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TRAEGER, CAROL MONROE

ADOLESCENT SELF-ESTEEM AND PERCEIVED RELATIONSHIPS WITH PARENTS AND PEERS

THE OHIO STATE UNIVERSITY

PH.D. 1985

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ADOLESCENT SELF-ESTEEM AND PERCEIVED RELATIONSHIPS WITH PARENTS AND PEERS

DISSERTATION

Presented in Partial Fulfillment of the Requirements for
The Degree Doctor of Philosophy in the Graduate School of The Ohio State University

By
Carol Monroe Traeger, M.A.

******

The Ohio State University
1985

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VITA

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CHAPTER ONE

INTRODUCTION

Adolescence is a period of changing relationships. It involves detaching from parents and establishing new and more complex relationships with peers. Changes in these relationships involve both who is seen and how frequently they are seen. Furthermore, the very quality of the relationship may undergo changes. For example, it has been noted that the early adolescent perceives more emotional support and intimacy with parents than the midadolescent who is beginning to turn to his/her peers (Hill, 1980; Hunter & Youniss, 1982; Sullivan, 1953; Youniss, 1980; Volpe, 1981). However, results indicate that intimacy in the parent-child relation does not necessarily decline as friendship becomes more intimate (Hunter & Youniss, 1982; Steinberg, 1985). The developmental course of intimacy follows a pattern described initially by Sullivan, 1953. Close relationships with peers come to supplement (but not replace) close relationships with parents, and close relationships with opposite-sex peers come to supplement (but not replace) close relationships with friends of the same sex (Steinberg, 1985; Sullivan, 1953).
These changing interpersonal ties with parents and peers are believed to be related to the adolescent's self-esteem (Rosenberg, 1979; Sullivan, 1953). The adolescent comes to see himself mostly through the eyes of others, primarily because of the messages he receives from his peers as well as from his parents (Rosenberg, 1979; Sullivan, 1953; Volpe, 1981; Youniss, 1980). Parent and peer, influence on self-concept, however, have seldom been studied from a developmental perspective (Youniss, 1980) with a focus on the perceived quantity, frequency and intimacy of these relationships. Even fewer studies have looked at how each developmental trend relates to the adolescent's self-esteem (Volpe, 1981; Youniss, 1980).

The purpose of this study is to examine adolescent self-esteem as it relates to perceived frequency of contact and intimacy with parents, both Mom and Dad separately and the quantity, frequency, and intimacy of peer relationships. Both same-sex and opposite-sex peer relationships will be examined since the early to midadolescent years emphasize same-sex peers and begin the formation of opposite-sex peer relationships. Both sets of peers and the closest peer dyadic relationship will be explored for their impact on self-esteem. Within each of these sections, attention will be given to grade and sex differences.
Developmental Trends

Normally the pattern of adolescent social development involves a trend from parents to same-sex peers to opposite-sex peers (Blos, 1962, 1967, 1973; Erikson, 1959, 1968; Jourard, 1979; Sullivan, 1953; Rubin, 1980). Striving for emotional autonomy, adolescents begin to reduce their dependence on parents as their primary source of support and turn to peers (Douvan & Adelson, 1966; Steinberg, 1985). The considerable adjustments involved with this detachment, along with pubertal development, provide some reasons for the central role same-sex friends begin to play (Douvan & Adelson, 1966). Adolescents may turn first to a same-sex peer experiencing similar changes to help them understand and adapt to these changes (Douvan & Adelson, 1966).

Furthermore, the peer group or set of peers provides emotional support for the adolescent (Cowen et al., 1973; Roff et al., 1972). The need to study aggregate group intimacy support as well as the dyadic closest friend relationship has been underscored by the revival in sociometrics as a way to study the connection between interpersonal adjustment and psychological adjustment (Coie & Dodge, 1983). Support system analyses have been part of the shift of moving from "explaining distress solely as an individual failing to link individual difficulties with characteristics of the social system" (Bloom, 1979, p. 184).

Traditional sociometric studies have focused primarily on the quantitative aspects of relationships from other's perspectives.
(i.e., quantity of peer nominations) while social-cognitive studies have focused on the subject's perceptions of the qualitative or descriptive aspects of relationships (e.g., intimacy). The different foci have created a division in the literature. It is important to understand the gradual development changes in the child's perception of relationships with peers in particular from both a qualitative and quantitative perspective and then to relate these changes to self-esteem.

As the adolescent develops and becomes more secure with his new identity, relationships with members of the opposite sex emerge (Douvan & Adelson, 1966; Erikson, 1968). According to Erikson (1968), genuine intimacy with the opposite sex does not occur until late adolescence because a secure identity has not been established earlier. Sullivan (153) sees a shift from isophilic ("friends similar to me") to heterophilic ("friends opposite from me") interpersonal relations as one of the major social tasks the adolescent faces. Females typically shift from same-sex to opposite-sex peers earlier than males (Blos, 1970).

How do these presumed shifts in the importance of different types of relationships affect the role of such relationships in the development of an adolescent's self-esteem? This question shall be examined in this study.
Intimacy

Not only are there changes during adolescence with whom the adolescent interacts and how frequently but there are also changes in how intensely or intimately he perceives such interactions (Berndt, 1979; Bigelow, 1977; Bigelow & LaGaipa, 1975). The preadolescent views relationships with parents and peers differently than the adolescent does (Bigelow & LaGaipa, 1975; Blos, 1962, 1967, 1973; Hill, 1980, Volpe, 1981; Youniss, 1980). With increasing age, children's conceptions about these changing relationships change systematically toward emphasizing psychological attributes such as intimacy and trust (Berndt, 1979; Selman, 1981; Bigelow & LaGaipa, 1975). For example, younger children associate friendship with sharing of material goods, whereas adolescents describe friendship as sharing private thoughts and feeling out a sense of mutual respect and affection (Youniss & Volpe, 1978).

Sullivan argues that the principal task of adolescence is integration of intimacy skills: that is relating on a one-to-one basis and being interpersonally sensitive and empathic with other people. He suggests that it is not only typical, but essential for mental health and "healthy" self-esteem development that young people form a close, usually same-sex intimate relationship. How do these intimate best friend relationships as well as intimacy in the set of peer relationships affect self-esteem? This question will also be examined in this study.
The perceptions of these relationships with parents and peers and their roles may vary significantly as a function of sex. The literature has shown that adolescent females are typically more expressive and concerned with maintaining interpersonal relationships than are males. For females, mother is more important than fathers in terms of intimacy. Males focus on shared activities rather than on intimacy in terms of shared feelings or acceptance (e.g., see Douvan & Adelson, 1966; Hill & Lynch, 1983; Maccoby & Jacklin, 1974).

Are these sex differences in intimacy also reflected in how adolescents evaluate themselves? Which aspect of what relationships are most important for self-esteem of males and females?

Self-esteem and Intimacy with Parents and Peers

The concept of self-esteem as a function of significant others is not a new one. As early as 1902 Cooley described the self as a reflection of the thoughts of others. Other personality theorists have followed the same line of thought and asserted that an individual's attitudes toward himself are acquired in some way from "significant others," specifically parents and peers (Adler, 1927; Cooley, 1902; James, 1890; Meade, 1934; Sullivan, 1953). As these others define and evaluate the person, so will he come to define and evaluate himself. Thus, Sullivan states "The self may be said to be made up of reflected appraisals.... If these were chiefly derogatory...then the self-dynamism will itself be chiefly derogatory...it will entertain disparaging and hostile appraisals of
itself" (p. 522).

Sullivan (1953) postulated that throughout the different stages of development, an individual needs interpersonal relations. These relationships, however, vary from one period to the next. Early in development, the child's social interactions are primarily with his parents whose approbation and/or disapproval contribute to the child's self-perception (Sullivan, 1953). Thus, during this period the self comes to resemble parents' evaluations of the child. During preadolescence, a member of the same sex becomes a "chum" or close friend. According to Sullivan (1953) a child's feelings of self-worth increase as he perceives the chum as having attitudes, interests, and feelings similar to his own. Sullivan refers to this conception of the child toward self as "reflected appraisal".

