state of mind shared by politicians, poets, and gamblers as well as by philosophers, theologians, psychologists, psychiatrists and nurses (Pruyser, 1963). The concept of hope has intrigued men for centuries, with its introduction into Western thought traced to the Greek's mythological Pandora (Menninger, 1959; Nelson-Martens, 1988; Smith, 1983). Over the years, Philosophers (Marcel, 1951; Pruysers, 1963) have argued what hope is and what it is not: Theologians (Fallon, 1961; Van Kaam, 1976) have described people as "beings of hope" while sociologists and anthropologists have presented the power of hope and its relationship to survival (Tiger, 1979). Psychiatry has associated the lack of hope (hopelessness) with depression and suicide (Beck et al. 1974). Psychologists have identified hope in relation to the fundamental needs of man and the requirement of human satisfaction (Callieri & Frighi, 1968) and have placed hope at the very heart and center of a human being (Lynch, 1965). In the health sciences hope has been described as one source of strength in all healing processes (Korner, 1970), for the practice of nursing hope is believed to directly and indirectly influence an individual's health state by helping
the individual to work at maintaining, regaining or augmenting health (Hinds & Gattuso, 1991; McGee, 1984; Nelson-Mart, 1988; Watson, 1979).

**Concepts Emerging in the General Literature.** Hope has been conceptualized as a trait or a state. McGee (1984) differentiates that as a trait variable, there is an individual predisposition toward a hopeful or pessimistic approach to life, whereas hopefulness as a state variable, its level at a given time is influenced by such factors as the perceived probability of goal achievement, perceived internal and external resources (support) or the importance of the goal (p. 39).

Lynch (1965) describes hope as an interior sense that needs a response from outside and has meaning only as it relates to others. In other words, hope cannot be achieved alone, it must in some way be an act of community (p. 24). Hope is an action-oriented concept, an aspect of motivation which dissipates powerlessness and fosters control. Hope is "a sense of the possible" (Lynch, 1965).

Stotland (1969) defines hope as the perceived probability of success, a conviction that the desired goal is truly obtainable. Stotland (1969) analyzed hope in relation to motivation, action, achievement, anxiety, and goal attainment, and suggested empirical support for the following propositions: (a) The greater the individual's expectation of attaining a goal, the more likely he will be
to act to attain it; and (b) the more important the goal is, the more likely the individual to selectively attend to aspects of the environment relevant to attaining it (Stotland, 1969).

Erikson (1961) and Fromm (1968) proposed that hope has early developmental origins. Fromm (1968) viewed hope as instinctive in nature with a potential for erosion due to violations by those in one's environment. Erikson (1961) conceptualized the existence of traits such as hope from the beginning of life and proposed that hope optimally matures during infancy and is reinforced through time (p. 153). Erikson (1982) goes on to suggest that hope in its mature form becomes a sense of certainty about others and the coherent nature of life, invoking a sense of consolidation and holding on to one's identity over time. Nurmi and Pulliainen (1991) conceptualized hopefulness as one's orientation to the future and suggest that a number of factors such as age, gender, family support and self-esteem explain differences in an adolescent's hopefulness (Nurmi & Pulliainen, 1991).

Meissner (1973) contends that hope is a basic quality of experience and thus becomes a resource for further adaptive functioning and coping. This basic quality of experience in human development is the motive force of change. In a similar vein, Dufault and Martocchio (1980) conceptualize hope as a "multidimensional dynamic life force
characterized by a confident yet uncertain expectation of achieving a future good, which to the hoping person is realistically possible and personally significant" (p. 380).

In summary, hope is a concept which has been known to man for thousands of years with its significance changing over the years. Currently scientists share a recognition of hope as an important factor in understanding and motivating human behavior with hope commonly identified as a positive expectation of future-oriented attainment of goals. Hope is a goal-directed (Lynch, 1965) motivating force (Stotland, 1969). Hope fulfills a function in the motivational process and the attainment of future goals is impossible without hope (Lynch, 1965; Meissner, 1973; Stotland, 1969). In other words, hopefulness is a mediating construct between antecedent and consequent events and thus necessary to explain a behavioral outcome such as goal attainment (Stotland, 1969). Hopefulness is sensitive to changes in situations and events (Hinds, 1985), and may fluctuate over time and across situations (Hinds, 1985; Smith, 1983). For some, hopelessness is considered the polar opposite of hope, however, Lynch (1965) asserts that hope and hopelessness must keep their separate identities and not be allowed to contaminate each other. As Lynch (1965) describes "a hopeless person is oriented toward the present rather than the future, is overwhelmed by difficulty and is not able to solve problems, even when presented with possible
alternative" (p. 29). Conversely, a hopeful person dissipates powerlessness and has a sense of the possible (Lynch, 1965).

**Conceptualization of Hope Within the Nursing Context.** Hope has held intuitive appeal for the practice of nursing, with the profession being challenged to explicate its relevance for the past several decades. Walsi (1967) considered hope as a basic nursing concept that provided a framework for nursing actions. She emphasized however that nurses need to identify and study factors related to hope which would clarify nursing actions. Travelbee (1971) defined hope as "a mental state characterized by the desire to gain an end or accomplish a goal combined with some degree of expectation that what is desired or sought is attainable" (p. 77). Travelbee (1971) went on to identify six characteristics of hope: hope is strongly related to dependence on others; hope is related to choice; hope is related to wishing; hope is closely related to trust and perseverance and hope is related to courage (p. 77). An important aspect in her discourse was that although nurses cannot give hope to another person, by understanding the meaning of hope, interventions can be developed to assist the patient to experience hope. In other words, as noted by Walsi (1967), nurses are in an ideal situation to assist individuals to hope, but study is needed to determine what
hope is, as well as factors and nursing actions that affect hope and hopefulness.

Nursing's earliest efforts to study hopefulness were conducted in the form of clinical observations and recounted in anecdotal reports of the behaviors of individual patients or nurses. For example, Skolny and Riehl (1974) present a case study in which the mother of a young man with a brain stem contusion was assisted to find an appropriate model of mothering and to accept the reality of her son's illness. The study presented two concepts of hope: (1) hope is the ability to believe that though one is uncomfortable now, one will feel better in the future; and (2) hope is a commitment to growth and being (p. 209). "Once hope is experienced, it becomes generalized to a commitment of life and growth" (Skolny and Riehl, 1974, p. 208). The authors pointed out that it is not an easy task to help a client to hope, it requires: (1) a concrete definition of hope, (2) an explicitly defined analytic model, and (3) identification of the relationship of hope to the selected model (p. 271).

In an attempt to provide clarity for the concept of hope, Stanley (1978) used an existential phenomenological approach in her investigation of "the lived experience of hope" by asking 100 college students (junior and seniors) to describe how each felt when one experienced hope in a situation. Stanley identified seven elements common to experiencing hope among these students:
1. Expectation of a significant future outcome
2. Being "confident" of outcome
3. Taking "action" to affect outcome
4. Experiencing "comfortable feelings"
5. Experiencing "uncomfortable feelings"
6. Having "interpersonal relatedness"
7. Having a quality of "transcendence"

Stanley (1978) synthesized these common elements into the following definition:

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The lived experience of hope is a confident expectation of a significant future outcome accompanied by a quality of transcendence and interpersonal relatedness and in which action to effect the outcome is initiated.
(Stanley, 1978, p. 65).
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Brunsman's (1988) phenomenological study focused on hope in families with a chronically ill child. Her findings specified that hope is a process that arises as one anticipates the future in the day-to-day struggle of living, the opportunities and limitations of creating a different view of the situation. Parse's (1990) study based on her model of Man-Living-Health in uncovering the structure of the lived experience of hope was carried out with a sample of ten adults on hemodialysis. The structure of hope emerging from this study was: Hope is anticipating possibilities through envisioning the not-yet, in harmoniously living the comfort-discomfort of everydayness while unfolding a different perspective of an expanding view
Parse's structure of hope is congruent with the findings from the two studies of hope conducted by Stanley (1978) and Brunsman (1988).

The foregoing studies provide conceptualizations of hope derived from observations of adults experiencing serious and/or terminal medical conditions, alterations in mental health status, young healthy college students and care providers, however, this literature does not include the meaning and importance hopefulness has for adolescents. Conceptualizations of hopefulness differ between adults and adolescents due to developmental and experiential differences (Hinds, 1988).

Conceptualization of Adolescent Hopefulness. The developmental tasks associated with adolescence involve the integration of growth in the physical, social, and psychological spheres, with the inevitable changes requiring incorporation into the self (Erikson, 1959). These developmental tasks include: (a) accommodation to pubertal changes with acceptance of a new body shape in a society with strict standards of attractiveness, (b) re-negotiation of childhood ties with parents, and (c) the broadening of one's social networks (Mahon, 1983; Nurmi, 1989; Lancaster, Altmann, Rossi, & Sherrod, 1987; O'Sullivan, 1992). Adolescents must confront a number of these tasks simultaneously and have little control over how the tasks present themselves (Nurmi, 1989). Regardless, these tasks
must be accomplished by the youth as he/she progresses toward adulthood. Adolescent tasks are characterized by a focus on the future with an emphasis on one's profession and education, a concern for one's parents and family, on developing autonomy, and a broadening of the social network (Lanchaster et al., 1987; Nurmi, 1989; O'Sullivan).

On the other hand, adult developmental tasks include generativity and integrity. Generativity refers to establishing and guiding the next generation while integrity refers to accepting the time limitation of life, and a sense of being part of a larger history (Erikson, 1959). Characteristics of adult tasks are faith in the future, belief in the species and ability to care about others (Erikson, 1959). Such differences in developmental tasks between adults and adolescents seem to indicate that it is necessary to consider adolescent's hopefulness from a perspective that is focused on development.

Hinds' Conceptualization of Adolescent Hopefulness was induced through qualitative methods used with varying populations of adolescents over a two year period (Atwood & Hinds, 1986; Hinds, 1984, 1988b). The impetus for these qualitative studies arose from Hinds' (1985, 1988b) interest in nurse-adolescent patient interactions and elements integral in promoting positive health outcomes. The conceptualization evolved from the idea that adolescent hopefulness is the degree to which an adolescent believes
that a personal tomorrow exists, to the notion that adolescent hopefulness is the degree to which an adolescent possess a reality based belief that a personal tomorrow exists, and to the current definition:

Adolescent hopefulness is the degree to which an adolescent possesses a comforting or life-sustaining reality based belief that a positive future exists for self and others (Hinds, 1988, p. 85).

According to Hinds (1988b), adolescent hopefulness is not either present or absent, but rather it occurs in degrees which range along a continuum comprised of forced effort, personal possibilities, expectations of a better tomorrow and anticipation of a personal future. The dimensions are as follows: (a) Forced effort is the degree to which an adolescent tries to artificially take on a more positive view, "I won't let myself spend all my time feeling sorry for myself"; (b) Personal possibilities is the extent to which an adolescent believes that second chances for the self may exist, "I'm getting some self-confidence"; (c) Expectations of a better tomorrow is the degree to which an adolescent has a positive although nonspecific future orientation, "Things will always get better"; and (d) Anticipation of a personal future is the extent to which an adolescent identifies specific and positive future possibilities for self, "I have the ability to change my destiny" (Hinds, 1988b, p. 84). Hinds (1988b) reports that as the level of hopefulness increases, a concomitant
increase in specificity of hoped for objects occurs. Hoped-for objects refers to what the adolescent is striving for (Hinds, 1988b). Examples of hoped for objects are "hope to keep myself going", "get a chance with my family", and "go to college" (Hinds, 1988b).

Hinds (1991) identifies the following assumptions as guiding her conceptualization:

1. Hopefulness is a prerequisite for achieving satisfactory adulthood (Smith, 1983).
2. Hopefulness is a dynamic and universal concept.
3. Adolescents attempt to achieve a hopeful state when threatened with some kind of crisis.
4. Adolescents are vulnerable to the presence or absence of hopefulness (Smith, 1983).
5. Hopefulness is an internal state that may be influenced by external others.
6. Hopefulness is a process which is influenced by factors such as age, diagnosis, illness progression, religiosity, and personality traits.

Adolescent hopefulness, thus can be considered differently from adult hopefulness with respect to developmental and experiential issues.

**Measurement of Hopefulness**

Building upon Stotland's (1969) psychology of hope, Stoner (1982) constructed and tested a self-report instrument designed to measure hopefulness: The Stoner Hope Scale (SHS). Her study sample consisted of 58 adult caucasian patients diagnosed as having cancer. The measured hopefulness levels were correlated with selected personal and situational variables. The instrument reflected three domains of hope: Intrapersonal, interpersonal and global. Intrapersonal hope is defined as the domain of hope founded on interior resources and beliefs. This hope arises from within the person and is not dependent on transaction with another being (for example, "To overcome fears I have"). Interpersonal hope is the domain of hope in which the sphere of involvement extends beyond the self and is definitely dependent on transaction with external resources. Interpersonal hope occurs or exists because of the connection between individuals (i.e., "To have people seek me out as a friend"). Global hope is the category of hope that refers to the broad scope of issues and concerns important to people in a general sense. Global hope goes beyond the person and interpersonal relationship to the sphere of involvement (for example, "hope for the human race, the world and beyond") (Stoner, 1982, p. 80).

The SHS demonstrates acceptable reliability and validity (Stoner, 1982). Four separate reliability estimates, one for each of the three subscales, Global,
Interpersonal, Intrapersonal, and one for the total hope scale were calculated: (a) the Global subscale, $r = .883$, (b) Interpersonal subscale, $r = .852$, (c) Intrapersonal Subscale, $r = .875$, and (c) Total Hope Scale, $r = .928$ (Stoner, 1982, p. 113). The instrument's validity was determined by a panel of experts in the content area (a mental health specialist and two oncology nurse clinicians) (Stoner, 1982).

Results suggested that the subjects in her study were moderately hopeful (Stoner, 1982, p. 184), with significant, positive relationships found between hope and social support, religiosity, and femaleness. Significant negative relationships were found between hope and contact with other cancer patients and socioeconomic states. An integral finding was that the more social support the subjects received the higher the level of hope they exhibited (Stoner, 1982, p. 191).

The Hopefulness Scale for Adolescents (HSA) developed by Hinds (1985) is a 24 item scale designed to measure the degree of positive future orientation an adolescent feels at the time of the measurement (Hinds & Gattuso, 1991). The scale items were derived from actual quotations of adolescents who participated in a qualitative study, the purpose of which was to develop conceptual and operational definitions of adolescent hopefulness (Hinds, 1984).
Two alternate forms of the HSA, A and B, were constructed. Since the dynamic nature of hopefulness implies the need for repeated measurement in the same adolescent at selected time points, concern arose regarding the effects of memory or recall on the reliability of the scale if the same form was used at each point which led to the construction of alternative forms (Hinds & Gattuso, 1991). Panels evaluated the questionnaires for content validity. Three adolescents comprised one panel and three nurses who routinely provide care for adolescents comprised the other panel. Findings from both panels indicated the HSA accurately and adequately represented the conceptual domain of hopefulness (Hinds & Gattuso, 1991).

The HSA has been completed by more than 400 adolescents including adolescents who were well, diagnosed as substance abusers, receiving treatment for emotional or mental disturbances or receiving treatment for cancer (Hinds & Gattuso, 1991). The HSA has consistently achieved moderate to strong internal consistency estimates (.76 to .94 using Cronbach's alpha) and some evidence of construct validity (Hinds, 1985, 1988; Hinds, Scholes, & Gattuso, 1990). Although additional evidence for construct validity is needed, current findings indicate the HSA is able to adequately and sensitively measure adolescent hopefulness (Hinds & Gattuso, 1991).
The HSA can be presented in two formats: visual analog scale (VAS) or Likert. The Cronbach alpha values of 0.88 for the Likert format and 0.91 for the VAS format indicate that the scales measure the same single concept (Hinds & Stoker, 1988). Findings reflect however that fewer VAS responses occurred at the lower level of the scale and of additional interest the VAS seemed to induce a "response set" (the tendency to give the same answer option to all or a majority of items) rather than the Likert.

Nowotny (1986) developed the Nowotny Hope Scale (NHS) to access perception of hope. Nowotny's (1986) sample of 306 subjects in the age range of 20-85 years included subjects diagnosed with cancer, other chronic illnesses as well as some healthy subjects. The scale verified that hope was a measurable quantity and that varying levels of hope were present in well individuals as well as in cancer patients. Six factors (subscales) were extracted for the 29-item NHS. These subscales were (a) confidence, (b) relates to others, (c) future is possible, (d) religious faith, (e) active involvement, and (f) comes from within. The NHS is a reliable and valid instrument with content validity established through the use of an expert panel and construct validity established using principal component analysis. The NHS achieved strong internal consistency, $r=.897$ (Nowotny, 1986). The applicability to subpopulations, such as different racial, cultural,
socioeconomic backgrounds, and of various ages and those seriously ill and terminally ill however requires investigation (Herth, 1991).

The scale attempts to capture the multidimensionality of hope, however it fails to capture the non-specifically oriented global sense of hope (Herth, 1991). As explained by Hinds and Martin (1988) a non-specifically oriented sense of hope refers to the view that some element of hope is always operative in a person. In other words, some hope is always present in a person but the amount and force of that hope may vary (Hinds & Martin, 1988).

Miller and Powers (1988) developed the Miller Hope Scale (MHS), a 40-item, 5 point likert type response tool, to measure hope in 522 healthy adults. Hope was conceptualized as more than goal attainment. Rather, hope is a complex multidimensional construct encompassing a state of being (Miller & Powers, 1988, p. 9). The instrument is based on the ten critical elements of hope described in the literature: (a) Mutuality-affiliation, (b) sense of the possible, (c) avoidance of absolutizing, (d) anticipation, (e) achieving goals, (f) psychological well-being and coping, (g) purpose and meaning in life, (h) reality surveillance-optimism, (i) mental and physical activation, and (j) freedom (Miller & Powers, 1988, p. 7).

Construct validity was demonstrated by high correlations of the MHS with well-established measures of
constructs integral to hope specifically, psychological well-being, $r = .71$, and purpose and meaning to life, $r = .82$. Internal consistency was high, $r = .93$ with a test-retest reliability at a 2 week interval of .87 (Miller & Powers, 1988, p. 9).

Herth (1991) based The Herth Hope Scale (HHS) on Dufault and Martocchio's model of hope (1985) which combines philosophic, theologic, sociologic, psychologic and nursing perspectives of hope. The model conceptualizes hope as multidimensional and process oriented, and has two related but distinct spheres (generalized and particularized hope) that have six common dimensions (p. 41). Generalized hope creates a positive overall view, transcending the limits of time, while particularized hope is concerned with a specific time-valued outcome. The six dimensions of hope (affective, cognitive, behavioral, affiliative, temporal, contextual) characterize the processes of hoping, in that multiple processes of hoping are active in the same person at the same time. Herth (1991) combined the conceptualized dimensions of hope in Dufault and Martocchio's model (1985) and used it as a framework for generating items: (a) cognitive-temporal, the perception that a positive, desired outcome is realistically probable in the future; (b) affective-behavioral, a feeling of confidence, with initiation of plans to effect the desired outcome; and (c) affiliative-contextual, the recognition of interdependence
and an interconnectedness between self and others and between self and spirit (Herth, 1991, p. 41). Psychometric evaluation has shown promising preliminary results when the tool is used with well adults (p. 45) cancer patients in the hospital (p. 43), and elderly in the community (p. 45). The applicability to subpopulations, such as different racial, cultural, socioeconomic backgrounds and of various ages and health problems requires investigation. Study findings show that the tool, a 4-point, 30 item rating scale, has content and initial construct validity, however, a more rigorous assessment of construct validity is necessary (Herth, 1991).

In summary, important work has been conducted in developing reliable and valid instruments to measure the construct of hope. However to reliably and validly measure the phenomenon of hopefulness, the instrument must not only be sensitive to the concept being measured but also appropriate for the age group being sampled. The Hopefulness Scale for Adolescents (Hinds, 1985) is the only instrument that has established reliability and validity with adolescent populations.

**Explanations of Hopefulness**

A review of the literature finds explanations of hopefulness offered from various perspectives for both healthy and vulnerable population groups. The emphasis however has been placed on persons with illness and especially those experiencing cancer.
Buehler (1975) using a descriptive correlational design, investigated factors which affected hopefulness of 24 cancer patients who were receiving radiation therapy. Buehler's (1975) findings indicated that these subjects "tended to vacillate between hope and doubt, with hopelessness the more common response" (p. 1353). Factors which positively influenced patient's hopefulness included social, psychological and structural conditions in environmental cues, especially those given by the health professionals. Buehler's (1975) findings are limited due to small sample size, a select patient group, and few controls, however it does point to the importance of social support especially that of health professionals in influencing hopefulness.

The relationships between hopefulness and the variables of love, mutuality, freedom, and newness were investigated by Thompson (1980). Using a descriptive-correlational design, Thompson developed an outline of nursing interventions based on a content analysis of in-depth interviews and questionnaire responses of 10 patients diagnosed with cancer. Thompson's outline was divided into four sections: (a) provision of a supportive climate, (b) facilitation of a hopeful perceptions, (c) assistance for the patient making plans; and (d) assistance with taking cognitive and behavioral actions. Although the study is based on a small sample size, used unreliable and possibly
invalid instruments, Thompson's findings provide an insight that may have significant influence on hopefulness.

Raleigh (1980) conducted a descriptive-correlational study investigating the relationship between belief in internal locus of control of health and level of hopefulness. Defining hope "as an expectation of achieving a desired goal...manifested by an orientation to the future" (p. 40) she attempted to identify the variables which aid physically ill adults in maintaining hope. Raleigh administered three questionnaires indexing locus of control, sources of support and hopefulness to 90 adults of which half of the subjects had non-life-threatening cancer. The study did not support the hypothesized positive relationship between internal locus of control and level of hope (Raleigh, 1980, p. 64). However, the study provides an insight into such variables as social support and length of illness having impact upon hopefulness.

Stoner and Keampfer (1985) studied the relationship between recalled life expectancy and hope in cancer patients and the effect of phase of illness on the level of hope. Using the Stoner Hope Scale (SHS) data were collected from 55 cancer patients. Although Stoner and Keampfer found that hope was not influenced by extent of illness, an analysis of variance showed a significant main effect on hope, recalled life expectancy and a difference in level of hope at different phases of illness.
Nelson-Marten's (1988) descriptive correlational study was two-fold: (a) to describe how cancer patients and healthy individuals defined health, perceived their own health state and perceived the phenomenon of hope; and (b) to determine whether relationships exist between a person's definitions of health, the persons perception of his own health state, and the person's level of hope (p. 164). Findings of the study were as follows: (a) both groups fell within the moderately hopeful range, although the cancer group had higher total mean scores, and (b) there were significant relationships between the three variables of definitions of health, perception of hope, and perception of health state. The results did not support the hypothesis that the more positive the individuals perception of health the greater the perception of hope. Health outlook was found to be important to the cancer client while current health was important to the healthy person. Cancer patients further reported higher levels of hope. What emerges from these studies with cancer patients is that hopefulness is associated not only with the person's illness state but also with other personal aspects such as attitudes regarding self, attitudes regarding illness and environmental support.

McGee (1984) applied propositions on the concept of hope gleaned from the literature to develop a model of expected responses to developmental or situational crises among people with varying degrees of hopefulness (p. 34).
Her model is based on her belief that persons have predominant hope patterns, which place them in a given category and that changes in perceived internal or external resources can move the individual into crisis (p. 42). McGee (1984) conceptualizes hope as having both a state and trait component; as a trait variable there is an individual predisposition toward a hopeful or pessimistic approach to life; while state variables (for example, perceived probability of goal attainment, perceived internal or external resources/ support, and/or goal importance) influence the level of hopefulness exhibited at a given time (p. 39). McGee's model of hope recognizes the potential for two extreme views of hope and she places hope on a continuum with despair as the polar opposite and divides this continuum into typical responses to the occurrence and management of illness: Unrealistic hopefulness, realistic copers, fragile copers, chronically fearful, and unjustified hopelessness. The desirable balance in this model is characterized by those individuals who have a positive outlook on life while accepting areas of actual and realistic hopelessness, when appropriate. The model lacks empirical testing at this time.

Owen (1989) argues against the notion of hopefulness as a time and future-oriented construct based on her experiences with patients who seemed unusually hopeful in spite of poor prognosis (p. 75). Using grounded theory
methodology Owen focused on developing an understanding of the meaning of hope for patients with cancer, as described by six oncology nurse specialists. The intention was to provide better insight into how nurses might intervene with patients with cancer. Six subthemes emerged from the vivid descriptions provided by the clinical nurse specialists: goal setting, positive personal attributes, future redefinition, meaning of life, peace, and energy. Energy further emerged as a strand running through each of the six subthemes with each subtheme describing a component of the process, whereby energy was exchanged, transformed, or moved, resulting in the preservation or loss of hope. Findings support the contention that hope is a dynamic process in which patients respond to changing life events, that certain individuals found hope despite external conditions, and that the hopeful seemed to be innately equipped with positive personal attributes that despite the circumstances, enables uplifting feelings and thoughts to be found (p. 78).