According to Rosenberg (1979), not all significant others are equally significant, and those who are more significant have greater influence on our self-esteem. Furthermore, the child is likely to attribute significance in such a way as to maximize his self-esteem. Rosenberg refers to this process as "selective valuation". The child is thus not simply a passive object, but rather, he interacts with the environment selectivity to protect his self-esteem.

The present study will focus on the quantity, frequency, and intimacy of the early adolescent's relationships with parents, same-sex peers and opposite-sex peers, and will explore the impact of each combination on global self-esteem (see p. ). Age trends and sex differences will also be emphasized.
The following chapters will review the literature in three basic areas important to the study: self-esteem, the developmental changes in relationships with parents and peers during adolescence (particularly in the intimacy of these relationships); and finally self-esteem as it relates to characteristics of parent and peer relationships.
CHAPTER TWO

SELF-ESTEEM LITERATURE

This chapter will explore several important aspects of self-esteem: historical-theoretical views, the complexity of the self-concept construct itself, the importance of studying the construct of self-esteem, and the influence of age trends and sex differences on self-esteem. This section will then discuss the relationship between self-esteem and significant others.

Historical-Theoretical View

Aspects of the self and the self-image have been discussed within a wide variety of theoretical perspectives over the last century. From the pioneering work of James (1890), Cooley (1902), Freud (1923), and Mead (1934) to the more recent formulations by Rosenberg (1965, 1979), the number of different definitions and uses of the terms self, self-image, and self-concept is overwhelming. As Wells and Marwell (1976) indicate in their review, the self-concept has been a central aspect of psychoanalysis, ego psychology, personality research, sociology, and experimental social psychology. These theoretical perspectives have tended to be imprecise and even contradictory in their use of various self-terms. It is important not merely to consider the term of self-esteem but to distinguish
between such terms as self, self-esteem, and self-concept (Blyth & Traeger, 1983).

William James' (1890) writings remain standard reference for developmental discussions of self-esteem. In his Principles of Psychology (1890), he wrote "our self-feelings are determined by the ratio of our actualities to our potentialities; a fraction of which our pretensions are the denominator, and the numerator our successes; thus self-esteem = successes:pretensions" (Wells & Marwell, 1976, p. 17). The underlying emphasis here appears to be on personal perceptions of reality rather than on reality itself. James (1890) proposed a "social self" which is the recognition which the person receives from other people. Therefore, James as early as 1890, refers indirectly to a relation between self-esteem and the perception of significant others.

Cooley (1902), the next major figure to deal with the idea of self, expanded on the self that James had labeled the "Social Me." Cooley's "looking glass self" postulates that an individual's conception of him or herself is determined by perception of other people's reaction to him or her.

Like Cooley, Mead saw the self as a social phenomenon—a product of interactions in which the person experienced herself as reflected in the behavior of the other (Wells & Marwell, 1976). Mead's notion of the "generalized other" is an important addition to the idea of self as a social process because it permits the notion of a more "global" sense of self. According to Mead, the self can be thought of as a collection of reflexive attitudes which emerge in
the context of a given social situation. Implicit in this notion was the idea of multiple selves. While Mead did not deal explicitly with self-esteem, he did discuss the effects of self-evaluation. Mead (1934) put forward the theory that self develops only when a person begins to "take the role of the other," that is, when a person perceives the attitudes that others have of him.

Mead's conception of self thus has two features important to self-esteem. First, the idea that multiple selves and a "global self" are complementary rather than contradictory. Second, if the self is thought of as a set of reflexive attitudes, self-esteem can be described as the "evaluative component of each of these attitudes or as the totality of all such evaluations" (Wells & Marwell, 1976, p. 18). According to Wells and Marwell (1976) this approach is represented most explicitly in the recent works of Rosenberg (1979) and Coopersmith (1967).

Complexity of the Self-Concept

To bring some order to this diversity of complex theories of the self, a number of excellent reviews have been written (e.g., Wells & Marwell, 1976; Wylie, 1974, 1979; Dickenstein, 1977). A brief review by Beane et al. (1980) attempts to synthesize what is known about the self-concept. From these and other studies (Rosenberg, 1979; Dickenstein, 1977; Calhoun & Morse, 1977; Blyth & Traeger, 1983), it is possible to make several basic distinctions between different aspects of the self.
Perhaps the primary distinction is that between the view of self as agent or process and the view of self as the object of the person's own knowledge and evaluation (Wylie, 1974). This distinction, according to Wylie (1961, 1974, 1979) has proved amazingly viable, and appears as a recurrent theme in theoretical treatments of the self. Empirically, however, the view of self as active agent has received less attention. Whereas the view of self as object has generated a multitude of studies on self-concept and self-esteem (e.g., Wylie, 1961, 1974, 1979).

Although both of these conceptualizations of self as agent and self as object of the person's own knowledge and evaluation are useful, this study shall concentrate on the self as object and will use self-concept as defined by Rosenberg (1965, 1979). Rosenberg (1979) defines the self-concept in terms of "the totality of the individual's thoughts and feelings having reference to himself as an object" (p. 7).

A second key distinction in the literature is that between the self-concept and what is generally referred to as self-esteem (Harter, 1983; Rosenberg, 1979; Blyth & Traeger, 1983). This distinction separates those aspects of the self-image which are considered to be basically descriptive and nonjudgmental (the self-concept or self-picture) from those aspects or attitudes which can be classified as evaluations of the self or the degree of satisfaction with the self (i.e., self-esteem). Discussions of self-concept motives generally agree that "self-seeking and self-preservation" (James, 1890) or the "maintenance or enhancement of
the self" (Snygg & Combs, 1949) are central to the individual's motivational system. Rosenberg argues that two basic motives of the self are involved: the "self-esteem motive"—the wish to think well of oneself, and the "self-consistency motive"—the wish to protect the self-concept against change.

Not everyone finds the distinction between the self-concept and the self-esteem to be viable. Shavelson, Hubner, and Stanton (1976) present an excellent methodological critique which argues that the descriptive and evaluative dimensions are not empirically separable. Other studies on the development of the self-concept equate self-concept with self-esteem. According to Volpe (1981), however; this research is not designed to test any particular theoretical perspective and has produced conflicting results (Bohan, 1973; Carlson, 1965; Katz & Zigler, 1967). These criticisms notwithstanding, Blyth and Traeger (1983) feel the distinction between self-concept and self-esteem is an extremely useful one. This study will concentrate on the evaluative dimension since it is the dimension most often measured (Harter, 1983; Wylie, 1961, 1974, 1979) and is the one which has frequently been thought to motivate behavior (Rosenberg, 1979; Kaplan, 1980; Blyth & Traeger, 1983).

Global self-esteem, the concept which this research focuses on, is the individual's global positive or negative attitude toward himself (Rosenberg, 1979). In Rosenberg's usage the individual with high self-esteem considers himself a person of worth, though he does not necessarily believe he is superior to others. Low self-esteem, on the other hand, implies self-rejection, self-dissatisfaction or
self-contempt. Harter (1983) supports Rosenberg's global self-esteem measure (see also; Harter, 1978, 1982a, 1982b). In constructing the Perceived Competence Scale for Children, Harter specified three specific competence domains in addition to a general self-worth subscale that taps the degree to which the child likes the way he or she is. Harter suggests one can possess a global concept of self-worth and simultaneously make domain-specific evaluations of oneself. Before looking at how self-esteem is related to other environmental variables such as significant others we must first understand the importance of studying the construct of self-esteem.