Farran, Salloway, and Clark (1990) and Farran and Popovich (1990) explored associations between stressful life events, social support, religiosity, personal control, hope and health using two scales for measuring the central attributes of hope: the Hopefulness Scale (HFS) and the Stoner Hope Scale (SHS) in a sample of community-based, healthy older adults. They hypothesized that learning more
about the relationships between the variables and hope, would facilitate detection and thus avert lapses in hope among older patients. This knowledge would further assist in shaping interventions to enhance hope (Farran & Popovich, 1990, p. 125). Results indicate the strongest positive relationship is found between Mental Health Status (MHS) and Physical Health Status (PHS) \( r = .49 \). Mental Health (MH) is inversely related to stressful life events (SLE) \( r = -.28 \), and positively related to social support, \( r = .22 \). It was also found that the two hope scales are related, \( r = .26 \), but they function differently in their relationships with the other variables. The Stoner Hope Scale (SHS) represented an interactive hope, while the Hopefulness Scale (HFS) was viewed as measuring a global hope (Farran, Salloway, & Clark, 1990). The SHS (Stoner, 1982) is related to social support and Interpersonal Control, while the Hopefulness Scale (HFS) is only related to these variables through the Stoner Hope Scale (Farran, Salloway, & Clark, 1990). The researchers concluded that (1) hope is essential in caring for older adults and (2) a primary nursing function is to assist the client to recognize and develop social support to foster a greater sense of hope.

Holdcraft and Williamson (1991) using the Miller Hope Scale (1986) investigated the hope of psychiatric and chemically dependent inpatients during the initial phase of treatment and at discharge. The study used Miller and
Powers (1988) definition of Hope: "a state of being characterized by an anticipation for a continued good state, an improved state, or a release from a perceived entrapment. Hope is an anticipation of a future which is good, based on mutuality (relationship with others), a sense of personal competence, coping ability, psychological well-being, purpose and meaning in life, and a sense of "the possible" (p. 6). Holdcraft and Williamson sampled 48 chemically dependent and 144 psychiatric inpatients in a large midwestern hospital. Hope was found to be significantly higher at time of discharge and approached the healthy population norms measured by the Miller Hope Scale. The researchers point out that an overly hopeful attitude in the early stages may indicate denial which should alert the mental health nurse to recognize that levels of denial need to be addressed in order to help work toward acceptance, therapy, and positive outcomes.

Hinds' conceptualization of adolescent hopefulness does not have a set of logically interrelated propositions, rather a few concepts have emerged as adolescents describe the context in which they experienced or thought about hope (Atwood & Hinds, 1986). The concepts within the perspective are adolescent hopefulness, caring behaviors of nurses and adolescent health care outcomes. Adolescent hopefulness is the degree to which an adolescent possesses a comforting or life-sustaining, reality-based belief that a
positive future exists for self and others (Hinds, 1988b, p. 85). Adolescent hopefulness is not either present or absent, but rather it occurs in degrees. These degrees range along a continuum comprised of forced effort, personal possibilities, expectations of a better tomorrow and anticipation of a personal future (Hinds, 1988b).

Adolescent hopefulness is dynamic and sensitive to changing situations (Hinds & Gattuso, 1991), and necessary for maintaining health and achieving goals (Hinds, 1985). The construct adolescent hopefulness can be measured using reliable and valid instruments (Hinds, 1985, 1989; Hinds & Gattuso, 1991; Hinds & Stoker, 1988).

Caring behaviors of nursing are defined as the composite of purposeful acts and attitudes which seek to (a) alleviate undue discomforts and meet anticipated needs of patients, (b) convey concern for the well-being of patients, and (c) communicate professional competence to patients (Hinds, 1988b). Examples of such influential actions were reassurance, comfort, fondly promoting goal-directed efforts (Hinds, 1988b, p. 26). Adolescents identified nurses as influencing their hopefulness and labeled their influential actions as caring behaviors (Hinds, 1984).

Adolescent health care outcomes is defined as the result of care received by the adolescent in terms of palliation, treatment rehabilitation and cure (Hinds, 1985). Outcomes indexed in Hinds' (1985) study were social
functioning and attitudinal status. Psychosocial functioning is the ability of the adolescent to interact in an acceptable, appropriate manner with one or more people (Hinds, 1988a). This ability is a developmental task of adolescence (Havighurst, 1974) and is frequently used to indicate adequate adjustment following professional intervention (Hinds, 1985; Ricks, 1970; Smith, 1983).

Hinds' conceptualization of adolescent hopefulness has been supported and expanded through multiple qualitative studies (Atwood & Hinds, 1986; Hinds, 1984, 1988; Hinds & Martin, 1988; Hinds, Scandrett-Hibden, & McAulay, 1990). Correlational findings indicate that the concepts of caring behaviors of nurses and adolescent hopefulness exist together thus supporting the theoretical assertion that nurse-patient relationships may function as a vehicle to promote positive outcomes (Hinds, 1985). In other words, nurses are able to use interpersonal skills to promote a more positive future view in adolescents (Hinds, 1985; Hinds & Martin, 1988). Findings also support the theoretical assumption that hopefulness is an internal state that may be influenced by external others (Hinds, 1985). Testing of other proposed theoretical linkages has not occurred.

The review of the conceptualizations and explanations of hopefulness within the nursing context finds the following common themes: (a) a future orientation, (b) an expectation of attainment of important goals and (c) the
recognition of hope as an interior sense that is dependent on interaction with others (Foote, et al., 1989; Hinds, 1985; Stoner, 1982). It is also from this review that the concepts of self-esteem and social support emerge when the concept of hopefulness is viewed as a state of mind and considered to be formed within the context of self and social support.

**Summary**

In summary, adolescence is a time of self-discovery and independence with the development of self-esteem. Self-discovery involves the search for self-identity and it is through experience that people develop enduring generalized expectations that involve fundamentally linked conceptions about self and the world. Nurmi (1989) reported that adolescents' with positive self esteem and trust in their abilities have a more positive outlook toward their future (hope). Independence or autonomy encompasses the emancipation from parents concurrent with the expansion of social boundaries. Erikson (1968) identified the achievement of autonomy as a major source of self-esteem for the individual, with the process beginning at home. Studies have shown that family context (Greene, 1986; Nurmi, 1989) also provides a basis for adolescent's hopes for the future. For example, Nurmi (1989) reported that mother's level of life planning correlated positively with the level of adolescent's educational plans thus supporting the
contention that the basis for future planning is learned within the family context.

These findings indicate the significance of self-esteem and social support in adolescence as key constructs in predicting hopefulness towards the future or specific goals and are therefore selected as key factors in constructing a theoretical framework for the study of hopefulness. The concepts of self-esteem and social support will be elaborated in the following section.

**Self-Esteem**

The concept of self-esteem has held intuitive appeal for theorists and researchers in a variety of disciplines for decades. Currently, the term self-esteem is prevalently used throughout the literature and the consensus is that it is an integral component in determining human behaviors (Coopersmith, 1967; Foote et al, 1990; Rosenberg, 1989; Wells & Marwell, 1976). The concept has appeared in a wide range of contexts and under an assortment of names: Self-worth, self-concept, self-image, self-regard, and self-acceptance have all been used interchangeably with the concept of self-esteem (Stanwyck, 1983; Wells & Marwell, 1976). Stanwyck (1983) however offers a convincing argument that self-concept and self-esteem cannot be interchanged, that they are not synonymous, rather one's
self-esteem is based on one's self-concept (p.11). Stanwyck provides the following definitions: self concept is "how I see myself; while self-esteem is "how I feel about how I see myself" (p.11).

Chinn and Kramer (1991) characterize "self- esteem" as a highly abstract concept for which there are no direct measures. Rather, the instruments that are developed to directly assess self-esteem depend on theoretical definitions serving a specific purpose. Such an instrument is built on multiple behavioral responses that are thought to be associated with that concept (Chinn & Kramer, 1991, p.60). Wylie (1961, 1974) argues in a similar vein that most measures of self-esteem are global estimates, presumably based on the assumption that individuals are characterized by a consistent disposition toward self-evaluation that is uniform across situations.

In their seminal work Self-Esteem, Wells and Marwell (1976) organized the multitude of applications of self esteem into four basic types: (a) attitudes, (b) as relations between attitudes or selves, (c) as psychological responses, and (d) as a personality function. Self esteem as an attitude characterizes it simply as a particular kind of attitude (of approval or disapproval about oneself) or as an aspect of all self-attitudes. The second grouping depicts self-esteem as a discrepancy between sets of two (self) attitudes, one set involving people's perceptions and
cognition of how they really are (real self-concept) and the
other set involving their perceptions of how they feel they
ought to be or would like to be (ideal self-concept). The
third grouping defines self-esteem in terms of what
attitudinal or perceptual processes feel like or how people
react to them. This grouping emphasizes that self-esteem is
not a discrepancy between but rather a feeling attached to
it (self-acceptance). Self-esteem in the fourth group is
defined as a conceptual buffer which regulates the extent to
which the self-system is maintained under conditions of
strain. The greater the internal regulation of the person's
self system the higher self-esteem (Ziller et al., 1969).
These distinctions are subtle yet have substantial
operational implications (Wells & Marwell, 1976, p. 233).
From their exhaustive review on the evolution of the concept
of self-esteem, Wells and Marwell (1976) concluded that the
multitude of definitions and or terms denote some basic
processes of psychological functioning which can be
described as either self-evaluation, self-affection, or the
combination of the two, moreover, the term is considered to
be a subset of the self-system (p. 7). Thus, to talk about
self-esteem it is first necessary to imply something about
the nature of self.
Since the beginning of philosophy itself, the idea of
self and various self-referent phenomena have been of
interest. Philosophers traditionally have been concerned with self-reflexive relations and obligations, although the word "self" was usually synonymous with the terms, soul or person (Wells & Marwell, 1976, p. 4).

The writings of William James (1890) are generally identified as the standard reference for an initial discussion of self. James's concern was not with the self as a psychological entity, but rather as behaviors and behavioral structures. James viewed self as an entirely conscious phenomenon, in a continuous dialogue between the I and Me, and that the evaluations (self-esteem) a person places on oneself are dependent upon one's aspirations (p. 294) or a person has high self-esteem to the degree that one's aspirations (pretensions) and one's achievements tend to converge.

Cooley (1902) sought to emphasize the continuity of the individual with society and suggested that it makes no sense to think of self apart from the social milieu in which one is embedded or the other persons with whom one interacts. Thus emerged Cooley's notion of "the looking glass self" which postulates that an individual's conception of oneself is determined by one's perception of other's reactions to him (p. 151-152). This self-idea has three principal elements: (a) the imagination of our appearance to the other person; (b) the imagination of his judgment of that appearance, and (c) some sort of self-feeling (p. 151-152). Cooley saw the
self as a kind of instinct which functioned to unify and stimulate the individual behavior and he assumed the same kind of motive toward self-appreciation as James, however, as pointed out by Wells and Marwell (1976) "although Cooley distinguished between the empirical or social self/self-feeling, the distinction is not well made" (p. 16). Of interest is that although Cooley did not deal explicitly with self-esteem, he did include self-feeling as an aspect of the "looking-glass self," and postulated a need for protecting the self against negative influences.

It is Mead (1934, 1956) who is generally credited with providing the most cogent and systematic statement of self from a sociological perspective (Turner, 1968; Wells & Marwell, 1976). Mead not only blended the ideas of James and Cooley by juxtaposing the essence of self in the I-Me distinction and the self as a social phenomenon (a product of interactions in which the person experienced oneself as reflected in the behavior of others), he moved the concept forward by further refining and integrating these points, organizing them around the usage of symbols which differentiate uniquely human behavior from other forms of interaction (Mead, 1934, 1956).

Mead (1934, 1956) suggested that the self can be thought of as a collection of reflexive attitudes which emerge in the concept of a given social situation. Although Mead did not deal explicitly with self-esteem, his concern
mainly being with the process by which the self develops, he did discuss the effects of self-evaluation and assumed the same kind of self-esteem as James and Cooley. For Mead (1956) enhancement must be relative to other people and clearly presumes not only self-evaluation but a social comparison process. Mead's conception of self can be interpreted as having several important features relevant to the description of self-esteem: (a) the idea of multiple selves and a global self are complementary, rather than contradictory, and (b) self-esteem is an aspect of self-attitudes in general (Wells & Marwell, 1976).

Sullivan (1953) viewed the self as built out of experience by means of reflected appraisals and is an entirely learned phenomenon with development of this system traced to childhood. Coming from the developmental perspective Erikson (1968) specified that self-esteem develops in the context of development of the total personality.

Self Esteem and Adolescence

Adolescents are not exempt from the lifelong process of deciding whether and to what extent they are valuable and worthy. Rather, adolescence has been identified as a critical time in the development of self-esteem particularly since the "self" is of central concern to the adolescent. A understanding of self-esteem is considered basic to understanding adolescent behavior.
Morris Rosenberg (1989) describes the self as the most important thing in the world to the human animal, "the question of what he is and how he feels about himself engrosses him deeply" (p.ix). Rosenberg based his research on the assumption that the self-image is central to the subjective life of the individual largely determining one's thoughts, feelings, and behavior (p. ix). He asserted this to be especially true during the adolescent stage of development. Rosenberg viewed self-esteem as a kind of valuative attitude; that people have attitudes about all sorts of objects, the self being just one (p. 6). Self-esteem is the degree to which one holds attitudes of acceptance or rejection toward self.

Approaching self-image from a developmental perspective, Rosenberg (1989) identifies two principles for self-esteem formation: (a) reflected appraisals and (b) social comparison. The principle of reflected appraisals refers to the process of "taking the role of the other", or in other words becoming aware that we are objects of other's attention, perception and evaluation, and coming to see ourselves through the eyes of another (p. xx). The principle of social comparison refers to the phenomenon that people judge themselves in certain respects by comparing themselves to others.

Rosenberg (1989) focused his research on adolescents, society, and the phenomenon of self-image. He sought to
examine the development of self-valuative behavior in terms of the social milieu of adolescents, then relate self-esteem to subsequent social behaviors. His findings indicate that (a) the opinions of other people (reflected appraisals) are not equally important to the adolescent, rather the opinions of significant others are more likely to have a powerful impact, and (b) two comparisons which affect adolescents' self-esteem are socioeconomic status and school performance. Rosenberg contents that close, intimate relationships are integral in shaping self-esteem.

According to Coopersmith (1967) "self-esteem is a personal judgment of worthiness that is expressed in the attitudes the individual holds toward himself" (p. 5) and may vary according to age, sex, and experience. The extend to which the individual believes the self is capable, significant, successful, and worthy indicates the level of self-esteem.

Coopersmith (1967) contends that self-esteem is comprised of two parts: subjective expression (individual self-perceptions and self-description) and behavioral expression (behavioral manifestations of self-esteem which are available to outside observers). He also differentiates between true self-esteem (persons actually felt worthy and valuable) and defensive self-esteem (person's actually felt unworthy, but could not admit such threatening information) (Coopersmith 1967, p. 21). Four groups of variables are
identified as determinants of self-esteem: success, values, aspirations, and defenses (p. 242).

Coopersmith (1967) focused on the early development of self-esteem and initially restricted his research to pre-high-school children. Coopersmith concluded that there were no distinctive family patterns which differentiate high and low self-esteem children but there are conditions that seem to be conducive to the development of high self-esteem levels: (a) acceptance of children by parents, (b) enforcement of clearly defined limits for children by parents, and (c) respect for individual initiative and latitude within these limits by the parents. Coppersmith further studied the manifestations of self-esteem and reported that individuals with high self esteem were more likely to be selected as friends, were less likely to be conformist and that self-esteem is related to adjustment and behavior. In sum, an individual's chances for success increased with self-esteem.

Long, Ziller, and Henderson (1968) reported that the view of self in relation to others changes over time during the adolescent years. The years of adolescence are filled with numerous personal and social changes (Long et al, 1968). The perception of the value of self may alter to respond to changes in size, strength and status. An altered concept of self and the social world may demand new patterns
of identification with parents, teachers, and peers (Long et al., 1968).

Long and associates (1968) defined self-esteem as the value or importance attributed to self in comparison with others (p. 212). In their study of 420 student (30 males, 30 females in their proper grades of six through twelve), they found that self-esteem increased with age.

Lachovic-Girgin and Dikovic (1990) examined the developmental trends in the contribution of evaluations by significant others (mother, father, teacher and friend) to the self-esteem of adolescents. Their sample consisted of 399 adolescents (n = 147, males; n = 252, females). The results indicated that girls evaluate themselves more positively than boys, and young adolescents evaluate themselves more positively than older adolescents. This study supports Hirsch and Rapkin (1987) report of a decline in self-esteem as measured by Rosenberg's Self-Esteem Scale (1965) at the time of transition from elementary to high school.

Hirsch and Dubois (1991) investigated the difference in self-esteem trajectory in early adolescence, using longitudinal data obtained from 128 early adolescents over a two year period, which covered their transition from grade school to high school. Findings indicate that peer social support is a strong predictor of self-esteem as measured by Rosenberg's Self-Esteem Scale (1965).
The achievement of autonomy is also identified as a major source of self-esteem for the individual (Erikson, 1968) with the process beginning at home. Stanwyck (1983) maintains that a youth who enters adolescence with high self-esteem and high level of intra-family independence has a realistic sense of autonomy and will use the high school years to refine academic and social competencies. Nurmi and Pulliainen (1991) found similar conditions in the families of adolescents (eleven and fifteen year old) with high self-esteem; although the focus of their study was on future orientation not identity formation, social cognition, or high risk behavior. In a study designed to investigate how parental control, level of family discussion, self-esteem and intelligence influence adolescent's orientation to the future, 57 10-11 year olds and 56 14-15 year olds, initially interviewed in 1987 were sampled. Individual interviewing using the Finnish version of the Rosenberg Self-Esteem Scale Adolescents was adopted for data collection. Findings indicated that those adolescents with increased self-esteem were more internal in decision making, and their thinking extended further into the future. They also reported those having high self-esteem mentioned hopes concerning education more often than those with low self-esteem (Nurmi & Pulliainen, 1991). They interpreted the findings to equate self-esteem with self-confidence and that high self-esteem seems to increase ones interest toward the future. Another
finding was that power relationship in the family changes as the adolescent grows older, with adolescent influence increasing with parental control decreasing. Nurmi and Pulliainen interpret the findings to influence adolescent orientation to the future in the following three ways: (a) Parents motivate children to become interested in different domains of their future life, such as future education, (b) family atmosphere provides a model of family life which may motivate adolescents to either plan their future family or, conversely not to, (c) the family context may provide a basis for adolescent's internality and optimism concerning the future.

In a similar vein, Gilberts (1983) observed that people with high regard tend to be better students, are bothered less by anxiety, display better physical health and enjoy better social relationships (p. 29). Rubin (1968) related self-esteem to the ability of individuals to use themselves functionally to achieve a precise goal. Rubin further equates self-esteem with control while feelings of shame and failures are the results of loss of control. Dryfoos (1984) endorsed comprehensive educational programs that encompasses the development of positive self-esteem and a favorable sense of future opportunities.

Kellerman, Zeltzer, Ellenberg, Dash and Rigler (1980) investigated the relationship between chronic or serious disease in adolescence, anxiety, self-esteem and perception
of control. Three hundred and forty nine healthy adolescents were compared with 168 adolescents with various chronic and serious diseases. Findings reported no differences between ill and healthy adolescents or differences between the various illness groups on the measure of self-esteem. There were differences between genders, with females having lower self esteem than males for both healthy and ill groups, however, the effects were not significant (Kellerman et al., 1980). In contrast, Seigel, Golden, Gough, Lashy and Sacker (1990) examined the relationship between depression, self-esteem, and life events for eighty nonhospitalized adolescents with chronic diseases, such as sickle cell disease, diabetes, and asthma, and 100 healthy peers. The subjects in both groups were from predominately low socioeconomic backgrounds (SES). Subjects completed a questionnaire compiled from the Beck Depression Inventory (BDI), Rosenberg Self-Esteem Scale and the McCutcheon Life Events Checklist. Adolescents with chronic disease had significantly higher levels of depression and lower self-esteem than their healthy age-matched controls, and no statistically significant difference was found according to life events. Depression, self-esteem and life events did not differ between the three chronic disease groups. The authors suggest that increased depression and lower self-esteem may be reflective of the lower SES status in that individuals with chronic illness
from higher socioeconomic levels have access to more support services and therefore experience less psychologic maladjustment (Seigel et al., 1990, p. 503).

Yarcheski and Mahon (1989) sampled 87 high school students and 78 college students to determine the interrelationships among perceived social support, self-esteem and positive health practices. Both social support and self-esteem had direct positive effect on PHP. However, social support had the strongest total effect due to (a) social support's direct effect on self-esteem, and (b) it's indirect effect through self-esteem.

In summary, it is apparent that self-esteem is a learned phenomenon, involving a life-long process. This learning process revolves around the interaction of the individual with the social environment, referring primarily to family of origin, and including significant others as they vary across the individual's lifespan (Coopersmith, 1967; Erikson, 1965; Mead, 1956; Muhlenkamp, 1986; Rosenberg, 1989; Stanwyck, 1983; Weeks, 1991). The development of self-esteem emerges when children enter school and fluctuates as children face stress, fear and competition (Riffer, 1981). In essence there are two sources of self-esteem: (a) the reflected appraisals of significant others and (b) one's accomplishments (Cooley, 1956; Coopersmith, 1967; James, 1890; Mead, 1902; Rosenberg, 1989). Of further note is that factors which influence
self-esteem parallel specific change and developmental tasks of adolescence with self-esteem becoming more stable and greater with age.

Another relevant factor pointed out by Antonucci and Jackson (1983) is that individuals with poor health have decreased self-esteem, in fact, reports of health problems regardless of type or severity are associated with significant lower self-esteem (Foote et al., 1990; Miller, 1987). An assumption could be drawn that the probability that people with health problems may also have lower levels of self-esteem. Another assumption that might be drawn from this is that low self-esteem may result in poor health practices. This assumption holds import for nurses working with adolescents.

Adolescence is a time for exploration with members of the opposite sex, with many adolescents experiencing a succession of relatively temporary significant others. Stanwyck (1983) points out these are often "high risk" relationships for self-esteem because the interpersonal skills required for success have not been perfected and because dating usually begins before adolescents fully understand their sexuality nor have brought it under control (p. 22). Opposite sex (peer) relationships become complex and confusing, yet acceptance and approval by at least one of them at a time often become supremely important (Stanwyck, 1983, p. 22). Rejection or disapproval may deal
severe temporary blows to self-esteem because partners seem to be selected for esteem enhancing potential, thus the need for acceptance and feeling good about oneself may increase the incidence of high risk behavior (Kellinger, 1985; Miller, 1987). In other words, adolescents with low self-esteem may be at greater risk for poor health care practices and high risk behavior than adolescents with high self-esteem.

**Self Esteem and Adolescent Pregnancy.** Adolescent self-esteem has been theorized to affect many aspects of one's life (Coopersmith, 1967; Rosenberg, 1989), and over the last several decades has been shown to be associated with adolescent pregnancy.

Zongker (1977) investigated the self-concept of pregnant school age girls and non pregnant school age girls in Northern Florida. The Tennessee Self-Concept Scale (Fitts, 1965) revealed that school age mothers exhibited poor self-esteem, feelings of inadequacy and unworthiness, more dissatisfaction with their family relationships and physical bodies. Horn and Rudolph (1987) compared the self-concept of gravida one, adolescent mothers to the self-concept published norms of the Tennessee Self-Concept Scale. They found that the self-concept of adolescent mothers was lower in comparison to the norm. In direct contrast Matsuhashi and Felice (1991), using the same instrument, compared the self-concept of 43 primiparous pregnant
teenagers (matched by age race, pubertal development by Tanner stage, and SES) to 43 never-pregnant teenagers and found that the pregnant teens had an overall higher self-esteem, a more positive body image, a surer self-identity, felt more productive as a family member, but appeared limited in their capacity for self-criticism. Matsuhashi and Felice (1991) interpreted the findings to indicate that for some teenagers, having a family may be a higher personal priority than completing school (p.314). They further suggested that some adolescent girls may be developing their own sexual identity through pregnancy. It should also be pointed out that the studies were conducted 15 years apart and in different geographic locations which may indicate a change in teen's perception of the acceptability of early motherhood.

Streetman (1987) studied 93 unmarried, 14 to 19 year old females to investigate the difference between self-esteem of female adolescents with children and without children. Seventy five per cent of the sample had at least one child. Self-Esteem was measured by using the Coopersmith Self-Esteem Inventory and Rosenberg Self-Esteem Scale. Findings indicate there was no difference in the self-esteem measures between childless teenagers and teenage mothers. Streetman (1987) reported that the impact of early motherhood showed significant differences in the symbolic importance of motherhood, as a passage into adult status,
and the effects of group anchorage which may mediate between individual's cognitive ability and their level of self-esteem.

Kellinger (1985) found no significant difference between unmarried pregnant and unmarried never been pregnant adolescent women in relationship between knowledge of contraceptive use, self-esteem and religiosity. Contraceptive use did not seem to correlate significantly with the adolescent's exposure to contraceptive information, level of self-esteem or issues related to religious attitudes (p.61). Kellinger (1985) suggests that strategies must be developed which not only provide information about pregnancy and contraception, but focus more attention on adolescent's feelings, values, and perceptions of life. Similarly, Zabin, Hirsch, and Boscia (1990) found that self-esteem as calculated with the abbreviated Rosenberg Scale was similar in 3 groups of pregnant, aborter, and non-pregnant adolescent, although the score in the abortion group was slightly higher approaching significance.

Durnst, Vance, and Cooper (1986) conducted a study to isolate factors that might be mediators and determinants of positive outcomes and consequently reduce the at-risk conditions often associated with a teenage pregnancy. Findings indicated that higher self-esteem was related to increased income, to having a less dense social network, internal locus of control and network members who provided a
greater number of types of support. The authors concluded that supportive experiences designed to foster a sense of empowerment can influence changes in interpersonal beliefs and increase self-esteem (p.46). In other words, the study emphasized the importance of support in the adjustment to adolescent pregnancy (Durnst et al., 1986, p.46).

Foster's (1989) descriptive correlational study investigated the relationship between selected variables (age, race, grade, family structure, sexual activity, and contraceptive use) and the self-esteem of adolescent mothers, pregnant adolescents, and never-been pregnant adolescent females. She sampled 512 adolescent females, aged 14 to 19 years from public high schools and county health departments in a southeastern state. Self-esteem was measured using the Coopersmith Self-Esteem Inventory (Coopersmith, 1967). Statistically significant differences were not found in the self-esteem of the adolescents, however, age was found to be significantly related to self-esteem in the group of adolescent mothers. Further, in both the adolescent mother groups and the pregnant adolescent group, the self-esteem score increased with age. The never-pregnant group averaged the youngest age and the highest self-esteem scores. Of note is that if non-pregnant adolescent's mothers had children as adolescents, the adolescent had lower self-esteem scores.
Adolescent self-esteem has been theorized to affect many aspects of one's life (Coopersmith, 1967; Rosenberg, 1989), and has been associated with adolescent pregnancy. The presumed relationship between self-esteem and adolescent pregnancy alluded to throughout the literature for several decades, however lacks empirical evidence to support this seemingly obvious relationship. Some researchers found that low self-esteem was associated with adolescent pregnancy (Zongkner et al., 1977; Lindeman, 1974) while others did not (Kellinger, 1985; Zabin et al., 1990; Matsuhaski & Felice, 1991). There could be many reasons for the discrepancies between the studies, including methodological deficiencies, lack of conceptual clarity, and confounding of independent variables thus making it difficult to conclude the nature of the relationship. Although research studies cannot prove that adolescent pregnancy is caused by one factor or another, the findings are helpful in identifying associated factors and potential interactions.

Social Support

Throughout history social support has held appeal for a variety of scholars and researchers and has been described in literary and scientific thought under many different names: love, caring, esteem, friendship, sense of community, and social integration. The domain assigned to social
support varies from the expansive view that support is the
overriding construct for the provision of social
relationships (Weiss, 1974) to the more focused views that
support has a specific character, such as information,
nurturance, empathy, encouragement, validating behavior,
constructive genuineness, sharedness and reciprocity,
instrumental help, or recognition of competence (Cobb, 1976;
McGrath, 1988; Patterson, 1990; Vaux, 1988).

Cobb (1976) defined social support as information which
lets the individual know he is cared for and loved
(emotional support); esteemed and valued (esteem support);
and a part of a network of communication and mutual
obligation. Cobb emphasized that it is information, not
tangible aid, that is central to the concept, and contends
that in the form of information, social support actually
encourages independent behavior. It is this aspect of
social support which could enhance self-esteem since an
individual gains esteem from independence and self-
recognition (Rosenberg, 1989).

Caplan (1976) broadened the definition by including
objective, tangible forms of support (material) as well as
more intangible forms (esteem-building, cognitive guidance,
and feelings of closeness). Kaplan, Cassell, and Gore
(1977) defined support as the "relative presence or absence
of psychological support resources from significant others"
(p. 50) and noted that studies have shown the presence of
"psychosocial assets" (a concept incorporating self-esteem and help from significant others). However, Patterson (1990) points out Kaplan and colleagues (1977) fail to state explicitly the meaning of psychological resources.

Kahn (1979) defined social support as interpersonal transactions that include one or more of the following: the expression of positive affect of one person toward another, affirmation or endorsement of another person's behaviors, perceptions or expressed views and the giving of symbolic or material aid to another person. Kahn further contends that certain interpersonal variables that enter into relationships between people are necessary to provide social support.

Kahn and Quinn (1976) and Kahn and Antonucci (1981) further refined the definition: "as the expression of liking, admiration, respect, love, agreement, and affirmation as well as the provision of direct aid or assistance". Kahn and associates propose that the definition is captured by the metaphor of a convoy to represent the changing nature of social support across the life span. The idea is that each person moves through the life cycle surrounded by a set of significant other people to whom he or she is related by the receiving or giving of support (p. 10).

Emotional support, cognitive support, and material support are identified as the three primary aspects of
social support (Cobb, 1976; DiMatteo & Hayes, 1981; Gottlieb, 1981) and provide the basis for the majority of typologies proposed to clarify the different types of social support (Mitchell & Trickett, 1980). Emotional support refers to behavior that fosters feelings of comfort and leads an individual to believe that he or she is admired, respected and loved, and that others are available to provide caring and security. Cognitive support refers to information, knowledge, and /or advise that helps the individual to understand his or her world and adjust to changes in it. Materials support refers to goods and services that help in practical problems.

Vaux (1988) summarized that "social support is a multidimensional metaconstruct comprised of three distinct conceptual elements- support network resources, supportive behavior, and subjective appraisals- "linked in a dynamic process of transactions between the individual and his or her social environment" (p.28). These modes of support serve a number of functions: helping individuals to manage problems and achieve goals, leading him or her to feel cared for or valued, and supporting components of his or her self-identity.

Caplan (1976), Kahn (1979), and House (1981) suggested that social support should be viewed in the context of a "person-environmental fit". This approach explicates two aspects of every person and every environment, the objective
and the subjective, and the difference (or fit) between the demands (motives of the person) and the available environmental supplies (French, Rodgers, & Cobb, 1974). The adequacy of support is, therefore, a function of the transaction between the person and the environment at any given time. Pearlin, Liberman, Menaghan and Mullan (1981) qualify this adequacy to be "the degree to which people can draw on social relations for support depends on more than either the extensiveness of the relations or the frequency of interaction. Support comes when people's engagement with one another extends to a level of involvement and concern" (p.340).

Social support does not emerge from a vacuum but rather from the social and cultural context from which it is embedded (Mitchell & Hodson, 1986). The characteristics of the context are likely to vary across setting, population, and time (Vaux, 1988) and may facilitate or inhibit the development, mobilization, and utilization of supportive resources. Heller and Swindle (1983) suggest that social support is most profitably viewed in terms of an interaction between environment and person variables occurring across time (p.91).

Shumaker and Brownell (1984) suggest four contextual factors which may influence the form and occurrence of social support. They include characteristics of the
participants (personal and network) and characteristics of the environment (organizational and physical).

Personal factors may include such elements as age, gender, ethnicity, personality, coping style and social skills. Hobfoll and Stokes (1988) argue for the inclusion of individual difference variables in the study of social support since even with the inclusion of environmental factors, individuals differ in their ability to perceive and interpret their environment and supportive transaction.

Environment or the external world surrounding the person, is conceptualized as consisting of social, symbolic and physical aspects. Argyle, Furnham, and Graham (1981) point out there further exist interrelationships among the three aspects of environment given that nearly all physical features have a symbolic and hence a social meaning (p.37).

The social environment refers to individuals and groups with whom a person interacts and communicates (Kim, 1983, p. 82). These are the people who are potential or actual sources of social support and the social system which an individual is embedded. Social networks and relationships are dynamic and have changing boundaries which can influence the perception of support. These boundaries change over time with various factors affecting the size of the social network.

The symbolic environment consists of a changing context without physical or concrete form consisting of shared ideas
on various levels (Kim, 1983). It includes such notions as roles, rules, language, and values. Jacobson (1986) referred to these notions as the "cultural" context, which shapes an individual's ideas about autonomy, dependency, and reciprocity, which in turn influence the provision, receipt, and acceptance of social support. Likewise these norms, values and beliefs can act as subjective constraints which individuals maintain with regard to who and when individuals should be called upon for help (Eckenrode and Gore, 1981).

The physical environment is a changing context "of the energy-generating, matter-based aspects of the milieu that are in various forms of biotic and abiotic elements" (Kim, 1983, p. 82). This includes such objective elements as proximity, passive social contact, setting and space. Research suggests that these environment variables can influence initiations, maintenance and utilization of social support.

Social support has been categorized into three broad constructs: social embeddedness, perceived social support, and enacted or received social support (Sarason & Sarason, 1985). Procidano and Heller (1983) clarified the distinction between social network characteristics and perceived social support to further refine the social support construct. Social embeddedness or network support refers to connections that individuals have with others in their environment and can be assessed in terms of structural
and functional dimensions (Marsella & Snyder, 1981). Structural dimensions are size, density and multiplexity while functional dimensions are information, comfort, emotional support and aid. Networks provide support, information and feedback (Caplan, 1976) and influences perceptions and expectations.

Perceived support refers to the impact networks have on the individual. It is a person's belief that help or empathy is readily available if needed (Sarason & Sarason, 1985) and that one's need for support, information and feedback are fulfilled (Procidano & Heller, 1983). Perceived support is considered by some to be a more sensitive indicator of buffering effects in stressful situations and on self-esteem than the actual availability of support (Cohen & Syme, 1985). Cobb's (1976) early conceptualization of social support seems consistent with the notion of perceived support. As previously noted, he defines social support as information that leads the individual to believe that they are cared for, loved, esteemed, and valued.

Perceived social support has continued to emerge in the literature as a significant aspect in the conceptualization of social support (Burke, 1990; Cutrona, 1986; Norbeck et al., 1981; Procidano & Heller, 1983) and has been defined as the "cognitive appraisal of being reliably connected to others" (Barrera, 1986, p.416). Measures of perceived
support attempt to determine whether the individual perceives supportive ties as available and adequate (Burke, 1990; Norbeck et al., 1981). Perceptions of support seem critical in that there may be considerable incongruence between the number or types of resources and how helpful they are for a particular individual. Coyne and Delongis (1986) point out that not all relationships are supportive and that sometimes well-intentioned efforts by others are regarded as unhelpful by the recipient (Wortman, 1984). In other words, the source of support may influence the perception of whether something is supportive or not.

While the perception of support depends upon the availability of supportive structure in the environment perceived support and support provided are not identical. Perceived social support is probably influenced by within person-factors (long standing traits) and temporal changes in attitude or mood (Cutrona, 1989). Further personality may determine not only how people cognitively represent their experiences but the actual quality and availability of support may be affected by the characteristics of the individual (Hobfoll, 1985; Procidano & Heller, 1983; Repitti, 1987). Enacted or received support assesses what persons do when they provide support and such support is likely to be provided when individuals face a crisis.
Effects of Social Support

The literature abounds with empirical evidence on the effects of social support. Kaplan, Cassel, and Gore (1977) identified social support as the protective factor which buffers individuals from effects of negative stimuli, including psychological stress. The strength and availability of social support was considered a protective psychological factor in disease prevention. The authors suggested that preventive interventions should focus on strengthening social support.

Lin, Simeone, Ensel, and Kuo (1979) studied social support, stressful life events, and illness in an effort to consider how social support is systemically related to the stressor-illness model. They postulated that social support serves as a mediator of stressful life events by providing the information needed to minimize the physically or psychologically deleterious outcomes of life events in the individual. The results supported an inverse relationship between social support and psychiatric symptoms and a weak mediating effect of social support in the life change-health change relationship in an adult sample.

Turner and Noh (1983) view social support to be a core human requirement and that one aspect of this requirement is the experience of being supported by others. They focus on social support as a sociopsychological variable with what Henderson (1980) described as significant affectional
content and psychological. Turner (1981), and Turner and Noh (1983) examining the concepts of social support and psychological distress determined that (a) they have different underlying determinants (b) they are distinct dimensions, and (c) that a portion of the causation appears to go from social support to psychological distress.

Hubbard, Muhlenkamp and Brown (1984) investigated the relationship between social support and self-care practices of a sample of 97 men and women aged 55 to 90 years with a mean age of 70. A significant positive correlation ($r = .37$) was found between the social support and self-care practices. In a second study consisting of 133 men and women ages 15 to 77 with a mean age of 44, a significantly positive correlation, $r = .57$, was found between social support and health practices. Furthermore, social support was found to account for 34% of the variance in positive health practices, it providing the most significant effect.

Muhlenkamp and Sayles (1986) studied the relationships among social support, self-esteem and positive health practices of 98 adults living in a southwestern metropolitan area. Both self-esteem and social support were positive indicators of life style and further social support was found to exert influence indirectly through its direct effect on self-esteem.

Foote, Plazza, Holcombe, Paul, and Daffin (1990) conducted a descriptive study to determine if a relationship
among the variables of self-esteem, social support and hope existed in a sample of adults with multiple sclerosis. The correlation matrix indicated that both social support and self-esteem were related to hope significantly, $r = .68$ and $r = .74$. Social support and self-esteem were also found to be related to each other at a significant level, $r = .43$. Implications addressed the need for nurses to assess the patient's support system and the degree to which support is perceived.

The assumptions throughout this body of research is that support may help the individual to gain, regain, or utilize personal strength during difficult adaptive periods which demand more energy and resources, thus maintaining or increasing an individual's level of confidence and esteem which facilitates adjustment to new situations. One can extrapolate from this literature to consider the important role which social support may play in adolescence in relation to self-esteem and hope.

**Social Support and Adolescence**

The adolescent developmental period involves major social shifts as adolescent's activities increase and expand beyond parental influence toward social, vocational, scientific, and ideological interests (Blos, 1979; Jacobson, 1991; Vaux, 1988). The adolescent's increasing social world serves an important role in exposing one to perspectives, values, attitudes and lifestyles beyond those of the
immediate family. Through interactions with varied others the adolescent begins to refine his or her sense of self (Rosenberg, 1989) and to select others who value that identify, sustain and shape it further (Vaux, 1988).

In conjunction with the increase in range and opportunities to select friends, is the refinement of the ability to engage others as individuals linked by ties of mutual affection, respect, caring, obligation and trust (Vaux, 1988). Peer support resources are established through deepening emotional attachments and extensive exchanges of guidance and feedback as youth try to deal with complications of family, school, and peer life. Interactions with the opposite sex are sanctioned and evolve through group activity, to formalized dating, to intimate dyadic relationships that may comprise supportive relationships of central importance. Although family members become somewhat less important sources of support, they continue to provide directive guidance, financial and practical aid, and limit setting in the overly free-spirited youth (Vaux, 1988). The goal is to achieve a more egalitarian form of relationship based on mutual respect rather than merely parental authority. Thus an integral component of the individuals support resource is an evolving system of relationships.

A general function of social support is to promote the individual development and to help one negotiate
developmental tasks. Gaining mastery and understanding the environment, achieving goals, negotiating demands, developing and maintaining a sense of identity and feeling loved, respected and involved constitute the functions of social support.

Of critical importance to the adolescent is how she/he is seen in the eyes of others and how skills, talents and tentative roles developed during childhood can be integrated with contemporary adult roles including occupation. Social support needs involve the clarification of options through guidance, recognition of personal strength and interests through feedback of a more global valuative kind ("Great you figured it out" or "You're really good at Math") and finally the ever important encouragement and reassurance of emotional support. The power of social support lies in its capacity to supplement the individual's experience.

Normative milestones engage the individual by creating demands and opportunities. Individuals often appraise these as threats or challenges and often seek the help of others in their encounters. The fact that many have gone before diminishes only a little the dread, excitement, anxiety or joy felt by an adolescent on his/her first date (Vaux, 1988).

The changing cultural context may influence support in various ways: for example, (a) alter the roles within which support is provided; (b) provide technological changes that
may facilitate or disrupt support networks and (c) underlie the dramatic impact on the differences faced by individuals rending the support (Vaux, 1988). For example, the increase in adolescent employment has had a direct effect on parental authority, premature loosening of family bonds and perhaps a premature lessening of parental guidance and emotional support. Changing cultural context means that age cohorts often will face problems unthought of by their elders and many old issues will take new form (Vaux, 1988). Schulz and Rau (1985) note that life events occurring to many people in the culture within a particular age group allows for greater socialization and preparation of both the individual and the support network in handling them. Vaux points out that statistical prevalence does not always lead to a cultural response, especially when recognition of prevalent life events reflects badly on the culture. Rather cultural responses often lag far behind the changing prevalence of life events, especially when such events mar societal ideals, for example in the United States sexual activity occurs at earlier and earlier ages, yet resistance for education and discussion in the early elementary grades is prevalent (Vaux, 1988). Cultural change also means change in what is a normative event. For example, young people becoming sexually active must also deal with the risk of a deadly disease.
Clinical observation suggests transition periods can be a time of acute stress or disequilibrium for some individuals, while others may simply require more energy. Social support during the transition of adolescence has stimulated research interest with the focus on topics of friendship choice, stability of friendship and gender difference, however, there is little data available that deal directly with social support.

Yarchestri and Mahon (1986) investigated the individuals perception of life change events as stressful (perceived stress) and symptom patterns in early adolescence. Affective oriented-coping and social support were hypothesized to mediate the relationship. Affective-oriented coping (Jalowiec & Powers, 1981) attempts to regulate the emotional response to the stressful situations (for example, day-dreaming, crying, or worrying), although it only creates an illusion of comfort and safety without changing the actual objective circumstances. The sample was comprised of 136 seventh and eight grade boys and girls (12-14 years old) attending a parochial school in a middle class suburban New Jersey community. The investigators used the Jalowiec Coping Scale (Jalowiec & Powers, 1981) and Personal Resource Questionnaire (PRQ) -Part II developed by Brandt and Weinert (1981). Positive relationships between perceived stress and symptoms (psychological inertia, free-floating anxiety, physical body complaints) were found.
When controlling for social support, the association between perceived stress and symptom pattern increased. For persons with lower social support, stress was significantly related to symptom pattern, $r = .55$, whereas, for those with high social support the relationship was not significant. In other words, perceived stress is strongly and positively related to symptom pattern under the condition of low social support. These researchers suggest that it is important to identify diverse sources of social support and future research is needed to determine which sources of social support are most meaningful (Yarchesti & Mahon, 1986).

Yarchesti and Mahon (1989) investigated the interrelationships among social support, self-esteem and positive health practices (PHP). The study was carried out with a sample of 165 youths between the age of 15 and 21, including both high school and college students. Self-esteem was measured using Rosenberg Self-Esteem Scale (Rosenberg, 1965) and social support was measured by PRQ-Part II (Brandt & Weinert, 1981). The results were that among adolescents social support had the strongest total effect on PHP, $r = .399$, and gender had the weakest total effect, $r = .018$. As predicted in their model both self-esteem and social support had a direct effect on PHP with social support having a significant direct effect on self-esteem, $r = .36$, and significant indirect effect on PHP,
$r = .107$. Age did not have a statistically significant effect on self-esteem, however there was a weak indirect effect of age on PHP through self-esteem, $r = .27$. Gender was significantly associated with self-esteem and social support. Males had higher self-esteem than females, while females had higher levels of support than males.

Cutrona (1989) examined personal and informant ratings of the adequacy of social support by three different sources (parents, friends, and male partner) in a longitudinal study of adolescent mothers ($N = 128$). One of the purposes of the investigation was to determine whether personal appraisals of social support availability could be corroborated by another individual in the person's social network. A second purpose was to determine whether ratings of support made by someone other than the adolescent would predict the subsequent adjustment to a significant life stress. Results showed modest correlations between adolescent and adult informants in their assessment of the social support available. Although a moderately high level of agreement was found for assessments of support provided by parents, lower agreement was found for friend support. Cutrona explains this difference as reflecting that the adolescent and informant focused their attention on different subsets of the girl's friendship network.
Jacobson (1990) investigated the relationship between perceived social support and depression sampling 85 adolescent males (n = 32) and females (n = 53), aged 15-19 (M =16.4, SD = .73) attending public high school in a working class urban community. Using Beck's Depression Inventory (Beck, 1967) and PRQ Part II (Brandt & Weinert, 1981) findings indicated that adolescents who perceived themselves as having more social support correspondingly reported less depressed feeling. There was no significant difference between males and females in terms of social supports (t(83) = 1.58, p> .05).

Burke (1990) investigated the relationship between life events, perceived stress and social support in 180 predominately low income women. The women were categorized to one of three groups: adolescent mothers (n = 67), older mothers (n = 49) and non-parenting adolescent females (n = 63). Social support was measured using the Norbeck Social Support Questionnaire (Norbeck, 1981). Burke hypothesized that mean scores for functional and network support would be lower for adolescent mothers than for older mother and non-parenting adolescents, whereas the mean scores for total loss of network conflict would be higher for adolescent mothers than older mothers and non-parenting adolescents. The measures of total functional support, network support, frequency of contact, total loss and network conflict are obtained from the NSSQ. Examining
scored specific social support revealed that functional support, frequency of contact and conflict with one's mother were higher for both adolescent mothers and non-parenting adolescents as compared with older mothers. Specific aid scores were compared by group and the non-parenting group had higher scores than adolescent mothers. Non-parenting adolescents further reported more support and conflict from relatives and friends.

Adolescent mothers reported significantly less social support than non-parenting adolescents even when SES was held constant. Adolescent mothers did not significantly differ from old mothers. Furthermore, adolescent mothers with a mean age of 18.2 years were older than non-parenting adolescents (M = 16.8), suggesting that differences in support may be related to age.

One can extrapolate from the social support literature to consider the important role which social support may play in adolescence. As presented by Cobb (1976) social support begins in utero and progresses naturally to incorporate other family members; peers in school, work, and the community; and members of the helping professions. Social support is described as being protective and may facilitate coping with crisis and adaptation to change, and as Cassell (1976) points out since it's origin social support has been identified as an explanatory concept for human behavior and found to be strongly correlated with self-esteem. Although
the theoretical literature finds no reference to hope, Cobb pointed to what he called "an attractive theory to which social support provides pathways through facilitation of coping and adaptation" (p 313). Therefore, it is conceivable that one of the pathways could involve instillation of hope (Stoner, 1982, p. 54).

An Emerging Theoretical Model
for Adolescent Hopefulness

The Symbolic Interactionist perspective provides the theoretical basis for the development of the conceptual framework. Symbolic Interaction (SI) focuses on the meaning that the acts and symbols of actors in the process of interaction have for each other (Conway, 1988; Hardy, 1988; Turner, 1986). An emphasis is placed on "the meanings that significant symbols have for actors, rather than the normative constraints presumed to be exerted by the social structure" (Blumer, 1969, p. 180; Turner, 1962, p. 23). This perspective holds that "humans have the capacity to create and use symbols, and that the very essence of humans and the world that they create flows from their ability to symbolically represent each other" (Turner, 1986, p. 335).

Symbolic Interaction postulates that human beings develop a mind and a concept of self through a process called social interaction (Mead, 1934). Interaction is an
emergent process derived from mutual social interaction and Mead's contribution to symbolic interaction lies in the description of the process of the development of the sense of self. Mead emphasized that mind, body, and society are intimately connected to each other and by using this as a framework interactionists analyze the relation between the genesis of "humanness" and patterns of interactions (Turner, 1986). "Mind" is the capacity to think and for interactionists this concept has been reformulated to embrace what W.I. Thomas termed "definition of the situation" (Turner, 1986, p. 336) which underscores that "self" is a major object that people interject and thus it shapes much of what people see, feel, and do in the world around them. Thinking, defining, self-reflection, and evaluation are the human capabilities that foster the existence of society (Conway, 1988; Hardy, 1988; Turner, 1986).

Blumer (1969) relying on the thoughts of Mead, further developed the nature of symbolic interactionism. Blumer viewed symbolic interactionism as based upon three premises. First, human beings act towards things on the basis of the meaning that the things have for them. Second, the meanings of things arise out of the social interaction that one has with one's fellows. Third, these meanings are handled in and modified through an interpretive process used by the person in dealing with the things encountered. Blumer
delineated SI as a perspective designed to yield verifiable knowledge of human conduct.

The Symbolic Interaction perspective is evident in the conceptualizations of self-esteem, social support, and adolescent hopefulness. The theoretical model can be conceptualized as the adolescent's hope and self-esteem in its relationship with environment's effects, since the interactionist framework focuses attention upon the female adolescent as a social being whose self-esteem is influenced by that of significant others in her social support system.

The concept of hopefulness as a state of mind is considered to be formed within the context of self and social support. As Nurmi (1989) suggests the family context provides a basis for hope toward the future. As a construct, hope emerges from the meaning one attaches to the future and to goals in life.

Self-esteem as a concept emerges as a product of interaction and meanings that are reflected upon one's self. Interactions with significant others are major contributors to self-esteem. As explained by Rosenberg (1989), self-esteem is formed through: (a) reflected appraisals and (b) social comparison which can both be explained by the symbolic interactionist perspective. These principles are based on interaction with others, first by becoming aware that we are objects of other's attention, perception and evaluation, coming to see ourselves through the eyes of
another, and judging oneself in certain respects by comparing to others. Self-esteem involves a life-long learning process revolving around the interaction of the individual with the social environment, including significant others as they vary across the individual's lifespan (Coopersmith, 1967; Erikson, 1965; Mead, 1956; Muhlenkamp, 1986; Rosenberg, 1989; Stanwyck, 1983; Weeks, 1991). Nurmi and Pulliainen (1991) found self-esteem to be positively correlated with an adolescent's hopefulness.

Heller and Swindle (1983) suggest that social support is most profitably viewed in terms of an interaction between environment and person variables occurring across time (p. 91) since social support emerges from the social and cultural context from within which it is embedded (Mitchell & Hodson, 1986). Social support is a multidimensional metaconstruct comprised of distinct elements that are linked in a dynamic process of transactions between the individual and his or her social environment (Vaux, 1988, p. 28). These modes of support help individuals to manage problems and achieve goals, lead one to feel cared for or valued (esteemed) and support components of his or her self-identity.