The Importance of Studying the construct of Self-Esteem

The level of self-esteem is a key dimension of mental health (Murphy, 1947; Rosenberg, 1979) as well as the evaluative component of the self-concept that varies or changes as a function of interpersonal relations (Beane et al., 1979; Rosenberg, 1979). The findings of Gecas (1972), Jourard (1979), Peterson and Atakan (1984), and Richardson (1984) have identified certain parental behavior variables as important to the development of the child's and adolescent's self-esteem. Taken together, these studies point to the importance of evaluative reactions of significant others to the development of self-esteem and adjustment. In contrast, Rosenberg's (1965, 1979) notion of global self-esteem points to the importance of evaluative reactions of self. That is, Rosenberg's construct of global self-esteem includes only "self" as the point of
reference and does not include any implicit external references such as parents. This distinction will be discussed more extensively in the discussion chapter.

According to Wells and Marwell (1976), high self-esteem is assumed to be related to "healthy" behavior. This position asserts that high self-esteem is not only more hedonically preferred than low self-esteem, but also more socially and psychologically functional. In general, high self-esteem is associated with "good" adjustment. This approach is taken in developmental theories such as those of Coopersmith (1967), Rosenberg (1979), and Ziller et al. (1969). A moderate position holds that some medium amount of self-esteem is optimum for healthy personality functioning (Cole, 1967). This medium position described in Block and Thomas (1955), Combs et al. (1963), and Weissman and Ritter (1970), suggest that the relationship between self-esteem and adjustment, rather than positive or negative is curvilinear. It basically assumes that extreme positions are not "good" for personal adjustment, and that the middle ground represents a reasonable and realistic amount of self-appraisal and self-acceptance. Most existing scales of self-esteem appear to operate closer to the linear than the curvilinear model.

Kaplan (1980, p. 8) hypothesized that an individual who is experiencing lowered self-esteem will be motivated to take steps to minimize the experience of "negative self-attitudes" (Kaplan, 1980, p. 8). Rosenberg (1979) finds that many researchers agree about the prevalence of the self-esteem motive. With the developmental
changes in the self-esteem, comes a change in perspective. The adolescent has the ability to see himself in terms of how others react toward him.

This selectivity mechanism that Rosenberg proposes, is also limited by reality. According to Rosenberg, the mother-child role relationship is so powerful that it is not easily overcome by what Rosenberg refers to a "selective valuation." Thus, one would expect to find a strong relationship with mother and self-esteem. With regard to fathers, teachers, or peers, however, the arrangement of one's interpersonal value hierarchy is very strongly directed by the desire to protect one's self-esteem. Rosenberg (1979) and Pearlin and his colleagues (1978, 1981) discuss the effort to protect the self-esteem as an ongoing process. The use of these self-protective responses is equivalent to what Kaplan (1980) refers to as coping responses to avoid the unpleasant effects of lowered self-esteem. For example, in a study by Rosenberg and Rosenberg (1978) only 38 percent of the respondents who believed their teachers thought poorly of them said they cared very much about their teacher's opinions, compared with 81 percent of those who attributed favorable attitudes to their teachers. For fathers, the corresponding figures were 41 percent and 90 percent, and for "kids in your class," 13 percent and 52 percent (Rosenberg, 1979, p. 89).

Age Trends in Self-Esteem

As Dusek and Flaherty (1981) and Wylie (1974, 1979) have noted, there are a number of difficulties involved in summarizing research
in the self-esteem area. The diversity of instruments, subjects, and
the ways in which results have been reported all complicate the
task. The task is made even more difficult when we look across
various ages.

Wylie (1979) extensively reviewed studies on the self-concept
and self-esteem across a wide variety of factors including age from
late childhood to adulthood. She concluded that the "bulk of the
studies...have no association of age and self-regard scores..." (p.
21). Nonetheless, Wylie did note that some of the more
idiosyncratic measures provide mixed results with an equal number
showing increases, decreases, and no relationship whatsoever between
self-esteem and age. Along these same lines Volpe (1981) points out
that "feelings of self worth may increase with age with respect to
some factors, decrease with age with respect to other factors, and
show no age-related changes with respect to still other factors" (p.
9). A longitudinal study by Bachman and O'Malley (1977), which
Wylie cited as being perhaps the best executed, reported an increase
in self-esteem from 10th grade until adulthood. Unfortunately, this
study did not begin in childhood or early adolescence. Wylie
concluded that the burden of proof for establishing a relationship
between age and self-esteem must lay on those proposing such a
relationship. She argued that longitudinal studies were badly
needed in this area.

Dusek and Flaherty (1981), in a study geared to the issue of
continuity and stability in the self-image over the adolescent years
(ages 11 through 18), found a high degree of continuity in the
factors they used to measure the self-concept. From this, they concluded that there is probably not a major qualitative change in the self-concept as it develops during adolescence. Nonetheless, they did note that although the major changes during pubescence probably do not cause a complete restructuring of the self-concept, there may be considerable individual change. They state, "the most reasonable conclusion to which we may come is that the adolescent's self-concept develops in a basically continuous and stable manner, with change occurring slowly and gradually at the individual subjective level" (Dusek & Flaherty, 1981, p. 37). This conclusion, however, is based on semantic differential items which are not specifically geared toward measuring self-esteem. In fact, the specific factor structures which they find persisting throughout adolescence involve dimensions of adjustment, achievement, congeniality, and masculinity.

One important aspect of this study is that none of the three cross-sectional aspects of the study replicated each other. That is, when the authors looked at different students representing different age groups, the age trends did not reveal a consistent pattern. Although each set suggested turmoil, none of them suggested the same pattern of turmoil. In contrast, by following the same students over time in a longitudinal study, they found a high degree of continuity and a moderate degree of stability in the self-concept as they measured it.

Simmons et al. (1973), in a cross-sectional study of school children in grades 3 through 11, found some evidence of a
disturbance in the child's self-image during early adolescence. This study indicated that the child's environment may have a stronger effect than his age in producing changes in self-esteem. The self-esteem of those who had entered junior high school appeared more disturbed than same-age peers still in elementary school.

Simmons et al. (1979) reached a similar conclusion in their longitudinal study of the impact of the movement into early adolescence upon the self-esteem of children. Their findings indicate that among girls, the ones with greatest loss in self-esteem occur with those who have recently experienced multiple changes, that is, who have changed schools, have reached puberty, and who have started to "date". Among boys, however, early pubertal development was an advantage for self-esteem and the change in schools had little effect. They conclude that change may be more a function of context instability, level of biological development, and social behavior than direct age-related change.

A McCarthy and Hoge (1982) study which was also longitudinal and cross-sectional, obtained results similar to the Dusek and Flaherty (1981). This study followed junior and senior high school students for one year using both the Rosenberg and Coopersmith self-esteem scales. McCarthy and Hoge concluded that self-esteem increases significantly from grade seven through twelve, but that this increase is relatively small and most likely to be seen only in longitudinal studies. They also found that their cross-sectional data using different students at different ages showed only slight differences and differences which changed direction and magnitude
depending on the particular scale and subscale used. This research is further supported by longitudinal analyses by Blyth et al. (1983) which indicated a general increase in self-esteem from sixth through tenth grade for students in an urban school system.

In summary, research on age trends and self-esteem indicates no clear cut age trends. In all likelihood, the self-esteem of youth increases slightly as they move from early adolescence into later adolescence. There is little support for the view that the self-image experiences a general or widespread disruption or devaluation during early adolescence, although more longitudinal studies started in late childhood are needed before we can eliminate this possibility. What disruption is found appears specifically tied to biological, environmental, and social factors (Petersen & Taylor, 1980).

The studies note a high to moderate degree of stability in the self-concept during adolescence. Savin-Williams (1983) using a variety of methods to measure different aspects of self-concept found a high degree of stability even from moment to moment during a week when students were asked to describe their self-feelings. Several researchers have suggested that theorists have probably overemphasized the amount of self-image instability which occurs in early adolescence (Volpe, 1981; Kokenes, 1974; Gecas, 1972). Other researchers suggest that we need to stop thinking of early adolescence as a time when changes occur so rapidly that it is impossible to maintain a certain degree of stability in how one views oneself (Savin-Williams, 1983; Rosenberg, 1979). In fact,
with the changes taking place in and around the adolescent, it may make maintaining some basic continuity and stability in one's self-image even more important.