The social environment refers to individuals and groups with whom a person interacts and communicates (Kim, 1983, p. 82). These are the people who are potential or actual sources of social support and the social system which an
individual is embedded and how the adolescent is seen in the eyes of others is of critical importance (Vaux, 1988). The symbolic environment consists of changing context without physical or concrete form consisting of shared ideas on various levels (Kim, 1983). It includes such notions as roles, rules, language, and values. Jacobson (1986) refers to these notions as the "cultural" context. It shapes an individual's ideas about autonomy, dependency, and reciprocity, which in turn influence the provision, receipt, and acceptance of social support. The adolescent's increasing social world provides opportunities for interactions with varied others and the adolescent begins to refine his or her sense of self (Rosenberg, 1989) and to select others who value that identity and sustain and shape it further (Vaux, 1988).

The theoretical framework (Figure 1) emerging from the foregoing considerations within the symbolic interactionist perspective and various empirical findings in the literature is drawn in the form of a diagram that reflects proposed relationships. The model is drawn as suggested by Blalock and Blalock (1968). The arrow or path diagram is a graphic representation of a model that facilitates the clearer statement of hypotheses (Asher, 1983). The postulated relations among the variables are represented by one-way arrows leading from each independent variable to the dependent variable. The unit of analysis is the adolescent
female. The functional form of the variables are represented by indicating either a positive or negative relationship between the variables (Blalock & Blalock, 1968). This model, as a general framework for an explanation of hopefulness, is thus used as the basis to explain adolescent hopefulness, especially in relation to adolescent pregnancy as a specific instance of life situation.
Figure 1. The theoretical framework: The relationship of social support, self-esteem and hopefulness of adolescent females.
CHAPTER III

METHODOLOGY

The model presented in Figure 1 depicts the theorized relationships among the variables of self-esteem, social support, and adolescent hopefulness. Within this framework, the situation of adolescent pregnancy was taken as offering a specific context in which the explanation of hopefulness needed further elaboration. Since adolescent pregnancy is a situation that has been considered problematic from the personal, societal and nursing context, it was considered an important focus for a study. From this model hypotheses were derived, specifically to test with a sample consisting of pregnant and non-pregnant adolescent females.

Hypotheses

Based on the purpose of this study the following hypotheses were proposed:

H1a: There will be a positive association between age and hopefulness in female adolescents.

H1b: There will be a positive association between SES and hopefulness in female adolescents.
H1c: There will be a positive association between self-esteem and hopefulness in female adolescents.

H1d: There will be a positive association between social support and hopefulness in female adolescents.

H2a: There will be a positive association between age and self-esteem in female adolescents.

H2b: There will be a positive association between SES and self-esteem in female adolescents.

H2c: There will be a positive association between social support and self-esteem in female adolescents.

H3a: There will be a positive association between age and social support in female adolescents.

H3b: There will be a positive association between SES and social support in female adolescents.

H4a: Pregnant adolescent females will have significantly lower scores on social support, self-esteem, and hopefulness than non-pregnant adolescent females.

H4b: There will be significant differences between pregnant and non-pregnant female adolescents in terms of AGE and SES.

H5: A significant amount of hopefulness will be predicted by Social Support and Self-esteem while controlling for age and SES in female adolescents.
## Definition of Terms

<table>
<thead>
<tr>
<th>Concept</th>
<th>Theoretical Definition</th>
<th>Instrument for Measuring</th>
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<tbody>
<tr>
<td><strong>Dependent Variable</strong></td>
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<tr>
<td>Hopefulness</td>
<td>Adolescent hopefulness is the degree to which an adolescent possesses a comforting or life-sustaining, reality-based belief that a positive future exists for self and others. (Hinds, 1988).</td>
<td>Hopefulness Scale for Adolescents (HSA) (Hinds, 1985)</td>
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<tr>
<td><strong>Independent Variables</strong></td>
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<tr>
<td>Social Support</td>
<td>Interpersonal transactions that include one or more of the following: the expression of positive affect, of one person toward another; the affirmation or endorsement of another person's behaviors, perceptions, or expressed views; the giving of symbolic or material aid to another (Kahn, 1979, p. 85; Norbeck et al., 1981).</td>
<td>Norbeck Social Support Questionnaire (NSSQ) (Norbeck et al., 1981).</td>
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Terms Related To Sample Population

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<tr>
<th>Terms</th>
<th>Definition</th>
<th>Questionnaire</th>
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<tr>
<td>Adolescent Female</td>
<td>Female between the ages of 14 and 18 years old</td>
<td>Demographic Questionnaire (Connelly, 1992).</td>
</tr>
<tr>
<td>Pregnant Adolescent Female</td>
<td>Female between the ages of 14 and 18 years old who is carrying a developing fetus.</td>
<td>Demographic Questionnaire (Connelly, 1992).</td>
</tr>
<tr>
<td>Age</td>
<td>Chronological age in years</td>
<td>Demographic Questionnaire (Connelly, 1992).</td>
</tr>
<tr>
<td>SES</td>
<td>Mother's Education, &amp; Occupation: Head of Household</td>
<td>Demographic Questionnaire (Connelly, 1992).</td>
</tr>
<tr>
<td>Life Situation</td>
<td>Pregnant Adolescent Female</td>
<td>Demographic Questionnaire (Connelly, 1992).</td>
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Design

The investigation was a theory based correlational design which explored the relationships among the variables of self-esteem, social support, and adolescent hopefulness. A cross-sectional survey using a questionnaire for which adolescents were asked to provide responses either at
school, health care agencies or social service agencies was adopted for this study.

A descriptive correlational design is defined as a study conducted in a natural setting without any attempt to modify, control or introduce something new to the environment (Kerlinger, 1986). Waltz and Bausell (1981) note that "descriptive designs are employed when the researcher wishes to obtain information in areas in which little previous investigation has occurred" (p. 6). Although the variables in this study, self-esteem and social support have been studied extensively, they have not been studied in relationship to adolescent hopefulness.

Sample and Sampling

Population Base for Sample

Adolescent females, defined as females between the ages of 14 and 18 years old, were the population from which the study sample was drawn. Since adolescent pregnancy was considered a focal context of this study, the study sample was composed of pregnant and non-pregnant adolescent females. A pregnant adolescent female was defined as a female between the ages of 14 and 18 years old who is carrying a developing fetus.
Sample Size

The determination of sample size for this study was the consequence of identifying and designating effect size and power desired. Sample size was calculated using power analysis according to Cohen and Cohen (1983).

\[ N = \frac{L}{b^2} + Kb + 1 \]

Effect sizes are set against a background of a ratio of effect size to random variation, or the degree to which the phenomenon exists (Cohen, 1977, p. 4). Effect size can be small (.20), medium (.50) or large (.80) and is selected based on the following: (a) past work, (b) conventional value, and or (c) the minimum value required for theoretical or practical significance (Cohen & Cohen, 1983, p. 117). Power on the other hand, represents the probability that the statistical test will yield statistically significant results (Cohen, 1977, p. 1). In other words, the power of a statistical test of a null hypothesis is the probability that it will lead to the rejection of the null hypothesis (Cohen, 1977, p. 4). Power values are chosen from the range of .70 -.90 (Cohen & Cohen, 1983, p. 161-162).

To determine the sample size for this study, the conventional "sample size tables" (Cohen & Cohen, 1983) were used. For this study the population means to be compared was assumed normal, the alpha (level of significance) was set at .05, with desired power of .80 and a medium effect size of .50. A medium effect size was chosen because in the
analysis of behavioral science data it has been found that this magnitude and degree of relationship is perceptable to the observer (Cohen, 1977, p. 26).

\[ N = L_c + k_b + 1 \]

Thus, for a model with five independent variables a sample size of 92 was considered adequate.

**Sampling**

Although it is best to obtain a large, random sample to maintain external validity, a random sampling procedure for the proposed study was not feasible. To minimize the threat to the study's validity, a purposive sample of pregnant and non-pregnant adolescent females was selected. Kerlinger (1973) notes that a purposive study uses "judgement and deliberate effort to obtain a representative sample by including presumably typical groups" (p. 129). The purposive method is a type of nonprobability sampling "which is characterized by the deliberate effort to obtain representative samples by including presumably typical areas or groups in the sample" (p. 129). The purposive method was the appropriate sampling technique for this study because the investigator wished to have the sample population meet certain specified criteria, i.e. female adolescents: pregnant and not pregnant.

A sample of 149 female adolescents was recruited from high schools, health care, and community agencies in New
Hampshire between April and August 1992. The rationale for the selection of these sites was the accessibility to potential subjects. Female adolescents aged 14 to 18 years of age in the selected schools, health care, and community agencies were invited to participate in the study. They were assured of their anonymity, that participation was strictly voluntary, they could withdraw from the study at any time, and no form of compensation was available. The criteria for inclusion was: (a) female between the ages of 14-18, (b) speak and write English, and (c) pregnant or non-pregnant adolescent females.

Consent letters were sent to school superintendents, principals, headmasters, administrators of the health and community agencies, adolescents and parents/guardians of non-emancipated adolescent participants. Letters informing the parents/guardians about the study and requesting consent for the adolescent to participate were distributed (See Appendix A). Consent forms were written to conform with Human Subjects Review Requirements.

The schools were visited on two days: (a) one day for initial recruitment and information session with distribution of consent forms, and (b) a second day (pre-scheduled) for data collection. The first contact with the students required about 15-20 minutes to explain the project, announce the scheduled time for data collection and answer any questions the students had. If interested,
students were given a packet containing an explanation of the study and requesting consent for the adolescent to participate. The packet contained informed consent forms for student and parent/guardian signatures. The second contact for data collection required about 40-45 minutes.

For adolescents recruited at health care and community agencies, data collection occurred on days designated by staff as having adolescents scheduled for visits. Non-emancipated adolescents were required to provide parental/guardian consent similar to those recruited at school prior to data collection with followup data collection days being scheduled.

**Instruments**

A questionnaire containing four sections (a social demographic and personal data section, self-esteem, social support and adolescent hopefulness) was utilized in the study (Appendix B). The questionnaire was used to obtain responses on items related to self-esteem, social support, and adolescent hopefulness, as well as selected demographic and personal characteristics.

**Hopefulness Scale for Adolescents**

Adolescent hopefulness, the dependent variable, was defined as the degree to which an adolescent possesses a comforting or life sustaining, reality-based belief that a
positive future exists for self and others and was measured by use of the Hopefulness Scale for Adolescents (HSA) (Hinds, 1985). The HSA, a 24 item scale was designed to measure the degree of positive future orientation an adolescent feels at the time of the measurement (Hinds & Gattuso, 1991). The scale items were derived from actual quotations of adolescents who participated in a qualitative study, the purpose of which was to develop conceptual and operational definitions of adolescent hopefulness (Hinds, 1984).

Expert panels evaluated the questionnaire for content validity. Three adolescents comprised one panel and three nurses who routinely provide care for adolescents comprised the other panel. Analysis by both panels indicated that the HSA accurately and adequately represented the conceptual domain of hopefulness (Hinds & Gattuso, 1991).

The HSA can be presented in two formats: visual analog scale (VAS) or Likert. It has been demonstrated that both scales measure the same single concept (Chronbach's alpha of 0.88 for the Likert scale and 0.91 for VAS) (Hinds & Stoker, 1988). Findings reflect however that fewer VAS responses occurred at the lower level of the scale and of additional interest the VAS seemed to induce a "response set", that is, the tendency to give the same answer option to all or a majority of items while the Likert scale did not. The form used in this study was a four-point Likert format, with
seventeen statements worded positively toward hopefulness, and seven worded negatively. Items 3, 5, 7, 11, 16, 22, 23 were reversed scored. Possible scores ranged from 0-96 with a higher score indicating greater hopefulness (Hinds, 1991).

The HSA has been completed by more than 400 adolescents including adolescents who were well, diagnosed as substance abusers, receiving treatment for emotional or mental disturbances or receiving treatment for cancer (Hinds & Gattuso, 1991). The HSA has consistently achieved moderate to strong internal consistency estimates (.76 to .94 using Cronbach's alpha) and some evidence of construct validity (Hinds, 1985, 1988; Hinds, Scholes, & Gattuso, 1990). Although additional evidence for construct validity is needed, current findings indicate that the HSA is able to adequately and sensitively measure adolescent hopefulness (Hinds & Gattuso, 1991). For the present sample of 149, Cronbach's alpha coefficient of .86 was obtained for the Hopefulness Scale indicating an acceptable level of internal consistency.

**Norbeck Social Support Questionnaire (NSSQ)**

Social support was defined as interpersonal transactions that include one or more of the following: the expression of positive affect of one person toward another; the affirmation or endorsement of another person's behaviors, perceptions, or expressed views; the giving of symbolic or material aid to another (Kahn, 1979). The
Norbeck Social Support Questionnaire was used to obtain responses about social support.

Norbeck Social Support Questionnaire (NSSQ) (Norbeck, Lindsey, & Carriere, 1981, 1983) was developed to measure multiple dimensions of social support. This instrument was based on Kahn's (1979) conceptualization of social support. Questions on the NSSQ combine to form three main variables: Functional Support, Total Network Property (structural support), and Total Loss. Functional Support is comprised of three properties: Affect, Affirmation and Aid and can be broken down into the subscales of affect, affirmation and aid. Subsequent work has shown that the subscales of affect and affirmation are highly correlated, thus these subscales were combined into a single subscale called emotional support with Aid referred to as tangible support (Norbeck & Anderson, 1989, p. 206). Total Network Support reflects size of network, duration of relationship and the frequency of contact. Total Loss reflects loss of a relationship and the amount of support lost (Norbeck et al., 1983).

The NSSQ questionnaire asks each subject to list "each significant person in your life" and to indicate the relationship (i.e., spouse, friend, neighbor). Respondents may generate a list of up to twenty-four people who provide personal support or are important to them. For each person listed the subject is asked to rate each identified network
member on a series of eight questions using a five point Likert scale (from 1, not at all, to 5, a great deal). A ninth yes/no question relates to the loss of a relationship. Questions 10 and 11 concern the loss.

In scoring the NSSQ, scores are calculated for each question, then separated depending on which main variable it reflects. Questions 1-6 reflect functional support with a total function score obtained by adding the six questions. Questions 1 and 2 address affect, questions 3 and 4 address affirmation and 5 and 6 address aid. The subscales of affect and affirmation are combined into a single subscale called emotional support. Aid is referred to as Tangible support (Norbeck & Anderson, 1989, P. 206). Questions 7 and 8 reflect network properties. High variable and subscale scores are equivalent to more functional support, more network properties and more total loss.

The NSSQ was chosen for this study because it measures perceived social support (McGrath, 1988; Norbeck & Anderson, 1989), has been used with adolescents (Burke, 1990; Dibble, 1986), can be self-administered in a reasonable period of time, and it's reliability and validity have been tested. The NSSQ possesses concurrent and content validity and high internal consistency reliabilities (range: .89 to .97) (Norbeck, Lindsey, & Carrieri, 1981, 1983). For the present sample of 149, an alpha coefficient of .82 was obtained indicating an acceptable level of internal consistency.
Rosenberg Self-Esteem Scale

Self-esteem defined as the degree to which one values oneself was assessed by a 10-item scale called the Rosenberg Self-Esteem Scale (RSES) (Rosenberg, 1989). The RSES was designed to measure basic feelings of self-worth with its items focusing on global evaluation of self-worth. Included are feelings of worth, failure, pride, positive attitude toward self, satisfaction with self, respect for self, feelings of failure, feelings of being no good, perception of a number of good qualities, and ability to do things as well as others (Rosenberg, 1989). The scale consists of 10 items answered on a four point Likert response scale ranging from strongly agree to strongly disagree. "Positive" and "negative" items are alternated in an attempt to reduce the effect of respondent set. The total score reflects the degree of positive self-esteem. Possible scores using the four response categories are 10 to 40 with a high score indicating more positive self-esteem. Low self-esteem is considered to be a score of 29.4 or below (Rosenberg, 1989).

Evidence for the construct validity of this instrument has been shown by examining its conformity to theoretical predictions, while convergence and discriminant validity has been demonstrated with the multitrait-multimethod framework (Rosenberg, 1989; Silber & Tippett, 1965; Wylie, 1974). Internal consistency has been established as $r = .92$, while test-retest reliability has been computed at $r = .85$ (Silber...
& Tippett, 1965). Convergent validity coefficients of $r = .56$ to .83 have been determined for the scale (Rosenberg, 1965; Yarcheski & Mahon, 1989). For the present sample of 149 adolescent females an alpha coefficient of .89 was obtained.

The scale was selected for use in this study because it: (a) directly measures a person's general sense of self-worth and self-acceptance; (b) is self-administrating and should take at the most five minutes; and (c) was specifically developed for use with adolescents.

**Demographic and Personal Data Questionnaire**

The Demographic and Personal Data Questionnaire included information that enabled the researcher to compare results of this study to people from different groups and situations. This questionnaire was designed to collect demographic and personal data from subjects. This questionnaire collected the following data: respondent's age, race, education level, urban or rural household, pregnant or not, mother's educational status, occupation of the head of household, parents' marital status, main source of income, sexual activity, and contraceptive use. Information for the selected control variables, chronological age and socioeconomic status (SES) was obtained from this questionnaire.

It is generally accepted that SES should be controlled because of its confounding effects on dependent variables.
(Hamilton, 1990). When random sampling or matching of subjects on SES is not possible, then controlling for SES statistically is appropriate (Hamilton, 1990). Green's SES Index (Green, 1982) was used to compute the SES for the study. Green's Index was selected based on a review of the literature which found Mueller and Parcel's (1981) critique that Hollinghead focuses on the nuclear family. The researcher did not expect her sample to come from predominately nuclear families and felt Green's Index would be more appropriate for this study.

Green uses the occupational status of the "main earner" and educational status for the "female head of household." Income is also a factor that can be obtained and used, however Burke (1990) points out that most adolescents would not know their parents' actual income and questions its inclusion. Green (1982) originally developed the index (1970) from stepwise regression analysis on data from a statewide sample (N = 1,592) of California families with at least one child under 5 years of age and later updated the occupation scores from 1980 census data. Greene identified the range of possible scores for SES as approximately 30 to 85, however, he offered no normative SES scores for comparison nor did he prescribe any interpretation of the computed scores. Based on his earlier work, Green reported that his SES scoring system was an optimal predictor of preventive health behaviors.
To ensure content validity, the demographic questionnaire was examined by two doctorally prepared nurses: One family health nurse practitioner and a member with a focus on instrumentation, two nurses with a specialty in adolescent health and five female adolescents. Identification of appropriateness and clarity in the content and wording was sought. Minor wording changes were made (use both terms condoms and rubbers).

Protection of Human Subjects

Approval for the study was obtained from The University of Rhode Island's Institutional Research Review Board and The University of New Hampshire's Institutional Research Review Board. Written consent (Appendix A) to utilize specific facilities for the project was obtained from school superintendents, school principals and authorizing agents of the health care and community agencies. Informed consent (Appendix A) was obtained from each participant and non-emancipated participant's parent/guardian (Appendix A).

To guarantee anonymity and confidentiality, every participant was informed that (a) any data shared with the researcher would be confidential, and (b) that research findings would be reported only as group data. Further, each participant was informed that she could choose to withdraw from the study at any time, and that participation
in the study would not affect school standing or the health care she was currently receiving.

Data Collection Procedures

A sample of 149 adolescent females was obtained for this study. Data collection occurred between April and August 1992, on prearranged days for the female adolescents recruited from the school setting and required about 40-45 minutes. Students returning signed informed consent were given the questionnaire containing three research instruments: the Norbeck Social Support Questionnaire, the Rosenberg Self-Esteem Scale, The Hopefulness Scale for Adolescents (Hinds, 1985) and a set of demographic and personal questions. Students self-administered the questionnaire during one of their class periods with the researcher present and available to answer individual questions. The survey answers were anonymous and strictly confidential, no identification was recorded or utilized in any way, and completed questionnaires were placed in a box. Data from all the subjects in the study were analyzed and reported collectively, no person, school, or agency was individually identified.

For adolescents recruited at health care and community service agencies data collection occurred on days designated by clinic staff as having female adolescents, pregnant and
non-pregnant, scheduled for visits. Non-emancipated adolescents were required to provide parental/guardian consent similar to those recruited at school prior to data collection. Followup data collection days were scheduled with actual data collection following a similar protocol as that used in the schools.

**Data Analysis**

The Statistical Package for the Social Sciences (SPSS/PC+ V2.0) was used to perform the analysis of data. All subjects who met the delimitations of the study sample and who completed the required questionnaires were included in the analysis of data.

Descriptive statistics and multivariate statistics were used to analyze the data. Descriptive statistics were used to summarize the demographic variables such as age, SES, education and to identify central tendency, variability, and percentages of the key variables. Pearson Product-Moment Correlations were used to test the following hypotheses: (1a) There will be a positive association between age and hopefulness in female adolescents, (1b) There will be a positive association between SES and hopefulness in female adolescents, (1c) There will be a positive association between self-esteem and hopefulness in female adolescents, (1d) There will be a positive association between social
support and hopefulness in female adolescents, (2a) There will be a positive association between age and self-esteem in female adolescents, (2b) There will be a positive association between SES and self-esteem in female adolescents, (2c) There will be a positive association between social support and self-esteem in female adolescents, (3a) There will be a positive association between SES and social support in female adolescents and (3b) There will be a positive association between age and social support in female adolescents.

T-test statistics were used to compare means of the two groups, pregnant vs non-pregnant, and test the following hypotheses: (4a) Pregnant adolescent females will have significantly lower scores on SS, SE and Adolescent Hopefulness than non-pregnant adolescent females and (4b) There will be significant differences between pregnant and non-pregnant female adolescents in terms of AGE and SES. ANOVA was used to examine the interaction between age and SES. The techniques of regression analysis were adopted for testing the fifth hypothesis: A significant amount of hopefulness will be predicted by Social Support and Self-esteem while controlling for age and SES in female adolescents.

**Regression Analysis.** Kerlinger (1986) points out whenever one studies the relations between variables that "already exist" in the individuals studied, or whether one
studies the determinants of such variables, one is deeply embedded in non-experimental research and its problems (p. 352). If independent variables are non-experimental (non manipulatable) then analysis of variance, strictly speaking, is not the appropriate mode of analysis (Kerlinger, 1986, p. 305), the method of analysis most appropriate is multiple regression.

Regression analysis forms the basis for predictive model testing. The theoretical model specifies the order in which variables will be analyzed for simple regression and the empirical correlations between the independent and dependent variables determine the ordering for the step-wise regression. The statistical model for the test of predicted relationship is as follows:

\[ Y_i = a + b_1 x_{li} + \ldots + b_r x_{ri} + e_i \]

where \( Y_i \) is the dependent variable (hopefulness) and \( X_{li} \ldots x_{ri} \) are fixed independent variables; \( a, b_1 \ldots b_r \) are unknown parameters; and \( e_i \) are unobservable random error terms which are assumed to be independent, normally distributed with zero means and equal variance (Hamilton, 1990). Multiple regression is the appropriate analysis when a dependent variable is measured using interval level data.

Hamilton (1988) points out regression analysis provides a number of different ways to look at relationships. In this study multiple regression was used as an inferential procedure in conjunction with a pre-specified model.
Multiple regression analysis was used to test the significance between the relationships of social support, self-esteem and hopefulness and to understand the degree of explanation offered by self-esteem and social support for adolescent hopefulness.
CHAPTER IV

RESULTS

The purpose of this study was to investigate the theorized relationships between social support, self-esteem, and hopefulness in adolescent females. Data for the analysis was based on the responses of 149 female adolescents living in the state of New Hampshire. The findings of this study are presented and discussed in this chapter.

The variables describing the sample are presented first. Descriptive statistics for the dependent and independent variables are next, followed by the results related to hypothesis testing.

Characteristics of the Sample

The demographic portion of the questionnaire (Appendix B) was used to collect demographic and personal data from subjects. This section was designed to seek information from which a profile of the sample could be developed. The following data were collected: respondent's age, ethnicity, education, whether subject resided in an urban or rural setting, religious
affiliation and participation, marital status of parents, mother's educational status, occupation of the head of household, main source of income, sexual activity, contraceptive use, and whether currently pregnant or not. Information for the selected control variables, chronological age and socioeconomic status (SES) were obtained from this demographic questionnaire.

The sample consisted of 204 volunteer participants, who were attending high schools, seeking services at health care, or community agencies located throughout the State of New Hampshire. Data were collected between April and August 1992. Of the 204 volunteer subjects, 11 subjects were eliminated because they did not meet the age criteria, 12 failed to complete the social support section of the questionnaire, 15 were males, 11 did not return the survey and 6 delivered her baby prior to the scheduled meeting to complete the questionnaire. Thus, 149 adolescent females were included in the sample for testing the hypotheses.

Table 1 summarizes through frequency distributions the characteristics of the sample.
Table 1

Frequency Distribution of Characteristics of the Sample

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>6</td>
<td>4.0</td>
</tr>
<tr>
<td>15</td>
<td>22</td>
<td>14.8</td>
</tr>
<tr>
<td>16</td>
<td>22</td>
<td>14.8</td>
</tr>
<tr>
<td>17</td>
<td>43</td>
<td>28.9</td>
</tr>
<tr>
<td>18</td>
<td>56</td>
<td>37.5</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>132</td>
<td>88.5</td>
</tr>
<tr>
<td>Asian</td>
<td>1</td>
<td>0.6</td>
</tr>
<tr>
<td>African American</td>
<td>2</td>
<td>1.3</td>
</tr>
<tr>
<td>Hispanic</td>
<td>3</td>
<td>2.0</td>
</tr>
<tr>
<td>Native American</td>
<td>5</td>
<td>3.3</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
<td>4.0</td>
</tr>
<tr>
<td>Life Situation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pregnant</td>
<td>58</td>
<td>38.0</td>
</tr>
<tr>
<td>Not Pregnant</td>
<td>91</td>
<td>61.0</td>
</tr>
<tr>
<td>Residence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>71</td>
<td>48.0</td>
</tr>
<tr>
<td>Rural</td>
<td>73</td>
<td>49.0</td>
</tr>
<tr>
<td>No Response</td>
<td>5</td>
<td>3.0</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single/never married</td>
<td>141</td>
<td>94.6</td>
</tr>
<tr>
<td>Married</td>
<td>6</td>
<td>4.0</td>
</tr>
<tr>
<td>Divorced/separated</td>
<td>1</td>
<td>0.6</td>
</tr>
<tr>
<td>No Response</td>
<td>2</td>
<td>1.3</td>
</tr>
<tr>
<td>Income Source</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family</td>
<td>76</td>
<td>51.0</td>
</tr>
<tr>
<td>Salary(own)</td>
<td>30</td>
<td>20.0</td>
</tr>
<tr>
<td>Boyfriend/husband</td>
<td>17</td>
<td>11.0</td>
</tr>
<tr>
<td>Other</td>
<td>26</td>
<td>17.0</td>
</tr>
</tbody>
</table>
Table 1 (continued)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Religious Affiliation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Catholic</td>
<td>65</td>
<td>44.0</td>
</tr>
<tr>
<td>Protestant</td>
<td>38</td>
<td>26.0</td>
</tr>
<tr>
<td>Jewish</td>
<td>3</td>
<td>2.0</td>
</tr>
<tr>
<td>Other</td>
<td>11</td>
<td>7.0</td>
</tr>
<tr>
<td>None</td>
<td>31</td>
<td>21.0</td>
</tr>
<tr>
<td>No Response</td>
<td>1</td>
<td>0.6</td>
</tr>
<tr>
<td><strong>Religious Participation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inactive</td>
<td>69</td>
<td>46.3</td>
</tr>
<tr>
<td>Infrequent (1-2x/year)</td>
<td>36</td>
<td>24.1</td>
</tr>
<tr>
<td>Monthly</td>
<td>19</td>
<td>12.7</td>
</tr>
<tr>
<td>Weekly</td>
<td>20</td>
<td>13.4</td>
</tr>
<tr>
<td>No Response</td>
<td>5</td>
<td>3.3</td>
</tr>
<tr>
<td><strong>Parent's Marital Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>8</td>
<td>5.3</td>
</tr>
<tr>
<td>Never Married</td>
<td>4</td>
<td>2.6</td>
</tr>
<tr>
<td>Married</td>
<td>76</td>
<td>51.0</td>
</tr>
<tr>
<td>Divorced/separated</td>
<td>55</td>
<td>36.9</td>
</tr>
<tr>
<td>No Response</td>
<td>6</td>
<td>4.0</td>
</tr>
<tr>
<td><strong>Parent's Living Together</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>75</td>
<td>51.0</td>
</tr>
<tr>
<td>No</td>
<td>66</td>
<td>44.2</td>
</tr>
</tbody>
</table>

**Note.**  \( N = 149 \)
The adolescents ranged in age from 14 to 18 years, the mean age was 16.8 years. Ninety-one subjects (61%) reported being not pregnant, while 58 (38%) reported being pregnant. The subjects were predominately Caucasian (88.5%); other participants were Native American (3.3%), Hispanic (2%), African American (1.3%), Asian (.6%) and 4% identified themselves as Other (1 Eskimo, 1 Haitian, 1 Greek and 1 German exchange student). Sixty-five participants (43.6%) identified themselves as Catholic; 38 (25.5%) were Protestants, 3 (2%) were Jewish, and 31 (20%) reported no religious affiliation. The majority, 105 (70.4%) reported inactive or infrequent religious participation. Seventy-one (48%) of the sample lived in an urban setting, 73 (49%) reported living in a rural setting and 5 (3%) did not respond. Participants reported having completed 8 to 13 years of education, mean education was 10.27 years. Six (4%) of the sample were married, with 141 (94.6%) never having been married, 1 (.6%) was divorced or separated. Ninety-nine (66%) reported currently having a boyfriend and 136 (91%) reported they would ask their sexual partner to use a condom. Seventy-six (51%) subjects reported their parents were married with 75 (50%) having their parents currently living together. SES ranged from 30 to 76, the mean was 57.70. Greene (1982) identified the range of possible scores for SES as approximately 30 to 85, however,
he offered no normative SES scores for comparison nor did he prescribe any interpretation of the computed scores.

The sample's high risk behavior, specifically focusing on sexuality was accessed. Data in Table 2 present frequency distributions for sexual activity, use of contraceptives, and assertiveness regarding male use of condoms.

Table 2

Frequency Distributions of Subject's Sexual Activity, Use of Contraceptives, and Assertiveness

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sexually Active</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>116</td>
<td>77.8</td>
</tr>
<tr>
<td>No</td>
<td>32</td>
<td>21.4</td>
</tr>
<tr>
<td>No Response</td>
<td>1</td>
<td>.06</td>
</tr>
<tr>
<td>Contraceptive Use</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>76</td>
<td>51.0</td>
</tr>
<tr>
<td>No</td>
<td>64</td>
<td>42.9</td>
</tr>
<tr>
<td>No Response</td>
<td>9</td>
<td>6.0</td>
</tr>
<tr>
<td>Assertiveness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>136</td>
<td>91.2</td>
</tr>
<tr>
<td>No</td>
<td>8</td>
<td>5.3</td>
</tr>
<tr>
<td>No Response</td>
<td>5</td>
<td>3.3</td>
</tr>
</tbody>
</table>

Note. N = 149
Table 3 presents descriptive statistics for age, education, and socioeconomic status for this sample.

Table 3
Means and Standard Deviations for Age, Education, SES

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>16.80</td>
<td>1.19</td>
<td>14-18</td>
</tr>
<tr>
<td>Education: years completed</td>
<td>10.27</td>
<td>1.19</td>
<td>8-13</td>
</tr>
<tr>
<td>SES</td>
<td>57.70</td>
<td>10.32</td>
<td>30-76</td>
</tr>
</tbody>
</table>

Note. N = 149

Descriptive Findings

Adolescents returning signed informed consent, self-administered four questionnaires: The Hopefulness Scale for Adolescents (HSA) (Hinds, 1985), Rosenberg's Self-esteem Scale (RSE) (Rosenberg, 1989), Norbeck's Social Support Questionnaire (NSSQ) (Norbeck et al., 1981), and a demographic and personal data section. The HSA (Hinds, 1985), a 24 item scale, was designed to measure the degree of positive future orientation an adolescent feels at the
time of measurement (Hinds & Gattuso, 1991). The RSE (Rosenberg, 1965/1989) a ten item scale, measures basic feelings of self-worth. The NSSQ (Norbeck et al, 1981) measures the multiple dimensions of social support, the perceived availability of functional support (emotion and tangible aid), the network's structural properties (size, duration of relationship and frequency of contact), and lost support (number of individuals no longer available and the amount of support lost). The demographic portion of the questionnaire was designed to collect demographic and personal data from subjects and to provide a profile of the sample.

Chronbach's alpha was used to measure the scale's reliability for each instrument based on the current sample. The alpha coefficients for all measures were greater than .70 and reflect internal consistency. The descriptive data on the key variables for the sample are shown in Table 4.

**Hopefulness**

The major dependent variable, adolescent hopefulness, was measured by the Hopefulness Scale for Adolescent (HSA) (Hinds, 1985). The reliability coefficient of the HSA was .86 for this sample which is consistent with .88 reported by Hinds and Stoker (1988). The mean HSA score in this study was 60.73 (SD = 7.19) compared to the mean HSA score of 93 reported by Hinds and Stoker (1988). Although the mean HSA score in this study is lower than that reported by Hinds and
Table 4

Means, Standard Deviations, Range, and Reliability Coefficients for the HSA, RSE and Social Support: Total Functional Support (TF), Total Network (TN), and Total Loss (TL), Scores

<table>
<thead>
<tr>
<th>Scale</th>
<th>M</th>
<th>SD</th>
<th>Range</th>
<th>Reliability Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSA</td>
<td>60.73</td>
<td>7.19</td>
<td>38 - 78</td>
<td>.86</td>
</tr>
<tr>
<td>RSE</td>
<td>23.59</td>
<td>2.16</td>
<td>18 - 30</td>
<td>.89</td>
</tr>
<tr>
<td>Social Support</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TF</td>
<td>291.20</td>
<td>145.60</td>
<td>57 - 612</td>
<td>.82</td>
</tr>
<tr>
<td>TN</td>
<td>125.00</td>
<td>83.00</td>
<td>17 - 837</td>
<td>.82</td>
</tr>
<tr>
<td>TL</td>
<td>3.6</td>
<td>6.3</td>
<td>0 - 68</td>
<td>.76</td>
</tr>
</tbody>
</table>

Note. N = 149

Stoker (1988), it reflects the use of a four point Likert scale with a possible range of 0 to 96 in comparison to the five point Likert scale with a possible maximum score of 120 used by Hinds and Stoker (1988), consequently the mean HSA score for this study is not inconsistent with that reported by previous researchers.

Self-Esteem

One of the independent variables, self esteem, was measured by Rosenberg's Self Esteem Scale (RSE) (Rosenberg,
1989). The reliability coefficient of the RSE in this study, .89 is slightly lower than the .92 reported by Rosenberg (1989). It is however, higher than the .85 reported by Silber and Tippett (1965) and .83 reported by Yarcheshi and Mahon (1989).

Participants' scores ranged from 18 to 30, with a mean of 23.59 and standard deviation of 2.16, in this study. The four point Likert scale has possible scores ranging from 10 to 40 with a high score indicating more positive self-esteem. A score of 29.4 or greater indicates high self-esteem (Rosenberg, 1989). The subjects in this study on the whole rated themselves as having low self-esteem, however Silber and Tippett (1965) point out that global self-esteem reflects subjective statements which may be variable depending upon time and place.

**Social Support**

Another independent variable, social support, was measured by Norbeck's Social Support Questionnaire (NSSQ) (Norbeck et al., 1981), which assesses the multi-dimensional formulation of social support. The three main dimensions identified as (a) total functional (emotion, tangible aid), (b) total network (number in network, duration of relationships, and frequency of contact), and (c) total loss (number of categories of persons lost and amount of support lost) (Norbeck and Anderson, 1989), were assessed in this study. The reliability coefficient for the functional and
network properties was .82 which is lower than the .89 and .92 reported by Norbeck and colleagues (1981, 1983) and .88 reported by Norbeck and Anderson (1989). The raw mean score for total functional support, identified by the present sample, was 291.2 (SD= 145.6), with a wide range of variability (57 to 612), which is slightly higher than that reported by Norbeck and colleagues (M = 286.68, SD ± 113.51) (1983), and considerably higher than that reported by Koniak-Griffin (M = 168.91, SD ± 101.63) (1988), and McGrath (M = 179.60, SD ± 93.79) (1988).

Participant scores for the variable total network showed extreme range variability, 17-837, with a mean raw score of 125, (SD ± 83). The raw mean scores for the number in network (M = 13, SD ± 6.3), is similar to that reported by Norbeck and associates (M = 13, SD ± 5.23) (1981), but higher than those reported by Burke (1990), Koniak-Griffin (1988), McGrath (1988), and Norbeck and Anderson (1989), which ranged from the mean of 7.1 to 10.64. Total loss in this sample had a raw mean score of 3.6, (SD ± 6.3) with a variability range of 0-68 compared to the mean of 4.20, (SD ± 8.52) reported by Koniak-Griffin (1988).

The mean scores for the dimensions are higher in this sample than those reported by previous researchers, however these differences may be a reflection of developmental, gender, socioeconomic, and proximity factors. For example, Koniak-Griffin (1988) sampled 14 to 19 year old pregnant
females from low to middle income backgrounds, while Burke (1990) sampled non-parenting adolescents with a mean age of 16.76 (SD ± 1.10), parenting adolescents with a mean age of 18.24 (SD ± 1.96) and older mothers with a mean age of 27.94 (SD ± 5.49) from predominately low SES backgrounds. McGrath (1988) sampled newly delivered moms ranging in age from 16 to 36 years predominately from middle socioeconomic backgrounds. Norbeck, Lindsey and Carrieri (1981) sampled 135 male and female graduate and undergraduate nursing students with an age range of 21 to 51 years. Norbeck, Lindsey and Carrieri (1983) sampled three different groups: (a) 136 employed males and females with an age range of 22 to 67, (b) 75 male and female graduate nursing students, and (c) 55 female graduate students, whereas, Norbeck and Anderson (1989) sampled 208 pregnant women between the ages of 18 and 39 from predominately low income households. This study sampled 149 pregnant and non pregnant females ranging in age from 14 to 18 years from predominately middle SES. Considering that perceived social support is a person's belief that help and empathy is readily available (Sarason & Sarason, 1985), the source of support may influence the perception of whether something is supportive or not. The results from this study may therefore, indicate the differences between adolescents and adults, males and females, and SES in terms of perceived social support.
Pearson Product-Moment correlations for the descriptive variables and hopefulness scores are presented next to examine the relationships among them. Table 5 presents the findings that there were no significant correlations between the descriptive variables and hopefulness of adolescent females.

Table 5

Pearson Product-Moment Correlations Between Descriptive Variables and Adolescent Hopefulness

<table>
<thead>
<tr>
<th>Descriptive Variables</th>
<th>Adolescent Hopefulness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$r$</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>-----</td>
</tr>
<tr>
<td>Completed Years of Education</td>
<td>.01</td>
</tr>
<tr>
<td>Religious Affiliation</td>
<td>-.04</td>
</tr>
<tr>
<td>Religious Participation</td>
<td>.08</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>-.04</td>
</tr>
<tr>
<td>Parents Living Together</td>
<td>.02</td>
</tr>
<tr>
<td>Parent's Marital Status</td>
<td>.03</td>
</tr>
<tr>
<td>Adolescent's Marital Status</td>
<td>-.003</td>
</tr>
<tr>
<td>Sexually Active</td>
<td>.03</td>
</tr>
<tr>
<td>Use of Contraceptives</td>
<td>-.005</td>
</tr>
</tbody>
</table>

Note. $N = 149$
Findings Related to Hypotheses

A correlation matrix was computed to examine the relationships hypothesized to exist among the independent variables. The correlation matrix was reviewed for evidence of multicollinearity. Hamilton (1990) points out that minimal collinearity among the independent variables facilitates identifying the extent to which each of the independent variables is related to the dependent variable. Although some of the scores for the independent and control variables were moderately correlated with each other, extreme multicollinearity, defined by Hamilton (1990) as intercorrelations in the range of .80 to 1.0, was not found. Table 6 presents the correlations which exist between the independent and control variables.

Self-esteem demonstrated a significant negative relationship with total functional support (TF), $r = -.16$, $p < .05$, total network (TN), $r = -.13$, $p < .05$, and total loss (TL), $r = -.14$, $p < .05$. This can be interpreted to mean the higher the self-esteem, the lower the perceived social support. Self-esteem had a significant positive relationship to life situation, $r = .16$, $p < .05$, where 1 was coded as pregnant and 0 as not-pregnant, indicating that those pregnant adolescents tended to have a higher self-esteem. Age demonstrated a significant inverse relationship with social support in that, TF, $r = -.19$, $p < .01$, TN $r = -$
.20, \( p < .01 \), and TL, \( \rho = -.05, p < .01 \), indicating that in this sample perceived social support was lower in older adolescents than in younger ones. Life situation and age showed a significant moderate positive relationship, \( \rho = .37, p < .01 \), indicating that older adolescent females were more likely to be pregnant. The significant negative relationship between life situation and SES, \( \rho = -.32, p < .01 \) and age and SES, \( \rho = -.15, p < .05 \) indicated that the pregnant adolescents reported lower SES and that older adolescents reported lower SES. For the three dimensions of social support, total functional support (TN) showed significant positive correlations with total network (TN), \( \rho = .76, p < .01 \), TL, \( \rho = .13, p < .05 \), life situation, \( \rho = .15, p < .05 \), SES \( \rho = .16, p < .05 \), and a significant negative correlation with age, \( \rho = -.19, p < .01 \). In comparison, total network (TN) shows significant negative correlations with life situation, \( \rho = -.17, p < .01 \), and age, \( \rho = -.20, p < .01 \) while total loss (TL) showed significant negative correlations with life situation, \( \rho = -.16, p < .05 \), age, \( \rho = -.05, p < .01 \), and a significant positive correlation with SES, \( \rho = .18, p < .01 \).
Table 6

Pearson Product-Moment Correlation Coefficients for Self-Esteem (SE), Social Support (SS): Total Functional (TF), Total Network (TN), Total Loss (TL), Life Situation (LS), Age, and SES

<table>
<thead>
<tr>
<th></th>
<th>SE</th>
<th>TF</th>
<th>TN</th>
<th>TL</th>
<th>LS</th>
<th>Age</th>
<th>SES</th>
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<tbody>
<tr>
<td>SE</td>
<td>1.0</td>
<td>-.16*</td>
<td>-.13*</td>
<td>-.14*</td>
<td>.16*</td>
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<tr>
<td>SS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TF</td>
<td>1.0</td>
<td>.76**</td>
<td>.13*</td>
<td>-.15*</td>
<td>-.19**</td>
<td>.16*</td>
<td></td>
</tr>
<tr>
<td>TN</td>
<td></td>
<td>1.0</td>
<td>.10</td>
<td>-.17*</td>
<td>-.20**</td>
<td>.07</td>
<td></td>
</tr>
<tr>
<td>TL</td>
<td></td>
<td></td>
<td>1.0</td>
<td>-.16*</td>
<td>-.05**</td>
<td>.18**</td>
<td></td>
</tr>
<tr>
<td>LS</td>
<td></td>
<td></td>
<td></td>
<td>1.0</td>
<td>.37**</td>
<td>.32**</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.0</td>
<td></td>
<td>-.15*</td>
</tr>
<tr>
<td>SES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.0</td>
<td></td>
</tr>
</tbody>
</table>

Note. N = 149  
* p < .05  
** p < .01
Hopefulness as the Dependent Variable

Four specific hypotheses treating adolescent hopefulness as the dependent variable were advanced as shown in Figure 2.

Figure 2. The relationship of age, SES, self-esteem, dimensions of social support and hopefulness of adolescent females.

The Pearson Product-Moment Correlation coefficients for the independent and control variables and the hopefulness scores for the sample are presented in Table 7 and provides the data for four of the hypotheses tested. The total functional support dimension of social support is the only variable significantly related to hopefulness, \( r = .15 \),
p < .05, meaning that those adolescent females with a greater amount of total functional support are likely to be more hopeful.

Table 7
Pearson Product-Moments Correlation Coefficients Between Self-Esteem, Social Support (Total Functional, Total Network, Total Loss), Life Situation, Age, SES and Adolescent Hopefulness

<table>
<thead>
<tr>
<th>Variables</th>
<th>Adolescent Hopefulness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>r</td>
</tr>
<tr>
<td>Self-Esteem</td>
<td>-.07</td>
</tr>
<tr>
<td>Total Functional (SS)</td>
<td>.15</td>
</tr>
<tr>
<td>Total Network (SS)</td>
<td>.03</td>
</tr>
<tr>
<td>Total Loss (SS)</td>
<td>-.09</td>
</tr>
<tr>
<td>Life Situation</td>
<td>.03</td>
</tr>
<tr>
<td>Age</td>
<td>-.06</td>
</tr>
<tr>
<td>SES</td>
<td>.08</td>
</tr>
</tbody>
</table>

Note. N = 149

* p < .05

Hypothesis 1a. There will be a positive association between age and hopefulness in female adolescents. This association was hypothesized on the assumption that as
children mature they look to the future in more positive ways. Table 7 reveals the relationship between age and hopefulness in female adolescents which was not significant, $r = -.06$, $p = .22$. This finding is in contrast to that of Nurmi and Pulliainen (1991) who reported that hope, or orientation and optimism toward the future, increased with age. Nurmi and Pulliainen (1991) sampled 111 eleven and fifteen year old Finnish males and females to investigate how parent-adolescent relationship, self-esteem, and intelligence influence young people's thinking about the future, and whether these influences change with age. They equated thinking about the future and hope, however a specific instrument to measure hope was not used, rather they looked at what was hoped for, for example, education, family, and leisure activities. Conversely, the present study sampled 149 pregnant and non-pregnant female adolescents aged 14 to 18 years old and utilized an instrument, the HSA (Hinds, 1985) to measure hopefulness, thus, the contrast in results may reflect methodological differences between the studies, including sample composition, research focus, definition and research instruments.

The result from this sample does not support the hypothesized relationship, suggesting that adolescent's age seems irrelevant to the degree of hopefulness expressed by them.
Hypothesis 1b. There will be a positive association between SES and hopefulness in female adolescents. This association was hypothesized based on the assumption that the adolescent's socioeconomic situation may influence the way they view the future. Table 7 reveals the hypothesized relationship between SES and hopefulness in female adolescents was not significant, \( r = .08, p < .16 \). This finding is in contrast to that of Stoner (1982) who reported a significant inverse relationship between SES and hope in a sample of 58 adult Caucasians, aged eighteen to eighty-four, diagnosed with cancer. Stoner measured hope utilizing the Stoner Hope Scale (Stoner, 1982), and SES by income, occupational level, and education. This study utilized the HSA (Hinds, 1985) and measured SES by mother's education and occupation of head of household (Greene, 1982) with a sample of 14 to 18 year old pregnant and non pregnant adolescent females. This contrast in findings may reflect methodological differences between the studies, including sample, definitions, and research instruments. A review of the literature found no studies which had investigated this relationship in adolescents.

The finding from this study may be interpreted to reflect that although lower SES adolescents have relatively limited access to socially structured avenues for academic and professional success, adolescents who have trust in their abilities have a more positive outlook toward the
future (Nurmi, 1989). The finding may also reflect the dynamic process of hope, that individuals find hope no matter (despite external conditions) and that the hopeful seem to be innately equipped with positive personal attributes, that despite the circumstances, enables uplifting feelings and thoughts (Hinds, 1988; Notwotny, 1991; Owen, 1989). In other words, adolescents may have a positive expectation of the future, even though that future holds many uncertainties, or it may be that adolescents do not necessarily view their socioeconomic circumstances as stifling in their projections to the future.

**Hypothesis 1c.** There will be a positive association between self-esteem and hopefulness in female adolescents. This association was hypothesized with a view that adolescents who have positive feelings about their worth would be more likely to be hopeful about their future. This hypothesis was not supported. Table 7 shows a non significant negative Pearson Product-Moment correlation coefficient between self-esteem and hopefulness, $r = -0.075$, $p < .18$. This partially supports the findings in a study conducted by Hinds and associates (1990) who reported conflicting findings, that the relationship between self-concept and hopefulness was statistically significant at two collection points but not at two others. This study's finding does not support that of Nurmi and Pulliainen (1991) who reported self-esteem to be positively associated with
adolescent hopefulness. Nurmi and Pulliainen reported that Finnish adolescents with increased self-esteem had higher levels of hopefulness than those with lower self-esteem.

Hinds and colleagues (1990) associated self-concept and not self-esteem with hopefulness in 8 male and 7 female adolescents, aged 9 to 20 with various diagnoses of cancer. Nurmi and Pulliainen (1991) sampled 11 and 15 year old Finnish male and female adolescents, measuring self-esteem with the RSE (Rosenberg, 1989) but equated hope with optimism and thinking about the future, specifically education, family and leisure activities, and did not utilize an instrument to measure hopefulness. This study sampled pregnant and non-pregnant adolescent females, 14 to 18 years of age, measured self-esteem with RSE (Rosenberg, 1989) and hopefulness with Hinds's (1985) HSA. Thus, the inconsistency in findings may reflect methodological differences between the studies, including sample, definitions and research instruments.

The finding from the current study may be interpreted to reflect the sample's developmental process of changing ideal ego, that the adolescents may be experiencing problems in relation to the development of self-esteem. In other words, if the interactions with significant others are major contributors to self-esteem (Rosenberg, 1989), the broadening social world of the adolescent provides opportunities for interactions with varied others and the
refinement of sense of self. This refinement however occurs over time (Mullis et al., 1992) with the adolescent experiencing many peaks and valleys related to these interactions, which may impact on the feelings of self at a given point in time. Similarly, the results may reflect the ever changing nature of hopefulness. Thus, because of the internal and external factors impacting upon the development and refinement of self-esteem during adolescence and the dynamic and changeable nature of hopefulness, it appears that additional investigation is needed to facilitate a clearer and more precise explanation of the relationship.

Hypothesis 1d. There will be a positive association between social support and hopefulness in female adolescents. This hypothesis was based on the assumption that the availability of empathy and tangible aid will increase an adolescent's positive feelings about the future. This hypothesis was partially supported. Social support was comprised of: Total functional support (emotion and tangible aid), total network (number, frequency and duration of contact), and total loss (number and amount of support lost). Table 7 reveals the relationships between the dimensions of social support and hopefulness. Functional support was positively associated with hopefulness, $r = .15$, $p < .03$ while total network, $r = .03$, $p < .35$ and total loss, $r = -.09$, $p < .13$ were not. No other studies were
found which specifically investigated the relationship between social support and hopefulness in adolescents.