With all the emphasis on stability and continuity over time, we may well have ignored one of the most important factors which is quite apparent in early adolescence: the tremendous variability in self-esteem and self-image regardless of age. In addition, we need to become aware of the potential changes in the bases upon which self-esteem is evaluated. What are the bases upon which self-esteem is evaluated? Are they the same for children and early adolescents? Current evidence from the social cognitive perspective suggests they are not (Berndt, 1979, 1982; Bigelow, 1975, 1977; Damon, 1977; Gamer, 1977, Selman, 1976, 1981). Further understanding of these changes as they relate to self-esteem changes would be particularly helpful.

Finally, and perhaps most importantly, we must recognize that age in itself is not a cause. Most of the studies cited above are looking for an association between age and self-esteem. I suggest that a more fruitful line of research and a more productive way of thinking about early adolescence would be to look at the association between self-esteem and the particular changes which are taking place in the early adolescents' lives—such as the changing relations with significant others which include detaching from parents and establishing relations with peers. Such research would emphasize the consequences of a change in intensity or perceived intimacy of relationships that is part of the process of growing up.
Sex Differences in Self-Esteem

In an extensive review of the self-concept literature (Wylie, 1979), underscores the complexity of understanding gender differences in self-esteem particularly in terms of methodological difficulties. She indicates that there is very little systematic documentation of sex differences. Several studies she reviews use well-known instruments of global self-esteem such as the: Rosenberg's Self-Esteem scale (RSE) (Rosenberg, 1965); Coopersmith's Self-Esteem Inventory (SEI) (Coopersmith, 1967); Piers-Harris Self-Concept Scale for Children (PH) (Piers, 1969); Long, Henderson, and Ziller's Self-Social Esteem Scale (SSE) (Long & Henderson, 1970); and Tennessee Self-Concept Scale (TSCS) (Fitts, 1965). The majority of these studies report no sex differences in samples of first, fifth, sixth, and seventh graders. Wylie states, however, that, it is impossible to assess the degree to which various sources of artifact contributed to these findings. "Such variables as GPA and SES were not controlled, reflecting the fact that most authors did not set out to test specific hypotheses concerning sex and level of self-esteem." (Wylie, 1961, p. 262).

Wylie's excellent review concludes that these studies are "so diverse and inconclusive, they will sustain no integrated, substantive summary" (Wylie, 1979, p. 39). The failure to find systematic gender differences as indicated by Wylie's review is supported by Maccoby and Jacklin's review (1974). We will highlight a few of the particular studies in the following paragraphs.
**Studies indicating no gender differences.** According to Wylie (1961), a study by Bagley and Evan-Wong (1975) raises the question of how to interpret the pattern of no sex differences involving the Coopersmith Self-Esteem Inventory. Bagley and Evan-Wong conducted separate factor analyses of the SEI scores obtained by male and female high school students ages 14 to 15 years old. Two-factor principal components analyses "produced similar components in boys and girls" (Bagley & Evan-Wong, 1975, p. 253). The first of these loaded highly on items indicating self-disparagement, unhappiness at home, and general unhappiness. The second had high loadings on items measuring social confidence and extraversion. Wylie (1961) points out that unfortunately the authors do not report factor scores for each sex. "It is possible that girls obtain more positive scores on one factor, boys on the other" (Wylie, 1961, p. 264) and that a comparison of the total SEI scores of boys and girls, these differences may cancel out one another, resulting in a finding of no significant sex difference.

Vance and Richmond (1975) report a nonsignificant gender difference between the median scores on the Piers-Harris Self-Concept Scale for Children in a sample of 240 children ranging in age from 8 to 12 years. Wylie critiques this study, as she does many of the other studies in her review, for lack of systematic documentation of significant relationships such as age, sex, and race (Wylie, 1961).

A Long et al's. (1972) study using a sample of 100 thirteen year olds of four groups (English, French, English-Canadian, French-
Canadian) found no significant sex by culture or sex by locale effects on the Self-Social Esteem Scale (Long et al., 1970).

Healey and de Blassie (1974) studied the self-concepts of 600 female and male ninth graders. Despite such large numbers, no significant sex difference emerged on the Total Positive Score of the Tennessee Self-Concept Scale (Fitts, 1965). In summary, Wylie cites a number of possible reasons for null findings, including the practice of summing across items in order to obtain a global self-regard score. Wylie speculates that "perhaps males and females obtain equivalent total scores by endorsing different sets of items" (p. 272), and suggests that item and factor analyses be performed separately for each gender. This practice would allow for the possibility that "perhaps the factor structures of overall self-regard are similar for the two sexes, but that females obtain higher scores on some factors, males on others" (p. 272).

Studies indicating gender differences. This section shall examine studies that have either used a factor analytic approach which highlights sex differences or have found major sex differences with particular self-esteem measures (particularly the Rosenberg scale).

Research based on data collected during the middle 1960's does indicate significant gender differences in self-esteem: middle-class female adolescents have a more difficult time with their self-image than do adolescent boys (Offer & Howard, 1972; Simmons & Rosenberg, 1975; Simmons et al., 1979); ninth grade and twelfth grade girls score less favorably on the MMPI in social inferiority
than do boys (Hathaway & Monachesi, 1963), and females of different ages are less positive toward their own sex than are males (Kohlberg, 1966; Bem & Bem, 1973; Bush et al., 1978).

Support for factor analytic approaches to understanding gender differences in self-esteem comes from several recent studies. For example, a study by Monge (1973) reported crucial differences between boys and girls in the content and development of the self-view. Monge administered a seven-point semantic differential scale to over two thousand boys and girls in grades 6 through 12. The subjects rated the concept "My Characteristic Self" on 21 polar adjective pairs. Four factors emerged in data analysis: achievement-leadership, congeniality-sociability, an adjustment factor, and a masculinity-femininity factor. Compared with girls, boys obtained significantly higher scores on Achievement/Leadership and Adjustment, whereas girls scored significantly higher on the Congeniality/Sociability factor. The sexes did not differ significantly in the sex appropriateness of self-concept, as measured by the Masculinity-Femininity factor.

Complex and significant interactions between grades and sex occurred on the Achievement/Leadership and Masculinity-Femininity factors. On masculinity-femininity, Monge noted a decline with age in femininity for girls from grades 7 to 12. Boys on this factor apparently affirm the continuity of the masculine role in which they are socialized as small children. Girls, on the other hand, seem to find that the feminine role in practice is not quite as clear as early socialization might have led them to believe. This confusion
in the messages sent to girls by parents and peers is supported by other recent research (Simmons et al., 1979).

In a study comparing the self-esteem of male and female children ages 8 to 18, Simmons and Rosenberg (1975) report that self-image problems increase more for girls than for boys during the years of adolescence. Simmons et al. (1975), like Monge, proposed and analyzed several contributing factors: (1) the adolescents' attitudes towards their sex role, (2) their relationship with peers in general and with the opposite sex in particular, and (3) factors relating to puberty, particularly attitude toward their changing physical appearance. These factors were examined separately as well as together.

A study by Bush et al. (1978) compared two sources of data. The first was a cross-sectional study of Baltimore City School children done in 1968 before the women's movement gained national recognition (this is the data just reported on by Simmons & Rosenberg, 1975). The second was a longitudinal study of a group of Milwaukee children as they move from the sixth to seventh grade in 1974-1975 subsequent to the rise of the women's movement. Findings from these two studies were compared. The authors (1978) caution only that changes could be due to the difference in the two cited samples rather than to a distinction between the two decades.

The findings indicate that in 1975, girls do not score better in self-esteem relative to boys than they did in 1968. In general the early adolescent girls of the 1975 sample demonstrated fewer changes in attitude toward themselves and toward their sex-role than
one might expect given the wide publicity accorded the women's movement in the early 1970's (Bush et al., 1978). The authors suggest that in order to more finely assess the impact of the new ideology of the women's movement upon adolescent girls, it may be necessary to study the mechanism for transmitting the movement's ideology. Furthermore, that the attitudes and behavior of the individual parents, peers, and teachers of such children would appear particularly relevant. According to Bush et al. (1978) "it is likely that more extensive changes among adolescents will have to await a new generation of parents and teachers who themselves have begun to accept the new values more thoroughly and therefore are more likely to transmit them to their children" (Simmons et al., 1978, p. 473).