The results of this study may be interpreted to reflect both developmental and proximity factors. Adolescents develop hope through seeking help from and trusting others (Nurmi & Pulliainen, 1991). Perceived social support is a person's belief that help or empathy is readily available (Sarason & Sarason, 1985), however the source of support may influence the perception of whether something is supportive or not. For the most part adolescents primarily live with their family of origin and are dependent on them for daily living and financial matter, with the source of emotional support shifting from family to the greater society. Unger & Wandersam (1988) suggest the necessity of considering the specific environmental supports and pressures that impinge on the teen during this period, for instance, the effect of perceived support for teens who live outside the parental home may be quite different than those who live in the family home. Although subjects for this study were not specifically asked whether they lived with their family of origin or not, they were asked their source of income, with 51% reporting parent(s) as the major source.

It would, therefore, seem reasonable that the positive association between hope and social support for this study may be interpreted to reflect the trust and positive feelings of being able to ask for assistance from the
adolescent's support network regardless of the current composition or members lost. This supports the findings of Buehler (1975), Farran, Sulloway and Clark (1990), Farran and Popovich (1990), Hinds (1985), Hinds and Martin (1988), Notwotny (1989, 1991) and Stoner (1982), who related hope to a person's expectation of help from others.

**Self-Esteem as the Dependent Variable**

Three specific hypotheses were advanced for explanation of self-esteem as shown in Figure 3.

![Diagram](image.png)

**Figure 3.** The relationship of age, SES, dimensions of social support and self-esteem of adolescent females.

**Hypothesis 2a.** There will be a positive association between age and self-esteem in female adolescents. This association was hypothesized based on the assumption that adolescents are likely to develop self-esteem as they age.
This hypothesis was not supported. Table 6 reveals a non significant relationship between age and self-esteem, $r = .117, p < .07$. This supports the findings of Yarchesti and Mahan (1989) who reported that age did not have a direct effect on self-esteem and Hinds, Scholes, Gattuso, Riggins and Heffner (1990) who reported that self-concept did not vary over time. This finding is in contrast to the findings of Nurmi and Pulliainen (1991), O'Malley and Backman (1983) and Foster (1989). Nurmi and Pulliainen (1991) reported a significant positive correlation, $r = .28, p < .01$ between age and self-esteem, similarly, Foster (1989) reported that self-esteem increased with age. O'Malley and Backman (1983) found that self-esteem increased significantly over a four year period.

This inconsistency in findings may be the result of methodological differences across studies, including type of design used, sample, definition, and research instruments. For example, the present study utilized a cross-sectional design to sample 149 pregnant and non-pregnant females ranging in ages from 14 to 18 and utilized the RSE (Rosenberg, 1989) to measure self-esteem, similarly Foster (1989) utilized a cross-sectional design to sample parenting and non-parenting adolescent females, however she used the Coppersmith's (1967) Self-Esteem Inventory (SEI). Yarchesti and Mahon (1989) utilized a cross-sectional design and the RSE but sampled male and female adolescents between the ages

Mullis, Mullis and Normandin (1992) point out that cross-sectional research may show age differences, but it leaves the course of developmental changes unclear and imprecise. Investigating the developmental nature of self-esteem with age, Mullis and associates (1992) utilized both designs, sampled male and female adolescents ranging in age from 14 to 19, and used the SEI (Coopersmith, 1967) to measure self-esteem. Their analysis of self-esteem data yielded significant results for the longitudinal data, $F(2, 807) = 6.52, p < .002$, but not for the cross-sectional data, $F(2, 1175) = 0.21, p > .05$.

The lack of a positive association between age and self-esteem in this study may reflect the research design and developmental age of the sample. Furthermore, self-esteem for female adolescents may be influenced by other factors of maturity than the chronological age.

**Hypothesis 2b.** There will be a positive association between SES and self-esteem in female adolescents. This association was based on the assumption that adolescents from more affluent and educated backgrounds would feel more positively about themselves. This hypothesis was not supported, $r = -0.0542, p < .256$. (see Table 6). This supports partly the findings of Mullis and associates.
(1992), who reported that the effects of parent's education and occupation were not significantly associated with adolescent self-esteem. It does not support their finding that family income was significantly associated with self-esteem. This study's finding is in direct contrast to the results of other authors (Demo & Savin-Williams, 1985; Richman, Clark, & Brown, 1985) who reported that higher SES participants exhibit higher self-esteem, and Trowbridge (1972) who found higher self-esteem among lower SES groups.

These inconsistencies may in part be attributed to the variation in the way of determining SES. For example, the current study calculated SES based on mother's education and occupation of head of household, whereas Mullis and associates (1992) calculated SES based on parent's education, occupation and family income. Perhaps the significance between self-esteem and SES is not found in this study because the subjects came from a fairly homogenous group of female Caucasians reporting middle SES.

**Hypothesis 2c.** There will be a positive association between social support and self-esteem in adolescent females. This hypothesis was based on the assumption that increased social support increases positive feelings about the self. This hypothesis was not supported, on the contrary, there were significant negative correlations. Social support was comprised of: Total functional support (emotion and tangible aid), total network (number, frequency
and duration of contact), and total loss (number and amount of support lost). Table 6 reveals the relationships between the dimensions of social support and self-esteem. Functional support, $r = -.16$, $p < .03$, total network, $r = -.13$, $p < .04$, and total loss, $r = -.14$, $p < .04$ showed significant negative correlations with self-esteem. The lower the perceived social support the higher the adolescent's self esteem.

These results do not support the findings of Yachesti and Mahon (1989) who reported a positive correlation between social support and self-esteem, $r = .30$, $p < .001$ and that social support had a direct effect on self-esteem, $R^2 = .363$, $p < .001$. These are also in contrast to the findings by Koniak-Griffin (1988) who reported several significant correlations between measures of social support and self-esteem and Hirsch and Rapkin (1987) who reported a strong association between peer support and psychological well-being. These results do support the findings of Nurmi and Pulliainen (1991) who reported that older adolescents reported less parental control, less family discussion and higher levels of self-esteem than younger adolescents.

This inconsistency in findings may be the result of methodological differences across studies, including sample composition, definitions, and research instruments utilized. For example, the current study sampled pregnant and non pregnant adolescent females, aged 14 to 18, and utilized the

Although this study found a significant negative association between social support and self-esteem it does support the findings of previous research and reflects the theoretical perspective that adolescents who are more independent and autonomous may achieve higher levels of self-esteem. A higher level of social support in fact, may act as sources of confusion for the development of self-esteem in adolescents.

Social Support as the Dependent Variable

Two specific hypotheses were advanced for the study to examine the relationships between social support and personal characteristics of age and SES as shown in Figure 4.
Hypothesis 3a. There will be a positive association between age and social support in female adolescents. This association was hypothesized with a view that adolescents as they age would be more likely to expand their social network beyond that of their immediate family. This hypothesis was not supported, instead, the results were opposite to the hypothesized association. Social support was comprised of: Total functional support (emotion and tangible aid), total network (number, frequency and duration of contact), and total loss (number and amount of support lost). Table 6 reveals the relationships between age and the dimensions of social support. Functional support, $r = -.19, p < .009$ and Total Network, $r = -.20, p < .005$ showed significant negative correlations with self-esteem, while total loss, $r = -.05, p < .25$ showed non significant negative correlations. A review of the literature found no studies
specifically examining the relationship between age and perceived social support among adolescents.

These findings may reflect that since perceived support is a person's belief that help or empathy is readily available (Sarason & Sarason, 1985), one may find incongruence between the number or types of resources and how helpful they are for a particular individual. For example, the development, mobilization, and utilization of supportive resources may be constrained as adolescents shift their emphasis from family to the broader society (Vaux, 1988). As Procidanio and Heller (1983) point out perceived social support is related to certain social network characteristics and that network engagement is not uniformly good or sufficient in itself, rather it depends on how the network is used. Although it would seem reasonable to interpret the findings of this study as showing that younger adolescents perceive more social support than older adolescents, in essence what may be reflected is the nature of changing support systems as an adolescent ages, rather than the amount of support available. Further, since the instrument used to measure social support in the present study cannot distinguish the sources of support, it can only be conjectured that the older female adolescents appear to function within a smaller circle of social support than the younger ones.
Hypothesis 3b. There will be a positive association between SES and social support in female adolescents. This association was based on the assumption that having increased SES facilitates an increased availability of social support. This hypothesis was partially supported. Table 6 reveals the relationship between SES and the dimensions of social support: Total functional, total network and total loss. SES had a significant positive association with total functional support, \( r = .1684, \ p < 0.020 \) and total loss, \( r = .18, \ p < .05 \). The relationship between total network and SES, \( r = .07, \ p < .18 \) was not significant. These findings support theorist's explanation that although the more people in one's network facilitates the greater availability of support (Norbeck et al., 1981; Turner & Noh, 1983), having low SES impinges on one's life options and makes the mobilization of such social support more difficult (Burke, 1990; Colletta & Lee, 1983; Cooley & Unger, 1991). This finding can be interpreted as, social support is the most effective when tailored to meet the adolescent's specific needs.

Conventional wisdom would suggest that both SES and age would be significantly related to social support. Of concern is whether the relationships are separate or related to each other. Anova was used to examine whether age and SES relate to total functional support and whether there is an interaction between the effects of age and SES. SES was
grouped as follows: 30 thru 45 = 1 for low SES, 46 thru 60 = 2 for middle SES, and 61 thru 76 = 3 for high SES.

To apply ANOVA properly the assumption of equality of variance must be met. Homogeneity of variance was tested for SES, Bartlett-Box F was 1.31 (p < .125), and for age, Bartlett-Box F was .551 (p < .69), hence the assumption of equal variances was met. With this assumption met, the F ratio was assessed. The F value associated with age and SES is 1.23, with the observed significance level of .289. Therefore, it appears there is no interaction between the two variables. Since there is no significant interaction, the variables of age and SES can be tested individually. The F value associated with age (1.69, p < .15) provides a test of the null hypothesis that age does not affect total functional support. The F value associated with SES (2.53, p < .08) tests the null hypothesis that SES has no main effect on total functional support. However, the main effect by age and SES together is significant E(6) = 2.23, p < .05). Therefore, although the differences in social support are not explained by age and SES independently, they are explained by these two factors taken together. Table 8 presents the results of the analysis.
Table 8
ANOVA Social Support by Age and SES

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
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<td>268700.28</td>
<td>6</td>
<td>44783.38</td>
<td>2.23*</td>
</tr>
<tr>
<td>AGE</td>
<td>135226.65</td>
<td>4</td>
<td>33806.66</td>
<td>1.69</td>
</tr>
<tr>
<td>SES</td>
<td>101267.06</td>
<td>2</td>
<td>50633.53</td>
<td>2.53</td>
</tr>
<tr>
<td>2-way Interaction</td>
<td>172539.24</td>
<td>7</td>
<td>24648.46</td>
<td>1.23</td>
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<tr>
<td>AGE SES</td>
<td>441239.53</td>
<td>13</td>
<td>33941.50</td>
<td>1.69</td>
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<tr>
<td>Explained</td>
<td>2699861.05</td>
<td>135</td>
<td>19998.97</td>
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</tr>
<tr>
<td>Residual</td>
<td>3141100.59</td>
<td>148</td>
<td>21223.65</td>
<td></td>
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</tbody>
</table>

Note.  N = 149  * p ≤ .05

Life Situation

For the analysis by life situation, two groups of adolescents were formed based on whether they were pregnant or not pregnant. The demographic and personal variables were compared for pregnant adolescent (n = 58) and non-pregnant adolescent females (n = 91). The chi-square statistic (χ²) was used to test for significance. The results of these analyses are presented in Table 9.
Table 9

Frequency Distribution of Sample's Demographic and Personal Characteristics for The Comparison of Pregnant and Non-Pregnant Adolescent Females

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Pregnant(n=58)</th>
<th>Not Pregnant(n=91)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>49</td>
<td>(84.4)</td>
</tr>
<tr>
<td>Asian</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>1</td>
<td>(1.7)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>1</td>
<td>(1.7)</td>
</tr>
<tr>
<td>Native American</td>
<td>3</td>
<td>(5.1)</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>(6.8)</td>
</tr>
</tbody>
</table>

$\chi^2 = 4.53$    $df = 5$

Residence

<table>
<thead>
<tr>
<th></th>
<th>Pregnant(n=58)</th>
<th>Not Pregnant(n=91)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>26  (44.8)</td>
<td>45    (49.4)</td>
</tr>
<tr>
<td>Rural</td>
<td>30  (51.7)</td>
<td>43    (47.2)</td>
</tr>
<tr>
<td>No Response</td>
<td>2    (3.4)</td>
<td>3     (3.2)</td>
</tr>
</tbody>
</table>

$\chi^2 = .93$    $df = 2$

Religious Affiliation

<table>
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<tr>
<th></th>
<th>Pregnant(n=58)</th>
<th>Not Pregnant(n=91)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catholic</td>
<td>26  (44.8)</td>
<td>39    (42.8)</td>
</tr>
<tr>
<td>Protestant</td>
<td>16  (27.5)</td>
<td>22    (24.1)</td>
</tr>
<tr>
<td>Jewish</td>
<td>0</td>
<td>3      (3.2)</td>
</tr>
<tr>
<td>Other</td>
<td>3     (5.0)</td>
<td>8      (8.7)</td>
</tr>
<tr>
<td>None</td>
<td>12    (20.0)</td>
<td>19     (20.8)</td>
</tr>
<tr>
<td>No Response</td>
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<td></td>
</tr>
</tbody>
</table>

$\chi^2 = 2.73$    $df = 5$
Table 9 (continued)

<table>
<thead>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Religious Participation</td>
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<td></td>
</tr>
<tr>
<td>Inactive (1-2x/year)</td>
<td>34 (58.6)</td>
<td>35 (38.4)</td>
</tr>
<tr>
<td>Monthly</td>
<td>10 (17.2)</td>
<td>26 (28.5)</td>
</tr>
<tr>
<td>Weekly</td>
<td>8 (13.7)</td>
<td>11 (12.0)</td>
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<tr>
<td>No Response</td>
<td>4 (6.8)</td>
<td>16 (17.5)</td>
</tr>
<tr>
<td></td>
<td>2 (3.4)</td>
<td>3 (3.2)</td>
</tr>
<tr>
<td>( \chi^2 = 8.08 ) ( \text{df} = 4 ) ( p = .04^* )</td>
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<tr>
<td>Marital Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single/Never married</td>
<td>51 (87.9)</td>
<td>90 (98.9)</td>
</tr>
<tr>
<td>Married</td>
<td>5 (8.6)</td>
<td>1 (1.0)</td>
</tr>
<tr>
<td>Divorced/separated</td>
<td>1 (1.7)</td>
<td>0</td>
</tr>
<tr>
<td>No Response</td>
<td>1 (1.7)</td>
<td>0</td>
</tr>
<tr>
<td>( \chi^2 = 8.56 ) ( \text{df} = 3 ) ( p = .03^* )</td>
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<td></td>
</tr>
<tr>
<td>Income Source</td>
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<td></td>
</tr>
<tr>
<td>Family</td>
<td>17 (29.3)</td>
<td>59 (64.8)</td>
</tr>
<tr>
<td>Salary (own)</td>
<td>11 (18.9)</td>
<td>19 (20.8)</td>
</tr>
<tr>
<td>Boyfriend/husband</td>
<td>14 (24.0)</td>
<td>3 (3.0)</td>
</tr>
<tr>
<td>Other</td>
<td>16 (27.5)</td>
<td>10 (10.9)</td>
</tr>
<tr>
<td>( \chi^2 = 27.9 ) ( \text{df} = 3 ) ( p = .0000^{***} )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completed years of Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>12 (13.2)</td>
<td>2 (3.4)</td>
</tr>
<tr>
<td>9</td>
<td>16 (17.6)</td>
<td>10 (17.2)</td>
</tr>
<tr>
<td>10</td>
<td>22 (24.2)</td>
<td>13 (22.4)</td>
</tr>
<tr>
<td>11</td>
<td>35 (38.5)</td>
<td>19 (32.8)</td>
</tr>
<tr>
<td>12</td>
<td>6 (6.6)</td>
<td>13 (22.4)</td>
</tr>
<tr>
<td>13</td>
<td>0</td>
<td>1 (1.7)</td>
</tr>
<tr>
<td>( \chi^2 = 12.46 ) ( \text{df} = 5 ) ( p = .02^* )</td>
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<td></td>
</tr>
</tbody>
</table>
Table 9 (continued)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Pregnant (n=58)</th>
<th>Not Pregnant (n=91)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Parent's Marital Status</td>
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</tr>
<tr>
<td>Single</td>
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<td>(8.6)</td>
</tr>
<tr>
<td>Never Married</td>
<td>3</td>
<td>(5.1)</td>
</tr>
<tr>
<td>Married</td>
<td>23</td>
<td>(39.5)</td>
</tr>
<tr>
<td>Divorced/separated</td>
<td>25</td>
<td>(43.1)</td>
</tr>
<tr>
<td>No Response</td>
<td>2</td>
<td>(3.4)</td>
</tr>
</tbody>
</table>

χ² = 8.9 df = 4

Parent's Living Together

<table>
<thead>
<tr>
<th></th>
<th>Pregnant (n=58)</th>
<th>Not Pregnant (n=91)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Yes</td>
<td>75</td>
<td>(51.0)</td>
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<tr>
<td>No</td>
<td>66</td>
<td>(44.2)</td>
</tr>
<tr>
<td>No Response</td>
<td>7</td>
<td>(4.6)</td>
</tr>
</tbody>
</table>

χ² = 9.1 df = 2 p = .01**

Note. N = 149

* p < .05
** p < .001

There were significant differences in distribution according to religious participation, marital status, income source, completed years of education, and whether parents lived together for the pregnant and non-pregnant groups. Non pregnant adolescents reported significantly greater religious participation, χ²(3) = 8.08, p < .05, family as
source of income, $\chi^2(3) = 27.0$, $p < .01$, being single, $\chi^2(3) = 8.56$, $p < .05$, and parents living together, $\chi^2(2) = 9.1$, $p < .01$, but significantly fewer years of completed education, $\chi^2(5) = 12.46$, $p < .05$ than the pregnant adolescents.

Hypothesis 4a. Pregnant adolescent females will have significantly lower scores on SS, SE and Adolescent Hopefulness than non-pregnant adolescent females. This hypothesis was partially supported. The t-test for independent samples was used to compare the means on these measures for the two groups (Table 10).
Table 10

T-tests Analysis of Differences in Hopefulness, Self-Esteem, Social Support (Total Functional, Total Network, and Total Loss) for Pregnant and Non-Pregnant Adolescent Females

<table>
<thead>
<tr>
<th>Variable</th>
<th>Preg</th>
<th>Non-Preg</th>
<th>df</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hopefulness</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preg</td>
<td>58</td>
<td>61.06</td>
<td>7.07</td>
<td>147</td>
<td>-.46</td>
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<tr>
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<td>91</td>
<td>60.51</td>
<td>7.30</td>
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<tr>
<td><strong>Self-Esteem</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preg</td>
<td>58</td>
<td>24.03</td>
<td>2.32</td>
<td>147</td>
<td>-2.02</td>
</tr>
<tr>
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<td>91</td>
<td>23.30</td>
<td>2.02</td>
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<tr>
<td><strong>Social Support</strong></td>
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<td></td>
</tr>
<tr>
<td><strong>Total Functional</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preg</td>
<td>58</td>
<td>262.58</td>
<td>144.13</td>
<td>147</td>
<td>1.94</td>
</tr>
<tr>
<td>Non-Preg</td>
<td>91</td>
<td>309.58</td>
<td>144.48</td>
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<td><strong>Total Network</strong></td>
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<td></td>
<td></td>
<td></td>
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</tr>
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<td>Preg</td>
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<td>107.36</td>
<td>60.06</td>
<td>147</td>
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<td>93.41</td>
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<td><strong>Total Loss</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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<td>Preg</td>
<td>58</td>
<td>2.32</td>
<td>3.24</td>
<td>129</td>
<td>2.31</td>
</tr>
<tr>
<td>Non-preg</td>
<td>91</td>
<td>4.43</td>
<td>7.66</td>
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</tr>
</tbody>
</table>

Note. N = 149 * p < .05
1. Social Support

In terms of social support there were significant differences between the pregnant and non-pregnant adolescents for all three indices of social support. The mean total functional support score for the pregnant adolescents was 262.5 (SD ± 144.13) whereas for the non-pregnant group, the mean was 309.58 (SD ± 144.48). The differences between the two groups were statistically significant, $t(147) = 1.94, p < .05$. Pregnant adolescent females had significantly lower total functional support scores than non-pregnant adolescent females. The total functional support scores were divided into the subscales of emotion and tangible aid to determine if one subscale was more significant (Table 11). The mean score for the pregnant group's emotion subscale was 181.18 (SD ± 101.39) and the mean score for the non-pregnant group was 208.09 (SD ± 97.91). The difference however between the two groups was not statistically significant, $t(147) = 1.61, p < .109$. On the other hand, the mean score for tangible aid for the pregnant group was 81.39 (SD ± 47.55) and the mean score for the non-pregnant group was 101.48 (SD ± 49.50). The differences between the two groups were statistically significant, $t(147) = 2.45, p < .015$.

The mean score for the pregnant group's total network was 107.36 (SD ± 60.06) and the mean score for the non-pregnant group was 136.28 (SD ± 93.41), indicating a
Table 11

T-tests Analysis of Differences in Total Functional, Total Network, and Total Loss Subscales for Pregnant and Non-Pregnant Adolescent Females

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>df</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Functional</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Emotion</td>
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<tr>
<td>Preg</td>
<td>58</td>
<td>181.18</td>
<td>101.39</td>
<td>147</td>
<td>1.61</td>
<td>.109</td>
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<td>Non-Preg</td>
<td>91</td>
<td>208.09</td>
<td>97.91</td>
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<tr>
<td>Tangible Aid</td>
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<td>Preg</td>
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<td>81.39</td>
<td>47.55</td>
<td>147</td>
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<td>.015*</td>
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<td>101.48</td>
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<tr>
<td><strong>Total Network</strong></td>
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</tr>
<tr>
<td>Number</td>
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<td>6.49</td>
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<td>.03*</td>
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<td>.02*</td>
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<td>73.75</td>
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</table>
Table 11 (continued)

<table>
<thead>
<tr>
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<th>N</th>
<th>M</th>
<th>SD</th>
<th>df</th>
<th>t</th>
<th>p</th>
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<tbody>
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</tr>
<tr>
<td>Number Lost</td>
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<td></td>
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</tr>
<tr>
<td>Preg</td>
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<td>.94</td>
<td>1.66</td>
<td>105</td>
<td>1.86</td>
<td>.06</td>
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</tr>
<tr>
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<td>1.49</td>
<td>146</td>
<td>2.36</td>
<td>.02*</td>
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<td>1.60</td>
<td>1.52</td>
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</tr>
</tbody>
</table>

Note.  N = 149  * p < .05

statistically significant difference, t(147) = 2.30, p < .02 (Table 10). The pregnant adolescents had a smaller total network than the non-pregnant adolescents. Dividing the variable into its subscales, the mean score for the network number for the pregnant group was 11.65 (SD ± 6.4) and 13.89 (SD ± 6.06) for the non-pregnant group with a statistically significant difference, t(147) = 2.13, p < .035. The subscales of frequency and duration were not statistically significant between the two groups, t(122) = 1.88, p < .06 for the frequency subscale, and t(147) = 1.74, p < .08 for the duration subscale. (see Table 11).

The third dimension of social support, total loss, was assessed for the pregnant group (M = 2.32, SD ± 3.2) and
non-pregnant group (M = 4.43, SD ± 3.2). There was significant difference in the total loss between the two groups, t(129) = 2.31, p < .02, (Table 10). The non-pregnant group experienced more total loss than the pregnant group. Dividing this dimension into its subscales, the mean score for the number lost was not statistically significant between the two groups, t(105) = 1.86, p > .06 while the mean score for amount lost for the pregnant group 1.0 (SD ± 1.49) and 1.60 (SD ± 1.52) for the non-pregnant group indicated a statistically significant difference between the two groups, t(146) = 2.36, p < .02. (See Table 11).

The findings for the total functional support and total network score supported the hypothesis that pregnant adolescents would have significantly lower scores on social support than non-pregnant adolescents. This supports the finding of Burke (1990) who reported that non-pregnant adolescents scored higher on functional support and total network than pregnant adolescents. The finding that non-pregnant adolescents experienced statistically significant more total loss did not support the hypothesis. This result also does not support Burke's (1990) reported finding that pregnant adolescents reported more total loss than non-pregnant adolescents.

This study's results may be interpreted that since social support emerges from the social and cultural context
from which it is embedded (Mitchell & Hodson, 1986), the characteristics of the context are likely to vary across setting, population, and time (Vaux, 1988) and may facilitate or inhibit the development, mobilization, and utilization of supportive resources. Hobfodl and Stokes (1988) argue that individuals differ in their ability to perceive and interpret their environment and supportive transaction. Considering that perceived support is a person's belief that help or empathy is readily available (Sarason & Sarason, 1985), one may find considerable incongruence between the number or types of resources and how helpful they are for a particular individual. As Coyne and Delongis (1986) point out not all relationships are supportive and that sometimes well-intended efforts are regarded as unhelpful by the recipient (Wortman, 1984). In essence, the source of support may influence the perception of whether something is supportive or not.

Cutrona (1989) reported that individuals who report high levels of social support are instrumental in attracting others, building an effective network of supports and knowing how to communicate their needs. As Procidanio and Heller (1983) point out, perceived social support is related to certain social network characteristics and that network engagement is not uniformly good or sufficient in itself, rather it depends on how the network is used. For example,
adolescents shift their emphasis from family to the broader society, family members are no longer the primary sources for social support although they do continue to provide guidance, financial and practical aid, instead peers and teachers may become important sources of support (Cauce, 1986). Cooley and Unger (1991) reported that similar to non pregnant teens, younger pregnant teens tend to live with their family of origin and receive support for emotional and financial assistance, conversely older teen tend to have completed more education and to live independently. For older pregnant teens, financial assistance from family of origin is minimal. Teens also tend to select peers with similar interests and SES backgrounds (Vaux, 1988), thus membership in a network of support and affiliation may also be a consequence of teen pregnancy. Colletta and Lee (1983) reported pregnant teens consider peers supportive when the teen is included in activities, by the number of peers who are pregnant, and when the peer expresses a positive attitude toward adolescents who are pregnant.

Although the subjects for this study were not asked whether they lived with family of origin or independently, 29.3% of pregnant adolescents reported their income source as coming from family compared to 64.8% of the non-pregnant group. Table 12 shows that the sample of pregnant adolescents reported lower SES, thus from this information one could infer that the significant difference in social
Support may reflect the lower SES and peer group network of the pregnant adolescent group. In summary, independence, lower SES and a peer group of other pregnant adolescents impinges on the availability of perceived social support.

2. Self-Esteem

The hypothesis that pregnant adolescent females will have significantly lower scores on self-esteem than non-pregnant adolescents was not supported. On the contrary, pregnant adolescent females had significantly higher self-esteem scores than the non-pregnant group. For the pregnant adolescents the mean self-esteem score was 24.03 (SD ± 2.32), whereas the non-pregnant group's mean self-esteem score was 23.30 (SD ± 2.02). The differences between the two groups was statistically significant, t(147) = -2.02, p < .045. (see Table 10). This supports the finding of Matsuhaski and Felice (1991) who reported that pregnant teens had overall higher self-esteem than non-pregnant teens. It does not support the findings of Streetman (1987), Kellinger (1985), and Foster (1989) who reported no significant differences in the self-esteem of pregnant and non-pregnant adolescents. Matsuhashi and Felice (1991) compared the self-concept, not self-esteem, of 43 primiparous pregnant teens with 43 never-pregnant teenagers, matched by age, race, pubertal development, and SES. Streetman (1987) sampled 93 unmarried, 14 to 19 years of age, to investigate the differences between the self-esteem
of female adolescents with and without children. Self-esteem was measured using the SEI (Coopersmith, 1967) and RSE (Rosenberg, 1989) with no statistical differences found between the self-esteem scores utilizing the two instruments or in the self-esteem measures between the childless teenagers and teenage mothers. Foster (1989) sampled 105 pregnant, 300 never been pregnant, and 107 parenting female adolescents aged 14 to 19 years old to investigate the relationship between various variables and self-esteem and found no significant difference in self-esteem scores between the three groups, \( F(2,502) = 2.79, p = .06 \).

Kellinger (1985) sampled 28 pregnant and 31 non-pregnant unmarried female adolescents aged 13 to 19, measuring self-esteem with RSE and found no significant differences between the self-esteem of the two groups. This study sampled 149 pregnant and non-pregnant adolescent females, 14 to 18 years of age and measured self-esteem with the RSE (Rosenberg, 1989), thus, the contrast in findings may reflect methodological differences across the studies including sample, definition, and research instruments.

The higher self-esteem of the pregnant adolescents in this sample may be explained by the symbolic significance of motherhood. In the United States, motherhood seems to have a special significance and often represents a time of gratification and strong feelings of self-worth. Normative expectations influencing reproduction vary however from
social location and historical period. While the various routes to adulthood are constrained by the social setting, integrating one's concept of personal identity with the surrounding environment may, in some instances, be facilitated by parenthood at an early age. Matsuhaki and Felice (1991) suggested that some adolescent females may develop their own sexual identity through pregnancy. For other teens, seeing little opportunity for future careers, motherhood may be seen as the only option available. Neel, Jay and Litt (1985) reported that teens hoped to find direction and purpose for their lives through their sexual relations, and ultimately through their pregnancies and babies. Flick (1986) reported that adolescents who tend to hold traditional stereotypical sex role values that define woman's roles as centering around home, husband, and children engage in high risk sexual behavior.

However it is impossible to determine from the data why the pregnant adolescents had higher levels of self-esteem. Some interesting questions are raised: Did their sexuality increase their positive feelings about themselves, was motherhood a valued outcome, or was it because they were older and their self-esteem was already refined?

3. Hopefulness

There was no significant difference between the hopefulness of the pregnant and non-pregnant adolescent females. The mean hopefulness score for the pregnant group
was 61.06 (SD ± 7.07). The non-pregnant group's hopefulness score was 60.51, (SD ± 7.30). The differences between the two groups showed no statistical significance, t(147) = -.46, p < .64) (Table 10). No other studies have looked at this phenomena in pregnant and non-pregnant adolescent females.

This finding may be interpreted that adolescent expectations are mediated by self-esteem and opportunities offered by society. That although pregnant adolescents tend to live predominantly in the present and have limited vision of the future (Colletta & Lee, 1983; Cooley & Unger, 1991; Holt & Johnson, 1991) this finding suggests that people's thinking and behavior are determined not only by previous experiences, but by expected development events, interests, goals and expectations which exemplify an important part of socialization into a culture. The hopes of the pregnant teen may be centered around the pregnancy, that through the pregnancy a goal could be achieved. The goal of birth and a child may hold the same import as the goal of college or career to the non-pregnant adolescent. On the other hand, for some, early childbearing and financial assistance may be related to a greater opportunity for educational and financial independence than delayed childbearing (McAnarney, 1985). Therefore, contrary to the common notion held by adults and scientists that presumes teenage pregnancy to be a doomed, hopeless situation, pregnant teenagers may not be
too different in their outlook of the future from other teenagers who are not pregnant. Pregnancy as a type of life situation that onlookers find distressing, may have little impact on the way adolescents view their own lives and future.

Another explanation may be that of the dynamic, ever changing character of hopefulness. Not only does hope change in form and extent but adolescent participation may vary in extent over time also, due to changing biological, psychological, or developmental status. In other words, an adolescent may answer quite differently at a subsequent time period. This intra-individual variability is difficult to identify and interpret in designs that do not allow for the study of the same person longitudinally. Therefore, it is impossible to infer specific reasons from this study's data.

Hypothesis 4b. There will be significant differences between pregnant and non-pregnant female adolescents in terms of AGE and SES. The hypothesis, there would be a significant difference between the age of pregnant and non-pregnant adolescent females was supported. The differences between the mean age of the pregnant group, 17.37 (SD ± .81) and the non-pregnant group, 16.46 (SD ± 1.26) were statistically significant, $t(147) = -4.91, p < .000$. Pregnant adolescent females were significantly older than the non-pregnant adolescents. (see Table 12).
Table 12

T-tests Analysis of Differences in Age, SES for Pregnant and Non-Pregnant Adolescent Females

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>df</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preg</td>
<td>58</td>
<td>17.37</td>
<td>.81</td>
<td>147</td>
<td>-4.91</td>
<td>.000**</td>
</tr>
<tr>
<td>Non-Preg</td>
<td>91</td>
<td>16.46</td>
<td>1.26</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preg</td>
<td>58</td>
<td>53.56</td>
<td>10.31</td>
<td>147</td>
<td>4.21</td>
<td>.000**</td>
</tr>
<tr>
<td>Non-Preg</td>
<td>91</td>
<td>60.49</td>
<td>9.43</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. N = 149

**p < .01

These results support the findings of Burke (1990) and Foster (1989) who reported significant differences in ages of parenting adolescents, pregnant adolescents and non-parenting adolescents. Burke (1990) found adolescent mothers were significantly older than the non-parenting adolescents, $t(107) = 5.36$, $p < .001$ (Burke, 1990, p. 32). Foster (1989) sampled 105 pregnant and 300 never been pregnant aged 14 to 19 years and found pregnant adolescents had a significantly greater mean age of 16.6 than the never pregnant teens ($M = 15.6$).

The differences between the mean SES score for the pregnant group was 53.56 (SD $\pm$ 10.31) and the non-pregnant
group \((M = 60.49, \text{SD} \pm 9.43)\) were also statistically significant, \(t(147) = 4.21, p < .000\). (see Table 12). The pregnant group had significantly lower socioeconomic status than the non-pregnant group. This study's results do not support the finding of Burke (1991) who reported no significant difference between the mean SES score of 53 for adolescent mothers and a mean SES score of 54 for non-parenting adolescents. Burke (1990) however, reported difficulty in calculating the SES using Green's formula, 46% of the adolescent mothers and 32% of the non-parenting adolescents were not included in the analysis, due to missing data. Although the results of this study could be interpreted to support the findings of Zabin, Hirsch and Boscia (1990) who reported that adolescents carrying to term were more economically disadvantaged than non-pregnant adolescents and those adolescents choosing to abort, they did not identify a specific SES measurement tool or statistical findings to base their conclusions on. Foster (1989) assessed family income and employment but did not investigate the differences between them for the parenting and never been pregnant adolescents, rather Foster looked at the sample as a whole and found the mean family income per year was $22,984.78 with 38 (8%) of the 549 adolescent females receiving welfare. This contrast in results may therefore reflect methodological differences between the
studies including sample, research focus, definition and research instruments.

An explanation for this study's results could be based on the assumption that economically disadvantaged adolescents are less likely to use contraceptives and that a longer time frame of being sexually active during adolescence increases the risk of pregnancy due to non use of contraceptives (Balassone, 1988; Castiglia, 1990; Durant, Jay, & Seymore, 1990; Zabin, Hirsch, & Boscia, 1990). This study however did not access the age at initiation of sexual activity, and although it asked whether the adolescent used contraceptives or not, it was not explicitly asked whether they were being used at time of conception. Furthermore, the sample is this study was predominately Caucasian, reporting low-medium to high-medium SES whereas the majority of prior research has overly sampled minorities reporting low SES, thus limiting comparisons and conclusions. However, the findings from this study support the notion that the pregnant teens are more likely to come from families of lower SES. Whether teenagers use pregnancy as a means of escaping from poverty or as a means to attain valued possessions is still a question to be addressed.

Contingency tables were computed to examine the distribution of age (Table 13) and SES (Table 14) by life situation (0 = non-pregnant, 1 = pregnant). SES was recoded as follows: (1) 30 thru 45 = 1 for low SES, (2) 46 thru 60
= 2 for medium SES, and (3) 61 thru 76 = 3 for high SES. There were significant differences in distributions according to age and SES for the pregnant and non-pregnant groups.

Table 13

Crosstabulation of Life Situation by Age

<table>
<thead>
<tr>
<th>Life Situation</th>
<th>Age 14</th>
<th>Age 15</th>
<th>Age 16</th>
<th>Age 17</th>
<th>Age 18</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Pregnant</td>
<td>n = 6</td>
<td>19</td>
<td>17</td>
<td>25</td>
<td>24</td>
<td>91</td>
</tr>
<tr>
<td></td>
<td>% = (6.6)</td>
<td>(20.9)</td>
<td>(18.7)</td>
<td>(27.5)</td>
<td>(26.4)</td>
<td>(100)</td>
</tr>
<tr>
<td>Pregnant</td>
<td>n = 0</td>
<td>2</td>
<td>6</td>
<td>18</td>
<td>32</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>% = (3.4)</td>
<td>(10.3)</td>
<td>(31.0)</td>
<td>(55.2)</td>
<td>(100)</td>
<td></td>
</tr>
</tbody>
</table>

$$\chi^2(4) = 21.02, \ p = .0003 \ ***$$
Table 14

Crosstabulation of Life Situation by SES

<table>
<thead>
<tr>
<th>Life Situation</th>
<th>SES</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Pregnant</td>
<td>n =</td>
<td>6</td>
<td>40</td>
<td>45</td>
<td>91</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>(6.6)</td>
<td>(44.0)</td>
<td>(49.5)</td>
<td></td>
</tr>
<tr>
<td>Pregnant</td>
<td>n =</td>
<td>9</td>
<td>36</td>
<td>13</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>(15.5)</td>
<td>(62.1)</td>
<td>(22.4)</td>
<td></td>
</tr>
</tbody>
</table>

\[\chi^2(2) = 11.7, \ p = .002 \]**

Explanation of Hopefulness

**Hypothesis 5.** The fifth hypothesis for this study was: A significant amount of hopefulness will be predicted by social support and self-esteem while controlling for age and SES in female adolescents. Multiple regression statistics were computed to test Hypothesis 5 and to determine the strength and nature of the relationship between the independent variables and adolescent hopefulness.

Based on data from previous research the relationships between age, SES, and hopefulness were expected to be significant (Nurmi & Pulliainen, 1991; Stoner, 1982) and, therefore, age and SES would be statistically controlled in
this investigation (Greene, 1982; Hamilton, 1990). Because of the negligible association found between age and hope, \( r = -0.06, p < 0.223 \) and SES and hope, \( r = 0.0802, p < 0.165 \), the statistical control was not necessary for this analysis (Table 8). Life situation was also thought to be a factor (CDF, 1987) however, Table 8 shows no significant association between life situation and hopefulness, \( r = 0.03, p < 0.32 \).

Stepwise multiple regression was used to examine the question: To what extent do self-esteem and social support explain hopefulness in adolescent females. Self-esteem, and social support (total functional, total network and total loss) were used as the regression variables. Hope was the dependent variable. In stepwise multiple regression, the order of entry of variables is based on statistical criteria, and at each step, the variable that adds most to the prediction is entered (Tabachnick & Fidell, 1983). An alpha of 0.05 was used as the statistical criterion for entry of variables. None of the variables were entered or removed using this criteria, thus, at \( p < 0.05 \) none of the variables accounted for any of the variance in the hopefulness scores of adolescent females.

The Hierarchical Multiple Regression model was utilized to answer the question: Do social support and self-esteem add to the prediction of hopefulness in adolescent females. In hierarchial regression, independent variables enter the
regression in an order specified by the researcher and are then assessed in terms of what they add to the prediction of the dependent variables. Therefore, by using hierarchial multiple regression, it was possible to determine the proportion of variance explained in the dependent variable hopefulness, and to examine which independent variables, self-esteem and social support, added to the prediction of hopefulness.

The results of the first hierarchial regression (Table 15) indicated that self-esteem when entered first, accounted for \(-.001\%\) of the variance in hopefulness scores. When total functional support was entered, the adjusted $R^2$ changed to .01, indicating that total functional support accounted for 1% of the variance in the hopefulness scores. When total network was entered, the adjusted $R^2$ increased to .02, and when total loss was entered the adjusted $R^2$ increased to .03. Thus, social support accounts for 3% of the variance in hopefulness scores.

The equation for this analysis was:

$$HSA = 64.35 - .22(RSE) + .01(TF) - .01(TN) - .14(TL) + ei$$
Table 15
Hierarchial Regression of RSE and Social Support: Total Functional (TF), Total Network (TN), and Total Loss (TL) on Adolescent Hopefulness

<table>
<thead>
<tr>
<th>Variable Entered</th>
<th>Adjusted R²</th>
<th>F to Enter</th>
<th>R² Change</th>
<th>F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSE</td>
<td>-.001</td>
<td>.84</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Support</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TF</td>
<td>.011</td>
<td>1.84</td>
<td>1.001</td>
<td>1.0</td>
</tr>
<tr>
<td>TN</td>
<td>.020</td>
<td>2.08</td>
<td>.010</td>
<td>.24</td>
</tr>
<tr>
<td>TL</td>
<td>.030</td>
<td>2.13</td>
<td>.01</td>
<td>.05</td>
</tr>
</tbody>
</table>

Note. N = 149

The results of the second hierarchial regression (Table 16) revealed that total functional support, when entered first accounted for 1.5% of the variance in hopefulness scores. When total network was entered the adjusted R² changed to .02 and to .03 when total loss was entered. The effect of self-esteem, entered last was zero. Again social support accounted for 3% of the variance in hopefulness.
The equation for this analysis was:

\[
HSA = 64.43 + .015(TF) - .017(TN) - .14(TL) - .227(RSE) + ei
\]

Table 16

Hierarchial Regression of Social Support: Total Functional (TF), Total Network (TN), and Total Loss (TL) and RSE on Adolescent Hopefulness

<table>
<thead>
<tr>
<th>Variable Entered</th>
<th>Adjusted (R^2)</th>
<th>(F) to Enter</th>
<th>(R^2) Change</th>
<th>(F) Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Support</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TF</td>
<td>.015</td>
<td>3.32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TN</td>
<td>.025</td>
<td>2.92*</td>
<td>.01*</td>
<td>-.40</td>
</tr>
<tr>
<td>TL</td>
<td>.032</td>
<td>2.63*</td>
<td>.01*</td>
<td>-.29</td>
</tr>
<tr>
<td>RSE</td>
<td>.03</td>
<td>2.13</td>
<td>.00</td>
<td>-.50</td>
</tr>
</tbody>
</table>

Note. \(N = 149\) \* \(p \leq .05\)

The multiple regression analysis includes a test of linearity, the t-test procedure. The results of the t-test revealed a significant linear relationship of total functional support, \(p < .01\). It appears that total
functional support (emotion and tangible aid) is a better predictor of hopefulness in adolescent females than any of the other variables included in the study.

The finding that 3% of the variance in hopefulness is explained by social support leaves 97% of the variance unexplained by the model. Thus, there are many other variables which were not included in this study that impacted on the hopefulness scores. Hopefulness in this sample of adolescent females was not explained by the chosen variables of self-esteem, social support, age, and SES.

**Summary**

The purpose of this study was to examine the theorized relationships between self-esteem, social support and hopefulness of adolescent females which had emerged from the literature. In order to accomplish this purpose hypotheses were derived specifically to test with a sample of pregnant and non-pregnant adolescent females.

Hypothesis 1a, 1b, 1c, 2a, 2b, 2c, and 3b revealed there were no significant positive relationships between hopefulness and age, SES and self-esteem, self-esteem and age, SES, and social support, and social support and age in this sample of adolescent females. Hypothesis 1d and 3a however, revealed that there were significant relationships
between hopefulness and social support, and social support and SES in this sample of adolescent females.

T-tests revealed significant differences between the self-esteem, perceived social support, age and SES of the pregnant and non pregnant subjects. Pregnant adolescents were significantly older, reported significantly lower SES, and perceived social support but significantly higher self-esteem. There were no significant differences between the hopefulness levels of the two groups. Stepwise multiple regression analysis indicated that of the variables included in the study none explained hopefulness in adolescent females. From the hierarchial regression, social support was indicated to explain 3% of the variance in hopefulness while self-esteem explained none. Of the three dimensions of social support total functional support (emotion and tangible aid) was the best predictor of hopefulness in adolescent females. Ninety-seven per cent of the variance in hopefulness remains unexplained leaving a wide range of potential variables untapped for future investigation.

In conclusion, through testing the study hypotheses, some relationships between the variables in the explanation of hopefulness were shown to exist. The following chapter presents the conclusions, limitations, and recommendations for nursing research, practice and theory.
CHAPTER V

CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

An explanation for adolescent hopefulness relating self-esteem and social support was proposed for this study. A desire to define relationships important to theory development rather than to specify causal relationships was the emphasis of the study.

The theoretical framework for this study emerged from the literature on hope, self-esteem and social support. The Symbolic Interaction perspective provided the theoretical basis for the framework and is evident in the conceptualizations of self-esteem, social support, and adolescent hopefulness. Within this framework, the situation of adolescent pregnancy was taken as offering a specific context in which the explanation of hopefulness needed further elaboration. From this framework hypotheses were derived specifically to test with a sample of adolescent females.

Conclusions

The principle conclusions drawn from the results of this study of 149 adolescent females are:
1. Hopefulness in female adolescents is positively associated with and predicted by perceived social support.

2. Hopefulness in female adolescents is not related to self-esteem, age, SES or life situation.

3. There is no difference in the hopefulness of pregnant and non-pregnant adolescent females.

4. The pregnant adolescents had higher self-esteem and lower social support than the non-pregnant adolescent females.

The findings that (a) social support is positively associated with adolescent hopefulness and (b) there is no difference in the hopefulness of pregnant and non-pregnant adolescent females, even though pregnant adolescents reported lower SES and less social support illustrates the theoretical perspectives that social support emerges from the social and cultural context from which it is embedded (Mitchell & Hodson, 1986), with hopefulness formed within the context of self and social support. Further, adolescent expectations are mediated by opportunities offered by society. In other words, adolescent thinking and behavior are determined by previous experiences, expected developmental events, interests, goals and expectations which exemplify an important part of socialization into a culture.

Although it has been estimated that 60 to 80% of adolescent pregnancies are unplanned (Hughes et al., 1989)
it has been argued that the rates of unintended pregnancies may not be this high (Dash, 1989). The meaning that a pregnancy has to an individual will vary. Contrary to the commonly held notion that adolescent pregnancy is a doomed, hopeless situation, pregnant teens may not be too different in their outlook of the future than non-pregnant teens, rather the hopes of the pregnant teen may be centered around the pregnancy. For example, Furstenberg, Brooks-Gunn and Morgan (1989) followed a cohort of adolescent mothers over a seventeen year period and found one third of the female children became adolescent mothers as well. Although the rate of early childbearing among the subject's mothers is not known because data on their mother's current age or age at first birth was not obtained, early childbearing may be an intergenerational pattern and culturally sanctioned.

The lower level of social support, specifically tangible aid, reported by the pregnant adolescents further reflects the social and cultural context within which it is embedded. In this study, pregnant adolescents were older, reported fewer parents living together, self as the major source of income, and lower SES. This perception of decreased tangible aid may in fact reflect that the sources of support for the pregnant teen may already be overburdened. In general, lower SES impinges on life options and makes the availability and mobilization of social support more difficult.
The findings that (a) social support and self-esteem are negatively associated and (b) the pregnant adolescents reported higher self-esteem and lower social support illustrates the theoretical perspectives that the social environment, the people who are potential or actual sources of support and the social system within which an individual is embedded (Kim, 1983), and how the adolescent is seen in the eyes of others is of critical importance (Vaux, 1988).

Self-esteem emerges from the reflected appraisals, social comparisons of one's accomplishments and becomes more stable and greater with age, particularly as one develops independence and autonomy. It is the cultural context (Jacobson, 1986) that shapes an individual's ideas about autonomy, dependency, and reciprocity, which in turn influences the provision, receipt, and acceptance of social support.

The higher self-esteem of the pregnant adolescent reflects the perspective that adolescents who are more independent and autonomous achieve higher levels of self-esteem. The pregnant teens were older, had completed more years of education and reported self as the major source of income thus demonstrating greater independence and autonomy than the younger non-pregnant adolescents. Being older also facilitated a more established, precise measurement of self-esteem.
The lower perceived social support of the pregnant adolescents may reflect lower SES and the composition of their support network. Perceived social support is support one thinks is available, the NSSQ (Norbeck et al., 1981) measures perceptions of available support provided, not the amount and type of support desired. The significant difference between the social support of the pregnant and non-pregnant adolescents lay in the available perceived tangible support rather than emotional support, thus it seems that lower SES impinges on the perceived availability and mobilization of social support.

The lack of empirical validation of several of the hypothesized relationships raises a concern about the accuracy of the theoretical and empirical conceptualizations of this study. One is tempted to delete the paths between the variables, however, the absence of an association between hope and pregnancy and self-esteem and hope may be due to the complex process apparent in the model. It may also reflect that self-esteem and hopefulness, and pregnancy and hopefulness may be operating independently, in that the subjects were not asked about what they hoped for, or how they felt about their pregnancy. Indirectly, these findings may suggest a revised model that encompasses the following paths (see Figure 5).
Prior to deleting paths however, it is important to consider the limitations of the study.

**Limitations**

The sample under investigation was a small, although statistically adequate voluntary convenience sample, relatively homogeneous with respect to ethnicity, regionality, and SES. Whether the nature of the relationships will generalize to different populations remains an empirical question.

The study utilized a cross-sectional design which incorporates a one time data collection procedure thus
disallowing for change over time. Since adolescents participation in research may vary in extent and content report across time, the study's design may not have captured the complex phenomena under study. Further, if one considers that: (a) self-esteem is developed and refined with age, (b) hope is dynamic and everchanging, and (c) perceived support is based upon perceptions, there are personality, situational, and environmental factors which can confound the outcome measures of social support, self-esteem, and hopefulness that could not be assessed using a cross-sectional design.

The accuracy and honesty of the subject's responses may have been influenced by the subject's lack of clarity or understanding of the language or intent of certain questions, social desirability and/or fear of disclosure.

Implications

Nursing Theory Development

The ongoing development of a strong theoretical base upon which to develop knowledge, conduct research, and guide nursing practice requires the identification of new and established concepts, operationalization of the concepts with development of propositional statements and testing of hypothesized relationships. The theoretical framework constructed for this study emerged from the literature on
the concepts of hope, self-esteem and social support. Its adequacy as an explanatory framework was assessed through empirical findings.

Hopefulness is an intersubjective phenomenon dependent upon external and internal factors. The importance of social support to hopefulness is well supported in the literature and is thus considered an integral part in the explanation of adolescent hopefulness. This study has contributed to the explanation of adolescent hopefulness through the empirical validation of a positive relationship between social support and hopefulness. It further identified social support to be the best predictor of adolescent hopefulness in this sample. This can be interpreted that adolescents develop hopefulness through trusting and seeking help from others.