A Simmons et al. (1979) study, reviewed earlier, investigated effects of pubertal development, school structure, and participation in dating behavior on adolescent girls' self-esteem. Findings indicated that only a third of the seventh grade girls had high self-esteem, compared to nearly half of their male classmates. Other findings from the study indicated that 61 percent of seventh grade boys felt it was "great" to be a member of their own sex, as opposed to only 40 percent of the girls. Among the girls, the ones with lowest self-esteem appear to be those who have recently experienced multiple changes, that is, who have changed schools, have reached puberty, and who have also started to "date" (Simmons et al., 1979, p. 948). In contrast, among boys early pubertal development is an advantage for self-esteem.
In their longitudinal study, cited earlier in this section, Dusek and Flaherty (1981) reported similarity between males and females for factor structure of the self-concept in fifth through twelfth grade students. The four factors emerging for both groups were named adjustment, achievement/leadership, congeniality/sociability, and masculinity/femininity. Even though the factor structure was similar, gender differences occurred in factor scores, with males having higher mean scores on achievement/leadership and masculinity/femininity (high score = masculine score), and females having higher mean scores on congeniality/sociability.

In summary, these studies suggest that early adolescent girls experience decreased self-esteem (Monge, 1973; Simmons & Rosenberg, 1975; Simmons et al., 1979). According to Hill (1980), there is also some support for the idea that early adolescent girls become more invested in interpersonal matters and more dissatisfied with physical appearance, but "the mechanisms of these changes have not been explored" (p. 212).

Self-Esteem and Parent and Peer Relationships

The final section focuses on the association between self-esteem and perceived relationships with significant others; specifically, with parents and peers. Harry Stack Sullivan's developmental theory is one of the few that extensively addresses itself to the growth of the self as it relates to interpersonal relationships (Sullivan, 1953). Sullivan's ideas were heavily
weighted in the social area. He suggested that as the "self-dynamism" evolves, it largely resembles evaluations made of the child by "significant others" in his life. Sullivan proposed the term "reflected appraisal" to describe this self-developing process from the evaluations made by the parent. He postulated that throughout the different stages of development an individual has a need for interpersonal relationships that vary from one period to the next (1953). The young child is primarily concerned with building his self-esteem which evolves out of experiences of approbation and or disapproval from parents. However, as the child enters preadolescence (Sullivan 1953), a need for interpersonal peer intimacy develops. Specifically, a new type of interest evolves in which a particular member of the same sex becomes a "chum" or close friend.

According to Sullivan (1953) this "chum" relationship increases a child's sense of self-worth by providing the opportunity to realize that he shares common thoughts and feelings with his friend. Sullivan calls this process of looking at self through peer's eyes "consensual validation". Sullivan (1953) believed that the notion of a chumship was critical in the development of a male, but he was less certain as to its importance to females. Moreover, since Sullivan had many more clinical contacts with males than females, he was unwilling to generalize his findings to females.

According to Rosenberg (1979) not all significant others are equally significant, and those who are more significant have greater influence on self-esteem. It is not only what we believe others
think of us, but what each of them means to us personally, that affects self-esteem (Rosenberg, 1979).

Rosenberg refers to this process as "selective valuation" or the "self-maintenance" notion for he concludes that the people whose opinions really matter to a person are those whom he perceives think highly of him. Conversely, the child tends, according to Rosenberg, to be relatively unconcerned with the views of his detractors.

Youniss (1980), extending the work of Sullivan (1953) has proposed a framework for conceptualizing cognitive-social development which he terms the "Sullivan-Piaget thesis" (combining the theoretical perspectives of Harry Stack Sullivan and Jean Piaget). A major proposition of the Sullivan-Piaget thesis is that knowledge of self and other develops out of relational understanding. Thus, the self-concept always involves the other and the concept of the other always incorporates the self. Youniss' work has pointed out the importance of understanding that the self-concept constructed in peer relationships with cooperation and mutual respect, for example, must be distinct from an evaluation of self developed in unilateral authority relationships such as those with parents. The important point for this study is that the subject's perception of relationships with both parents and peers will strongly influence the subject's perception of himself (self-esteem).

According to Youniss, with adults, children's worth (self-esteem) is determined by the adult's criteria for approval. Work by Gecas (1972) supports this view in that relationships with parents
only predicted self-esteem for subjects when in "adult contexts" and not when in large peer contexts. Peer friendships according to Youniss (1980) introduce a radical alteration. "In this new necessity for thinking of the other fellow as right and for being thought of as right by the other fellow, much of this uncertainty as to the real worth of personality" is allayed (Sullivan, 1953, p. 251). While the relationship with parents is fixed and inescapable, the relationship with peers is not fixed, but selective.

Youniss' (1980) thesis has provided us with a rich developmental perspective of the complementary roles played by parents and peers. According to this thesis, during adolescence the cooperative and mutual peer relationship becomes the most influential in self-concept development. Nevertheless, Youniss has underscored that neither of these relationships (parent or peer) can be studied in isolation, for they are interrelated in varying ways throughout the course of development.

Valuable though it is, Youniss' (1980) theory, is generally cognitive in orientation and does not explore affective components of these relationships such as intimacy. In addition, Youniss (1980) focuses on self-development in terms of self-concept or of self in the context of "parent-child" context or "close friend" relationship (Volpe, 1981, p. 12). Youniss does not deal with global evaluative components of self or self-esteem.

In summary, the relationship with parents and peers serve different, but complementary functions in the socialization process (Youniss, 1980). Both of these relationships contribute to the
developing self-esteem. Few studies, however, have explored self-esteem as a function of relations with parents and peers (these will be reviewed in a later section) and even fewer have focused on the association of self-esteem and the quantity, frequency, and intimacy of these relationships.

This chapter has reviewed the literature on self-esteem and suggested that it is likely to be affected by age and sex difference and by relationships with parents and peers. Before formulating specific hypotheses about the association between self-esteem and relationships with parents and peers, it is important to review the literature on the developmental changes in parent and same- and opposite-sex peer relationships during adolescence. The following chapter will, therefore, explore these changing relationships.
CHAPTER THREE

DEVELOPMENTAL CHANGES IN RELATIONSHIPS DURING ADOLESCENCE

This chapter reviews theoretical literature and examines developmental changes in perception of relations with parents and peers during adolescence. Specifically, the review will focus first on both historical and current developmental theories of the early to mid-adolescent period (Blos, 1962, 1967, 1973, 1979; Sullivan, 1953, Volpe, 1981; Youniss, 1980). Next the chapter will cover current empirical studies of: (a) parent and peer influence (these studies demonstrate the movement away from the "conflict" model of parents and peers toward complementary and interactive models); (b) developmental changes in family relations; and (c) developmental changes in relationships with peers. Age and sex differences will be highlighted within these sections.

The chapter will conclude with a discussion of the construct of intimacy as a qualitative aspect of both parental and peer relationships.
Theoretical Literature

Historical Psychodynamic Perspective

The psychodynamic theory is distinctive in both the degree and nature of its emphasis on the role of parental influence (Blos, 1962, 1967, 1973; Erikson, 1959; Freud, 1958, 1962) throughout development. The issue of changes in emotional attachments to parents during adolescence has its most influential intellectual origins in the work of Sigmund and Anna Freud. According to the psychoanalytic perspective, the physiological changes of puberty mean an increase in libido, or sexual drive. This libidinal increase reactivates the person's previously repressed object ties of the earlier Oedipal (phallic) stage of development. Strong ambivalent feelings of love and hostility are involved in attachment to both parents. According to Blos (1941), the important developmental task of adolescence is the redirection of sexual object ties in order that attachments to parents come to be replaced by attachments to peers. In this psychodynamic view, adolescent turmoil is viewed as the sine qua non of development, the assumption being "that only through conflict can maturity be attained" (Blos, 1958, p. 272). Stormy and stressful intrafamilial encounters are considered normal (Adelson & Doehrman, 1980; Blos, 1958). Sullivan's (1953) work and his notion of "chumship" described
earlier, came out of the psychodynamic tradition.

Peter Blos (1962, 1967, 1973, 1979) was one of the few theorists in the psychodynamic tradition who focused on the developmental changes in interpersonal relations during the adolescent period. This review will not cover the entire adolescent period, but rather will focus on Blos' account of the developmental changes during the early to mid-adolescent period.

**Early Adolescence.** According to Blos (1962, 1979), early adolescence is a state of chaos and conflict since the newly emerging drive orientation requires abandoning homosexual and bisexual tendencies; total reorganizing the libidinal drive and the emotional life. This process requires a detachment from parental dependencies and is often accompanied by outright conflict.

With the onset of puberty, identification with parents declines rapidly and is replaced by an identification with others through friendship, admiration, and hero-worship. According to this psychodynamic perspective, the redirection of object ties to peers results in a more intense and richer emotional life. There is a turning toward the same-sex peer group (Sullivan, 1953).

Friendship with members of the same sex takes on an idealized quality. Such relationships often show a high degree of intimacy, which thrives on secrecy and may become eroticized and sexualized. Blos regards attachments to peers as a coping mechanism for loss of
parental support. According to Blos (1962), during adolescence, relationships with peers help the younger person to disengage more fully than ever before from the emotional ties to parents and to work toward a growing sense of individuality. Blos (1962) refers to a process of "disillusion in the parent and formation of the degraded parent image."

Adolescence proper (midadolescence). In the next stage, homosexual and bisexual tendencies are replaced by a heterosexual orientation. The beginning of a sexual identity during early adolescence is the prerequisite to midadolescence which is based on a heterosexual orientation (Blos, p. 71).

The pubertal conflicts that begin in preadolescence and early adolescence climax in the turmoil of midadolescence. Libido is now directed toward new love objects; that is, the goal of the drive is heterosexual object finding. The resolution of the pubertal Oedipus complex begun in childhood implies a distinct turn toward the achievement of sexual identity and independence culminating in this heterosexual object finding process.

Critique of the Psychodynamic View. The parental relationship and the successful attachment to parents as love objects will, according to a psychodynamic perspective, ensure successful relationship capacity throughout the rest of development (Blos, 1979; Freud, 1962; Mahler et al., 1975). Unfortunately, changes in
emotional bonds to parents have not been much studied in early adolescence (Hill, 1980). Available information does support the conclusion that positive ties between children and their parents, in general, remain strong throughout early and late adolescence (see Hartup, 1983).

In contrast to the Psychodynamic theory, other theories view the family as merely one institution among several, and in fact a declining one during the period of adolescence when the family finds itself competing with other sources of influence—particularly peers (Volpe, 1981; Youniss, 1980). The next section we will review some of these models.

**Current Theoretical Perspectives**

Current studies reflect a trend toward interactive models that recognize the importance of the separate and combined contribution of parents and peers (e.g., Harter, 1983; Hartup, 1980). The "conflict model" proposed by the psychodynamic tradition is too narrow in its emphasis on stress (Hill, 1980). An alternate more integrative direction is demonstrated in Youniss' (1980) complementary model of parents and peers. Volpe's (1981) research supports the complementary model. Hill (1980) suggests that we move beyond the old tired debate of whether the transition between childhood and adolescence is stressful or not to more important and
interesting issues such as orderly changes in the family system. Hartup's (1983) extensive review underscores the movement toward more complementary or interactive research models. The compensatory explanation of relationships with parents and peers shall also be reviewed (Smith, 1976) in that it also focuses on each of these relationships (parents and peers) within the context of the other.

**Complementary Model**

Youniss' (1980) "Sullivan-Piaget Thesis" described earlier emphasizes understanding both parent and peer relational contexts in order to more fully appreciate the primacy of peer influence in self-concept development during adolescence. A major tenet of the thesis is that these relations are characterized by distinctly different forms of interaction and thus come to be conceptualized by the adolescent in different ways. Parent-child relations are characterized by "unilateral authority interactions" and conceptualized as complementary. In contrast, peer relations involve "reciprocal interactions" are conceived as cooperative or mutual relationships.

Youniss (1980) indicates that these various role relationships use different forms of socialization. For example, parents frequently intervene in children's activities and direct their behavior. They tell children how to behave with others, what to do
in various social situations, and for what activities the child can expect to be praised or punished. Within this "unilateral" parent-child relationship, directives flow in one direction—from parent to child.

In contrast, children do not impose their views upon one another to the same extent that parents do, but instead exchange them for comparison and validation. Each participant in the relation is more or less free to act as he or she pleases. From these "free" actions, children mutually determine limitations and behavior, and mutually agree upon rules. According to Youniss, the reciprocal interactions with peers lead children "to the construction of a concept of interpersonal cooperation and eventually a concept of a cooperative or mutual relationship."

While parents and peers play different, but complementary roles in development according to Youniss (1980), the peer relationships are most influential during adolescent's development of self-concept because they enable the adolescent to realize that one's common thoughts are shared with friends and thus, validate his/her self-worth.

Volpe (1981) supports Youniss' premise that the adolescent learns mutuality and bilaterality through the peer relationship that he is unable to learn within the more unilateral, authority relationship with parents. Volpe (1981) has developed an exciting
developmental framework in which she explores conceptions of these interpersonal relations and self at each adolescent age level.

**Early adolescence.** According to Volpe (1981), during early adolescence the parent-child relation is perceived and accepted as one of unilateral authority. This authority role is largely unchallenged by the early adolescent during this period. Self-concept of early adolescents within parent-child relations corresponds to their conceptions of these relationships.

With their parents, early adolescents feel happy and loved and act playful, polite and obedient. These actions and feelings are guided by and sometimes determined by the parents' feelings and actions toward the child (Volpe, 1981, p. 63).

In contrast, conceptions of self in friendships reflect the cooperation and mutuality with which this relationship was developed.

Their behavior and feelings are not guided nor determined by the behavior or feelings of the other toward them, but rather by the behavior and feelings that the two persons have co-constructed to characterize the relationship (Volpe, 1981, p. 64).
For the early adolescents, the worlds of parents and peers are indeed distinct and views of self within these worlds reflect this distinction. According to Volpe (1981), it is not clear at this age that the disparate nature of the relations and of the self within these two relations is perceived, much less experienced as problematic.

**Midadolescence.** Midadolescents do begin to question legitimacy of the unilateral parent authority. Self-concept of midadolescents in parent-child contexts reflect their view of these relations. "When with parents, they describe themselves as warm and happy...but also as defensive and cautious about what they say" (Volpe, p. 66). The ambivalence of the self-concept of the midadolescent in parent-child relations is consistent with their ambivalent view of the unilateral structure of these relations.

Close-friend relations are seen by all midadolescents as relations based on cooperation and equality. Self-concepts in close-friend relations reflect the view of the relation as based on intimacy as well as equality and mutual respect. For example, Volpe (1981) cites an adolescent saying "I am comfortable because I am with someone who won't judge me. I can be myself" (Volpe, 1981, p. 68).

According to Volpe (1981), the ambivalence of the midadolescent's self-concept is due to the difference (as conceived
by the midadolescent) between the world of parents and peers and by
the fact that there are disparate selves within these two relational
structures. Attempts to reconcile these differences create problems
for the midadolescent. Not only are these attempts thwarted by the
parents' unwillingness to relinquish their authority functions, but
also by the midadolescents' desire for certain authority functions
to be maintained. The conflict seems to occur when "midadolescents
make unreasonable demands on parents and at the same time perceive
the parents as making unreasonable demands on them" (Volpe, 1981, p.
68).