The lack of empirical validation of the other theorized relationships indicates a need to retest those linkages. If the theorized relationships are not empirically validated through repeated tests, the links may need respecification. With retesting and respecification, the emerging theory has the potential to provide new insight about hopefulness in adolescent females. The promise of this model for nursing is its potential to provide new insights into adolescent hopefulness. It can further help to identify linages between hoped for objects such as "baby", motherhood and early parenting. Thus, an understanding of hopefulness
within the context of adolescence and the specific knowledge of what contributes to adolescent hopefulness will provide an essential basis for the design of effective nursing interventions that will increase positive health outcomes for adolescent females.

Nursing Research

The proposed theoretical model provided direction for this study, however further refinement is needed. Further research is needed to be conducted in relation to self-esteem, social support, and hopefulness to determine how they are related, how they impact each other, and how they impact the adolescent female.

Ideally, research with adolescents should be prospective and longitudinal, however the approach is seldom feasible due to cost and attrition factors. Regardless, a longitudinal design would more effectively capture the how, when, and why of the complex phenomena under study. Given the complex nature of hope, self-esteem and social support and the need for understanding adolescent parenting, more qualitative designs are needed to complement the quantitative approach. Many of the questions still to be answered lend themselves to a more open-ended exploratory approach.

Qualitative research is needed in order to study the breadth and depth experienced in the feelings of hopefulness. For example, in this study, social support
accounted for only three percent of the variance in hopefulness, consequently, there are other variables which were not included in the model that contribute to the explanation. Variables contributing to feelings of hopefulness may be identified through qualitative methods and could then be investigated through quantitative methods. Qualitative methods would also provide an opportunity to explore what the adolescent hopes for. Does the teen view the hope as attainable and what is needed to attain it? For pregnant adolescents, what does having a baby mean to you, how does having a baby make you feel? What do you see for yourself in 5, 10, 20 years? What do you want to see yourself doing in 5, 10, 20 years?

Qualitative methods could also provide information on how adolescents define social support and how they perceive their own support needs and available sources. Such questions as what do you perceive as being supportive, who makes up your support network and what are the relationships involved can provide valuable information for nurses providing care to adolescent females, pregnant or not.

With retesting, reformulation, and use of different methodologies the emerging theory has the potential to provide new insights into adolescent hopefulness.

Nursing Practice

For a theory to be a value to nursing practice it must be useful. Study outcomes indicate a significant
relationship between social support and adolescent hopefulness which can be the focus of nursing interventions.

Adolescents develop hope through seeking help from and trusting others, therefore nurses are potential sources of hope. The nurse can strive to establish a trusting relationship with the adolescent and through discussion assist the teen to identify what she is hoping for. What is it she wants to achieve, what is her capacity to achieve the goal, how confident is she in being able to achieve the goal? Because hope is dynamic and ever changing, on going assessments are indicated. Nurses need to understand and be supportive of the ebb and flow in the teen's hopefulness.

Providers need to gain a better understanding of a person's social network and the role of the relationships that are operating. Nurses can assess the adolescent's support system to determine strengths and weakness, by engaging the teen in conversation about those significant to her. Who is available to help her achieve her goal? Do others important to her value her goal?

Because age was found to be significantly related to social support, nurses need to be aware of the changing nature of the social support network due to developmental changes. Also, since SES was significantly related to social support, nurses need to be sensitive to the issue that adolescents from low SES may be less likely to have a social support network which can provide needed support.
For the adolescent a focus on the family as well as the client is particularly important. For the pregnant adolescent, who, for example, are the parenting role models, what types of support do people offer, as well as what types of support is the client depended upon to provide? What is the relationship with the baby's father, how is discipline viewed, who will be involved in the care giving, what about balancing job, school, home, and child care? The practitioner can assess the level of perceived social support and based upon the assessment, can develop and implement plans to raise the quality and quantity of social support available to the adolescent.

Nurses should access the adolescent's feelings concerning self worth, since the levels of feelings of self worth have implications for nursing practice. Findings from this study suggest that pregnant adolescents have higher levels of self-esteem than non-pregnant adolescents. Nursing interventions for the pregnant adolescent should focus on maintaining the increased levels of self-esteem, while interventions with younger adolescents can focus on activities to further develop and improve one's self-esteem.

In essence, nurses serve as facilitators through the use of interventions designed to enhance the hopefulness, self-esteem, and social support of adolescent females which will improve health outcomes.
Recommendations

Hope is a complex, dynamic, ever changing phenomena. Regardless it is essential if people are to cope successfully with and adapt to certain situations they encounter throughout life. Without hope, the events of today become meaningless. As people face new situations, their goals and expectations change, further for many, how one addresses new situations is based on self-esteem. Self-esteem is developed and refined over time with interactions of significant others being major contributors to its refinement.

This study is viewed as an initial step in investigating the relationships between self-esteem, social support, and hopefulness in female adolescents. Conducting this study has resulted in the identification of future steps necessary for continuing documentation of the relationship. The lack of empirical validation of several of the theorized relationships in the model indicates a need to retest and consider respecification of the proposed linkages. Recommendations for future steps include:

1. Retesting the model in varying samples of adolescents.
2. Retesting the model using a longitudinal design.
3. A qualitative study to identify factors which directly influence adolescent hopefulness.
4. A qualitative study to determine the meaning of hopefulness for a pregnant adolescent.

5. A qualitative study to determine how adolescents define social support and perceive their own support needs.

6. A replication and extension. Namely, by introducing other variables associated with hopefulness identified by the adolescents.

This chapter has presented the conclusions based on an exploratory study of hopefulness in adolescent females. The purpose of the investigation was to examine and describe the relationships between self-esteem, social support, and hopefulness in adolescent females. A cross-sectional correlational design was employed with a convenience sample representing a hypothetical population of female adolescents. Results should be seen within that perspective and cause and effect relationships should not be assumed. Even though the magnitude of correlations was small, the most consistent correlate and the best predictor of hopefulness was social support. The findings have implications for nursing practice, research and theory development.
APPENDIX A

CONSENT FORMS FOR RESEARCH
I am a doctoral candidate in the College of Nursing, University of Rhode Island and on the faculty in the Department of Nursing at the University of New Hampshire, Durham. I am conducting a research study on the effect of social support and self-esteem on adolescent hopefulness. I am writing to request your permission to survey adolescent females aged 14 to 18 who are attending High School.

The first contact with students will require 15-20 minutes to explain the project, announce the scheduled time for the data collection and answer any questions the students might have. If interested, students will be given informed consent forms (enclosed) to sign and take home for parental/guardian signatures. All procedures for protection of human subjects will be followed.

The second contact, for data collection, will require about 40-45 minutes. Students returning signed consent forms will be given research scales: the Norbeck Social Support Questionnaire, the Rosenberg Self-Esteem Scale, The Hopefulness Scale For Adolescents (Hinds) and a Demographic and Personal Data Questionnaire. All scales are enclosed for your review. I will explain the questionnaires and remain with the students to answer questions until all students are finished.

If you have any questions concerning this project please call me at 603-746-5297 at any time. Your signature on this letter will indicate your approval. Upon your approval, I will contact you to identify appropriate settings and times within which to implement my project.
Thank you for your consideration of this request. Your assistance and cooperation will be greatly appreciated.

Sincerely,

Cynthia D. Connelly, RN, MA, MSN Doctoral Candidate
University of Rhode Island

Signed: ___________________________ Date ___________
Dear Parent or Guardian:

I am a doctoral candidate in the College of Nursing, University of Rhode Island and a professor in the Department of Nursing at the University of New Hampshire, Durham. I am conducting a study on the effect of social support and self-esteem on adolescent hopefulness. The ________ School Administration has agreed to let me recruit students who might be interested in completing a survey for me.

My survey takes about 30 minutes to complete. The answers are anonymous and strictly confidential. Data from all the subjects in the study will be analyzed collectively and no one in any way will be individually identified. I, or my advisors will be the only persons with access to the data. The survey will cover participant background (for example: age, education, head of household, sexual activity), self-esteem (How you feel about yourself), social support (relatives and friends who lend support), and adolescent hopefulness.

Participation in this survey is completely voluntary. Students will fill out the survey one time only. There are no known physical or medical risks to an adolescent taking part in this survey. There is the potential for some embarrassment or uncomfortable feelings by reading and responding to some questions. The results of this survey will help professionals learn more about social support, self-esteem and hopefulness of adolescent females.

If you are willing to have your adolescent participate, please sign and return the enclosed informed consent form with your daughter. If you would like more information about my study I can be reached at (603) 746-5297.

Thank you,

Cynthia D. Connelly, RN, MSN, MA, PhD. candidate
I have been asked to participate in a research project as described below. The researcher will explain the project to me in detail. I should feel free to ask questions. If I have more questions later, Cynthia D. Connelly, the person mainly responsible for this study, 603-746-5297, will discuss them with me.

Nature and Purpose of Study
I have been asked to take part in this study which is to examine the effect of social support and self-esteem on adolescent hopefulness. Two different groups of adolescents are being surveyed, pregnant and non pregnant adolescent females.

If I decide to participate in this study,

Explanation of the Procedure
I will be asked to complete a survey questionnaire by filling in blanks and placing checkmarks by sentences. The questionnaire will cover student background (for example: age, education, head of household, sexual activity), self-esteem (How you feel about yourself), social support (relatives and friends who lend support), and hopefulness. The questionnaire (to be taken one time only) will take approximately 30 to 35 minutes to complete. Any questions that I may have will be answered before, during, or after the survey. If I am under 18 years of age and not a parent, I will need my parent's or legal guardian's written consent for me to participate in this survey.

Discomfort and Risks
There are no known physical or medical risks or discomforts involved with my participation in this study. There is the potential for some embarrassment or uncomfortable feelings by my reading and responding to questions.
Benefits of this Study
Although there may be no direct benefit to me for taking part in this study, the information derived may help nurses and other professionals learn more about the relationship between social support, self-esteem and adolescent hopefulness. This knowledge may result in identifying and establishing services which can provide improved health care for adolescents.

Decision to quit at any time
My participation in this study is completely voluntary. A decision not to participate will in no way alter my school standing. I may decline to answer any question or questions. I am free to withdraw my consent or discontinue participation in the study at any time. Withdrawal will in no way affect my school standing.

Rights and Complaints
If I am not satisfied with the way this study is performed, I may discuss my complaints with Cynthia D. Connelly, (603) 746-5297 or with Professor Donna Schwartz-Barcott, PhD. (dissertation chair and Director of Graduate Studies, College of Nursing) at (401) 792-2766, without identifying myself, if I choose. If I have any concerns related to this study, I should contact the University of Rhode Island's Vice Provost for Research, 70 Lower College Road, University of Rhode, Kingston, RI 02881, telephone (401) 792-2635.

Confidentiality
The information I provide will be used for research purposes only, including teaching and publication. Answers are anonymous and strictly confidential. No identification will be recorded or utilized in any way. Data from all the subjects in the study will be analyzed and reported collectively. I will in no way be individually identified. Cynthia D. Connelly, or her advisors will be the only persons with access to the data. Surveys will be stored in a locked file and destroyed upon completion of this study.

I ACKNOWLEDGE THAT I HAVE READ AND FULLY UNDERSTAND THE ABOVE CONSENT, THAT ALL OF MY QUESTIONS HAVE BEEN SATISFACTORILY ANSWERED. MY SIGNATURE ON THIS FORM MEANS THAT I UNDERSTAND THE INFORMATION AND I AGREE TO PARTICIPATE IN THIS STUDY.

Signature of participant Date

Signature of parent/guardian Date
I CERTIFY THAT I HAVE EXPLAINED FULLY TO

participant ________________________ parent/guardian ________________________

THE NATURE AND PURPOSE, PROCEDURES, POSSIBLE RISK AND
POTENTIAL BENEFITS OF THIS RESEARCH STUDY. I HAVE ANSWERED
AND WILL ANSWER ALL QUESTIONS TO THE BEST OF MY ABILITY.

Cynthia D. Connelly, RN
Doctoral Candidate
College of Nursing
University of Rhode Island
(603) 746-5297

Signature of Researcher ________________________ Date ____________

Typed/printed Name ________________________
The University of Rhode Island  
College of Nursing  
White Hall  
Kingston, Rhode Island  02881  

The Relationships Between Social Support,  
Self-Esteem and Adolescent Hopefulness  

Consent Form For Research  

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Benefits of this Study
Although there may be no direct benefit to me for taking part in this study, the information derived may help nurses and other professionals learn more about the relationship between social support, self-esteem and adolescent hopefulness. This knowledge may result in identifying and establishing services which can provide improved health care for adolescents.

Decision to quit at any time
My participation in this study is completely voluntary. A decision not to participate will in no way affect the services I receive from this agency. I may decline to answer any question or questions. I am free to withdraw my consent or discontinue participation in the study at any time. Withdrawal will in no way affect the services I receive from this agency.

Rights and complaints
If I am not satisfied with the way this study is performed, I may discuss my complaints with Cynthia D. Connelly, (603) 746-5297 or with Professor Donna Schwartz-Barcott, PhD. (dissertation chair and director of Graduate Studies, College of Nursing) at (401) 792-2766, without identifying myself, if I choose. If I have any concerns related to this study, I should contact the University of Rhode Island's Vice Provost for Research, 70 Lower College Road, University of Rhode, Kingston, RI 02881, telephone (401) 792-2635.

Confidentiality
The information I provide will be used for research purposes only, including teaching and publication. Answers are anonymous and strictly confidential. No identification will be recorded or utilized in any way. Data from all the subjects in the study will be analyzed and reported collectively. I will in no way be individually identified. Cynthia D. Connelly, or her advisors will be the only persons with access to the data. Surveys will be stored in a locked file and destroyed upon completion of this study.

I ACKNOWLEDGE THAT I HAVE READ AND FULLY UNDERSTAND THE ABOVE CONSENT, THAT ALL OF MY QUESTIONS HAVE BEEN SATISFACTORILY ANSWERED. MY SIGNATURE ON THIS FORM MEANS THAT I UNDERSTAND THE INFORMATION AND I AGREE TO PARTICIPATE IN THIS STUDY.

Signature of participant __________________________ Date ____________

Signature of parent/guardian __________________________ Date ____________
APPENDIX B

QUESTIONNAIRE
DEMOGRAPHIC and PERSONAL DATA QUESTIONNAIRE

To enable me to compare the results of this study to people from different groups and situations, I would like to ask you a few questions about your background.

1. AGE: __________

2. ETHNIC BACKGROUND: ___ Asian
___ African American
___ Caucasian (white)
___ Hispanic
___ Native American
___ Other (specify) _____

3. Town you live in: __________________

4. What is the highest grade of school you have completed? (CIRCLE ONE)

<table>
<thead>
<tr>
<th>Grade School</th>
<th>High School</th>
<th>Post Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8</td>
<td>9 10 11 12</td>
<td>13 14 15 16</td>
</tr>
</tbody>
</table>

5. Current Educational Status:
a. What grade are you in today? __________
b. Left school before graduated
Do you have a GED? yes/no
c. Not currently a student
d. In college/technical school

6. Religious Preference:
a. Catholic
b. Protestant (Specify) _______________
c. Jewish
d. Muslim
e. Buddhist
f. Other (Specify) ____________________
g. None

7. Participation in Religious Activities:
a. Inactive
b. Infrequent Participation (1-2 times a year)
c. Occasional Participation (about monthly)
d. Regular Participation (weekly)

8. Do you have a job? yes/no

9. Your job is? ________________________

10. You work ________ hours per week at your job
11. Is your mother alive? yes/no
12. Is your father alive? yes/no
13. If both parents are alive, do they live _____together _____apart
14. Your parent's marital status
   a. single
   b. never married
   c. married
   d. divorced/separated
15. Does your mother have a job? yes/no
16. Your mother's job is ____________________________
17. Your mother's education is
   a. grade school
   b. high school
   c. graduated from high school or (GED)
   d. college
18. Does your father have a job? yes/no
19. Your father's job is? ____________________________
20. Your father's education is
   a. grade school
   b. high school
   c. graduated from high school or (GED)
   d. college
21. How many sisters____ and brothers____ do you have?
22. Your marital status
   a. single/never married
   b. married
   c. divorced/separated
23. Do you have a boyfriend/husband? yes/no
24. Are you sexually active (have you gone all the way?) yes/no
25. If yes, approximately the number of times
   a. 0 times per month
   b. 1-3 times per month
   c. 4-6 times per month
   d. more than 6 times per month
26. Could you have sex with more than one person in the same week?  yes/no

27. Do you use birth control? (condoms/rubbers, pills)  yes/no

28. Could you ask your sex partner to use a condom/rubber, pills?  yes/no

29. Do you want a baby?  yes/no

30. Does your boyfriend/husband want a baby?  yes/no

31. If you do not want to have sex can you say no?  yes/no

32. Do you sometimes allow boys to pressure you into sex?  yes/no

33. Are you pregnant now?  yes/no
   If yes how far along are you?  ________months

34. Have you ever been pregnant?  yes/no
   How many times?  1  2  3  4  5  more than 5

35. Your main source of income is (circle one)
   a. family (parent/guardian/in laws)
   b. own job salary
   c. boyfriend/husband
   d. other (specify) ___________________
THE HOPEFULNESS SCALE FOR ADOLESCENTS

This questionnaire contains statements made by adolescents who were describing their thoughts about how hopeful they are. Please use this questionnaire to indicate how hopeful you are right now. Because your answers are describing your honest opinions, there are no right or wrong answers. It is very important that you answer each statement according to your real opinion at this time.

Directions:

Below is a list of statements dealing with how hopeful you are. At the right of each statement are words indicating how often the statement might be true for you. Please circle the letter that best represents how often your thoughts are like those expressed in the statement: If you never think this way circle N. If you sometimes think this way, circle S. If you frequently think this way, circle F and if you always think this way circle, A.

1. I see different ways to look at a problem.  N  S  F  A
2. There are great things yet to come for me.  N  S  F  A
3. I'm not going to get any better than I am.  N  S  F  A
4. I won't let myself spend all my time feeling sorry for myself.  N  S  F  A
5. I let myself focus on the bad.  N  S  F  A
6. I have the ability to change my future.  N  S  F  A
<table>
<thead>
<tr>
<th></th>
<th>NEVER</th>
<th>SOMETIMES</th>
<th>FREQUENTLY</th>
<th>ALWAYS</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Things really won't get better for me.</td>
<td>N</td>
<td>S</td>
<td>F</td>
<td>A</td>
</tr>
<tr>
<td>8. I'm getting some self-confidence.</td>
<td>N</td>
<td>S</td>
<td>F</td>
<td>A</td>
</tr>
<tr>
<td>9. I won't let myself keep worrying about things I can't fix.</td>
<td>N</td>
<td>S</td>
<td>F</td>
<td>A</td>
</tr>
<tr>
<td>10. Someday I'm going to find somebody to love.</td>
<td>N</td>
<td>S</td>
<td>F</td>
<td>A</td>
</tr>
<tr>
<td>11. I'm pretty sure I can't make problems turn out OK.</td>
<td>N</td>
<td>S</td>
<td>F</td>
<td>A</td>
</tr>
<tr>
<td>12. I make myself do something to get my mind off bad thoughts.</td>
<td>N</td>
<td>S</td>
<td>F</td>
<td>A</td>
</tr>
<tr>
<td>13. I try to make myself believe things will get better.</td>
<td>N</td>
<td>S</td>
<td>F</td>
<td>A</td>
</tr>
<tr>
<td>14. I'm starting to come up with possibilities for me</td>
<td>N</td>
<td>S</td>
<td>F</td>
<td>A</td>
</tr>
<tr>
<td>15. Maybe there will be something going for me.</td>
<td>N</td>
<td>S</td>
<td>F</td>
<td>A</td>
</tr>
<tr>
<td>16. There's no light at the end of the tunnel.</td>
<td>N</td>
<td>S</td>
<td>F</td>
<td>A</td>
</tr>
<tr>
<td>17. I force myself to try harder.</td>
<td>N</td>
<td>S</td>
<td>F</td>
<td>A</td>
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<td></td>
<td></td>
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<td>3</td>
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</tr>
<tr>
<td></td>
<td></td>
<td><strong>NEVER</strong></td>
<td><strong>SOMETIMES</strong></td>
<td><strong>FREQUENTLY</strong></td>
</tr>
<tr>
<td>18. Things will always get better.</td>
<td>N</td>
<td>S</td>
<td>F</td>
<td>A</td>
</tr>
<tr>
<td>19. I make myself think positive thoughts.</td>
<td>N</td>
<td>S</td>
<td>F</td>
<td>A</td>
</tr>
<tr>
<td>20. I believe there is a chance for me.</td>
<td>N</td>
<td>S</td>
<td>F</td>
<td>A</td>
</tr>
<tr>
<td>21. Good can come.</td>
<td>N</td>
<td>S</td>
<td>F</td>
<td>A</td>
</tr>
<tr>
<td>22. I can't handle problems.</td>
<td>N</td>
<td>S</td>
<td>F</td>
<td>A</td>
</tr>
<tr>
<td>23. I'm not positive about my life becoming a good one.</td>
<td>N</td>
<td>S</td>
<td>F</td>
<td>A</td>
</tr>
<tr>
<td>24. I know I'll do OK in life.</td>
<td>N</td>
<td>S</td>
<td>F</td>
<td>A</td>
</tr>
</tbody>
</table>
ROSENBERG SELF-ESTEEM SCALE

Below is a list of statements dealing with your general feelings about yourself. If you STRONGLY AGREE with the statement, circle SA. If you AGREE, circle A. If you DISAGREE, circle D. If you STRONGLY Disagree, circle SD.

<table>
<thead>
<tr>
<th></th>
<th>1 Strongly Agree</th>
<th>2 Agree</th>
<th>3 Disagree</th>
<th>4 Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>On the whole, I am satisfied with my self.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
</tr>
<tr>
<td>2</td>
<td>At times I think I am no good at all.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
</tr>
<tr>
<td>3</td>
<td>I feel that I have a number of good qualities.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
</tr>
<tr>
<td>4</td>
<td>I am able to do things as well as most other people.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
</tr>
<tr>
<td>5</td>
<td>I feel I do not have much to be proud of.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
</tr>
<tr>
<td>6</td>
<td>I certainly feel useless at times.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
</tr>
<tr>
<td>7</td>
<td>I feel that I'm a person of worth, at least on an equal plane with others.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
</tr>
<tr>
<td>8</td>
<td>I wish I could have more respect for myself.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
</tr>
<tr>
<td>9</td>
<td>All in all, I am inclined to feel that I am a failure.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
</tr>
<tr>
<td>10</td>
<td>I take a positive attitude toward myself.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
</tr>
</tbody>
</table>
NORBECK’S SOCIAL SUPPORT QUESTIONNAIRE

Please list each significant person in your life on the right. Consider all the persons who provide personal support for you or who are important to you.

Use only first names or initials, and then indicate the relationships, as in the following example:

Example:

<table>
<thead>
<tr>
<th>First Name or Initials</th>
<th>Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Mary T.</td>
<td>Friend</td>
</tr>
<tr>
<td>2. Bob</td>
<td>Brother</td>
</tr>
<tr>
<td>3. M.T.</td>
<td>Mother</td>
</tr>
<tr>
<td>4. Mrs. R.</td>
<td>Neighbor</td>
</tr>
</tbody>
</table>

Use the following list to help you think of the people important to you, and list as many people as apply in your case.

- spouse or partner
- family members/relatives
- friends
- work or school associates
- neighbors
- health care providers
- counselor or therapist
- minister/priest/rabbi
- other

You do not have to use all 24 spaces. Use as many spaces as you have important persons in your life.

<table>
<thead>
<tr>
<th>NAME</th>
<th>RELATIONSHIP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
</tr>
</tbody>
</table>

| 24.  |              |
For each person you listed, please answer the following questions by writing in the number that applies.

1 = not at all
2 = a little
3 = moderately
4 = quite a bit
5 = a great deal

Question 1:
How much does this person make you feel liked or loved?

Question 2:
How much does this person make you feel respected or admired?

Question 3:
How much can you confide in this person?

Question 4:
How much does this person agree with or support your actions or thoughts?

Question 5:
If you needed to borrow $10, a ride to the doctor, or some other immediate help, how much could this person usually help?

Question 6:
If you were confined to bed for several weeks, how much could this person help you?

Question 7:
How long have you known this person?
1 = less than 6 months
2 = 6 to 12 months
3 = 1 to 2 years
4 = 2 to 5 years
5 = more than 5 years
Question 8:

How frequently do you usually have contact with this person?  
(Phone calls, visits, or letters)  
5 = daily  
4 = weekly  
3 = monthly  
2 = a few times a year  
1 = once a year or less

Please be sure you have rated each person on every question.  
Go on to the last page.

Question 9:

During the past year, have you lost any important relationships due to moving, a job change, divorce or separation, death, or some other reason?

_________ 0. No  
_________ 1. Yes

If YES:

9a. Please indicate the number of persons from each category who are no longer available to you.

_________ spouse or partner  
_________ family members or relatives  
_________ friends  
_________ work or school associates  
_________ neighbors  
_________ health care providers  
_________ counselor or therapist  
_________ minister/priest/rabbi  
_________ other (specify) ____________________

9b. Overall, how much of your support was provided by these people who are no longer available to you?

_________ 0. none at all  
_________ 1. a little  
_________ 2. a moderate amount  
_________ 3. quite a bit  
_________ 4. a great deal


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