Late adolescence. Because the present study will specifically
focus on the early to midadolescent period, we will not extensively
review Youniss and Volpe's conception of the adolescent during late
adolescence. According to this perspective, however, late
adolescents come to view and redefine the relationship with parent
in the more cooperative and mutual terms that he/she experienced in
the relationship with peers.

Critiques of Youniss' Cognitive Perspective. The Sullivan-
Piaget Thesis as proposed by Youniss (1980) and extended by Volpe
(1981) does not focus directly on the "quality" of the parent and
peer relationships in terms of intimacy; neither does it focus
directly on "evaluations of self" (self-esteem), but rather on
"descriptions of self" within the parent-context and peer context"
Furthermore, this model is primarily from a cognitive perspective (Volpe, 1981; Youniss, 1980). Developmental changes during adolescence are not only cognitive. A model is needed that gives more weight to the affective considerations. Further research is needed to explore the perceived intimacy aspects of these changing relations and how they effect self-esteem during the early and midadolescent period.

**Empirical Literature**

**Current Empirical Studies of Theoretical Views of Parent and Peer Influence**

Research studies that have explored parent and peer relationships as they affect or influence decisions, demonstrate a movement from conflict notions to more complementary or interactive models recognizing the importance of the separate contributions of each relationship (Berndt, 1979; Brittain, 1963; Smith, 1976). Because the focus of this study is on developmental changes in parent and peer relationships as they effect self-esteem and not parent-peer influence per se, we will only briefly mention this literature. Hartup (1983) contains a more extensive review.

The comparative literature reviewed by Hartup (1983) supports the view that family relations and peer relations interact synergistically. That is, they interact in a cooperative way such
that they are mutually enhancing to one another in social
development (Hartup, 1983).

Hartup (1983) points out an interesting distinction between early interpretations of Brittain's (1963) cross-pressure model and more current interpretations. Early interpretations regard Brittain's (1963) results as an indication that adolescents remain oriented toward the attitudes of their parents in situations where implications for future status are implied, but decline in situations where implications for current needs are indicated. More recent interpretations indicate that situational salience may not function so straightforwardly. For example, using a four-item inventory, Larson (1972) showed greater parent than peer influence in decisions about club membership and social activities as well as in choices between alternative school curricula. In both these situations, however, an even larger number of subjects followed their own inclinations rather than those of either parents or peers. This "situation compliance" occurred among nearly three-quarters of the subjects, suggesting that context accounts for most of the variance in these situations, parent and peer pressures notwithstanding. Hartup (1983) does point out that cross-validation using more varied item content is needed since most of the items in the inventory were related to important cultural norms with which the subjects were undoubtedly familiar. Nevertheless, "we can
conclude that the relative degree of parent and peer influence depends on the situation in a more complex way than earlier studies suggested" (Hartup, 1983, p. 170).

Developmental patterns in cross-pressures were also explored by Berndt (1979). Berndt's (1979) findings indicated that peer conformity to antisocial norms does not follow the same developmental course as conformity to prosocial norms. The problem behavior literature most dramatically demonstrates the differences in developmental patterns of parent and peer influence of adolescents from disrupted and nondisrupted family contexts (Fox & Izau, 1980; Kandel, 1981, 1978, 1969). For example, the findings of a number of research projects (e.g., Bronfenbrenner, 1970) show that it is in situations where parental interest is lacking, or where the adolescent has no parental support to depend on, that commitment to peer-group values is at its height. Research by Burke and Weir (1979) suggests that youth who have disrupted relations within family turn to peers who themselves mirror these unsatisfying and unsupportive relationships. The compensatory or "push explanation" of parent-peer influence is presented by Smith (1976). The "push" explanation says that a perceived vacuum in parental support may cause an adolescent to be less favorably oriented toward the parent and "to be 'pushed' away from parents and into choosing peer
associates with unfavorable attitudes toward parents..." (Smith, 1976, p. 17).

Studies of Developmental Changes in Families

Recent attempts to explore parent-adolescent stress have not focused on the individual characteristics of adolescents or parents, but rather have emphasized transformations of family patterns of interaction (Hill, 1980; Jacob, 1974; Montemayor, 1983). Montemayor (1983) extensively reviewed research addressing several important issues related to family interactions. Some of this literature is reviewed below.

Results of a study by Jacob (1974) of families with eleven and sixteen year old sons indicated several differences in family interactions. In general, sons were more assertive (interrupted more often) than were their parents (particularly mothers), but the sons were less assertive at age sixteen than at age eleven while parents tended to interrupt more when the sons were sixteen. Fathers and mothers, however, were more influential in the presence of an eleven year old than a sixteen year old, as shown in the extent to which family consensus reflected initial preferences.

In two other studies of eleven to fourteen year old boys, conflict with mothers was reported to be greater during the early rather than the later part of the pubertal cycle (Steinberg, 1981;
Steinberg & Hill, 1978). During audiotaped discussions, adolescents in an early pubescent stage were interrupted by their mothers more frequently but deferred to them less often than did more physically advanced boys. According to Montemayor (1983), the results of these three behavioral studies (Jacob, 1974; Steinberg, 1981; Steinberg & Hill, 1978), indicate that family relations undergo a transformation during early adolescence such that sons acquire more family power and influence at the expense of their mothers. However, by middle adolescence mothers and sons have developed new forms of interaction based upon the son's adult physical status and conflict subsides. Understanding these developmental changes in family/parental relationships and their impact on the adolescent's level of self-esteem is an important direction for future studies.

Montemayor (1983) explored the research that addressed the issue of why the transition from childhood to adolescence is stressful for some families but not for others. Burr et al. (1979) argue that the degree of difficulty individuals experience undergoing a transition from one role to another is highly related to their anticipatory socialization into that role. Individuals who wish to make a change and who know how to correctly act in their new role will have an easier transition than those who are reluctant to change or don't know the proper way to behave in their new role (Montemayor, 1983).
Most studies have shown that the majority of arguments between parents and their adolescents are about mundane family matters such as school work, social life and friends, home chores (Douvan & Adelson, Montemayor, 1983; Offer, 1969). Some researchers conclude that these arguments indicate adolescents' growing desire for autonomy and independence from parents (Montemayor, 1983). Montemayor (1983) makes the important point that this interpretation is certainly plausible, but "one should not lose sight of the fact that normal socialization continues throughout adolescence" (p. 91). In other words, researchers should focus on the changing socialization process throughout adolescence, with its intermittent stress components, rather than overdramatizing the old "sturm und drang" view of parent-adolescent relationships (Hall, 1904).

Bandura (1964) argued, in part, that parents and adolescents are in turmoil. As the result of such biases as mass media sensationalism and an over interpretation of superficial signs of nonconformity from samples of deviant adolescents. Montemayor (1983) adds that perhaps "some conflict with parents appears to be a normal part of family relationships during this time" (p. 98).

In conclusion, the research seems to indicate that the focus of future studies should be on changes or transformations of relationships with parents, stress included, rather than on notions of inevitable conflict (Hill, 1980; Montemayor, 1983).
Studies of Developmental Changes in Relationships with Peers

Having briefly reviewed the literature on changing family relationships, the pertinent literature on relationships with peers will be explored. In this section the focus will be on the definition and structural aspects of peer relationships.

Although "peers" have long been recognized as influential significant others, the literature is inconsistent about what constitutes a peer to adolescents. According to Keates (1983) investigators have tended to use the phrase "significant other" when studying individuals of importance and "reference group" when studying groups. "Peer" is used at different times to include all other young people, only a group of acquaintances, or only a specific dyadic relationship with a friend. Often the distinction between levels is not clearly specified in the research (Sharabany et al., 1981). This study will address this problem by examining peers at both a dyadic and aggregate level. A discussion of peer as defined at the dyadic level in this study and peers as defined at the aggregate level will be presented in the methods chapter.

Understanding aggregate relational influences of peers (set or group of peers) as well as dyadic relational influences is important. For example, Crockett (1984) found in her multidimensional study that adolescents who reported spending most
of their time with one or several groups of friends (frequency) had significantly higher peer relations scores and overall self-esteem scores than did those who spent much of their time with one friend (dyadic) or with no one in particular (isolate). There is some evidence that these relationships were stronger for boys than for girls (Crockett, 1984). Crockett's study suggests the importance of including both dyadic and aggregate aspects of relationships in research studies.

Kandel (1981) who studied dyadic friendships not in isolation, but within the context of parental relationships, indicates that dyadic involvement represents but a limited aspect of peer influences and that the adolescent's relationship to the larger and more complete peer aggregate must be examined as well. She suggests that future research on adolescent friendship ought to stress longitudinal field surveys based on large relational samples and careful monitoring of developmental changes in adolescent behavior and values.

The sociometric literature underscores the need to study groups and to use more specific and discrete systems of classification than that used by traditional sociometric research (Asher & Gottman, 1981; Asher & Renshaw, 1981; Moreno, 1934). Furthermore, while traditional sociometric status scores (e.g., Moreno, 1934) used quantity (number of nominations received) to
infer quality by assuming that all people nominated are of equal value, current studies are attempting to differentiate between different types of children and to get at the quality of relationships by using more discrete categories (Coie & Dodge, 1983; Hallinan, 1979; Ladd, 1983; Peery, 1979). For example, although rejected and neglected children both receive few nominations by friends, they are very different kinds of children and others react to them differently.

Two distinctions are important to make between sociometric studies and the present study. First, the present study does not use a sociometric approach and therefore, does not get at the interactions within the group. Second, sociometric studies use others' perceptions and the present study uses only the subject's perceptions.

Research results from the sex differences literature also underscore the need for evaluation at the aggregate level as well as at the dyadic level. According to Kon and Losenkov (1978) adolescent girls tend to form close, one-to-one friendships while boys tend to form group or gang friendships. Lever (1975), for example, found that girls tended to interact in dyadic play groups, while boys formed larger play groups. Eder and Hallinan (1978) studied changes in friendship dyads among fifth and sixth graders and observed that girls' dyads tended to exclude new members over a school year while
boys' dyads tended to coalesce into larger groups. In a study by Hansell (1981) girls had more mutual friendships than boys. According to Deaux (1977), males attempt to assert their status in their social interactions while females prefer more egalitarian relationships characterized by friendliness and reciprocity. These and other results (Maccoby & Jacklin, 1974) suggest that girls show more involvement and interest in reciprocal dyadic friendships than boys (Hansell, 1981) who prefer more group affiliated activities.

Few studies have combined or compared the dyadic and aggregate peer influence. Furthermore, few studies have distinguished between quantitative aspects of relationships (such as how often adolescents are listed as friends or how frequently one has contact with peers) and qualitative aspects of relationships (such as the level of intimacy one has with a friend or a set of friends).

This research addresses both quantitative and qualitative aspects of relationships. For example, Wilcox (1981) found that natural social support systems among adults helped buffer the degree of stress. He noted that the quality of the supportive relationship appeared more important than the quantity of supportive relationships. This difference may be best illustrated with an example of relevance to this dissertation. Some adolescents may have a large number/group of peers with which they maintain superficial relationships but who do not provide adequate social
support for dealing with serious problems. The number of friends a person has tells us little about the "quality" of those relationships. A person could have a lot of friends and have little or no intimacy with any of them. Conversely, an adolescent could have few friends, but be intimate with all of them. Understanding the qualitative aspects of relations as well as the quantitative aspects will enable us to better understand how these relations with significant others relate to how a person feels about himself.

The next section examines literature on one qualitative aspect of a relationship: intimacy. While the present study does not utilize sociometric methods, it is concerned with integrating the subject's perceptions of dyadic and sets of dyadic relationships.

**Intimacy**

This section we will discuss the importance of the construct of intimacy in assessing the qualitative aspects of a relationship. The developmental changes in intimacy, and sex differences in intimacy development will be focused upon in the two following sections. The term "intimacy" has been applied to several different aspects of interpersonal relationships. According to Sharabany (1981), intimacy refers to friendship with a close peer; according to Steinberg (1985) it refers to an emotional attachment between two people in which the other person's well-being is considered. These
definitions both include close commitment to another person and can refer to parents and same- and opposite-sex peers. In this study, intimacy will primarily include self-disclosure, mutual understanding and acceptance, and seeking others out for advice.

**Age Trends in Intimacy of Relationship**

While intimacy is not reserved for adolescence, adolescent relationships appear to mark the most intimate and highly involved relationships up to this point in the life span. Most theorists have assumed that intimate relations first emerge during early adolescence (Blos, 1962, 1979; Sullivan, 1953;). Sullivan (1953) suggested that intimate attachments differentiate adolescent relationships from earlier peer relationships. The onset of puberty, the growth of more advanced forms of social cognition, and the movement of young people into new settings and roles all provoke the development of more intimate relationships (Reisman & Shorr, 1978; Steinberg, 1985).

The developmental course of intimacy follows a pattern described initially by Sullivan (1953). Close relationships with peers come to supplement (but not replace) close relationships in the family, and close relationships with opposite-sex peers come to supplement (but not replace) close relationships with friends of the same sex (Steinberg, 1985).
Intimacy of friendship increases dramatically between middle childhood and early adolescence (Berndt, 1982). Comments about the intimate sharing of thoughts and feelings with friends increase dramatically between middle childhood and early adolescence (Berndt, 1982; Bigelow, 1977; Douvan & Adelson, 1966; Reisman & Shorr, 1978; Selman, 1981; Youniss, 1980). According to Sharabany (1974) the transition from preadolescence to adolescence is marked by an increase in all aspects of intimate friendship. The following studies indicate the developmental trends that occur in conceptions of relationships with peers with an emphasis on psychological aspects such as intimacy.

Bigelow and LaGaipa (1975) asked elementary and junior high students how they conceive of and what they value in friendship. They found that until about fourth grade, friendships revolved around common activities and demographic similarities. Such things as commitment, genuineness and intimacy potential were not stressed until fifth or sixth grade. At this age, intimacy in friendship for the first time involves a mutual recognition of others' feelings and a more genuine understanding of others.
Bigelow (1977) taking the dimensions from the Bigelow and LaGaipa (1975) study went one step further. Using the statistical procedure of cluster analysis, he found that certain of the dimensions appeared to emerge together at certain stages. From this he inferred the existence of three loosely defined stages. In second and third grades a reward-cost stage emerged. Fourth and fifth grades had a focus on sharing—particularly of norms, values, rules. Sixth and seventh grade, the third stage, yielded dimensions of self-disclosure, intimacy, and personality dispositions that differentiated friends from acquaintances.

Developmental trends in children's expectations of friendship were clearly demonstrated by Bigelow's research. However, Gamer (1977) questioned the Bigelow data collection procedure of the use of written essays to elicit children's expectations suggesting the possible bias introduced in the results. She wondered whether the open-ended instructions biased the children to write only about those behaviors which were most salient and easiest to express. To explore this issue further, she employed a three-part interview to assess children's criteria for friendship and prosocial expectations (i.e., support, loyalty, trust, unselfishness, and reciprocity). Gamer's (1977) findings indicate that with age psychological attributes, particularly those labeled "prosocial" acquire more salience with age as defining criteria of friendship. Campbell et
al. (1979) confirmed Gamer's (1977) results.

A study employing an interview method (Reisman & Shorr, 1978) yielded a developmental progression for three dimensions in Bigelow and LaGaipa's system. It was found that intimacy potential, common activities, and loyalty—commitment significantly increased with age up to about the eighth grade but were cited less often in adulthood. The results of all these studies showed that children's spontaneous definitions of friendship change with increasing age in the direction of emphasizing psychological attributes (trustworthiness and keeping secrets) and similarity of interests and attributes.

Berndt (1979) studied children in kindergarten, third grade, and sixth grade using open-ended questions about best friends, nonfriends, and friendships that are disintegrating. Berndt assigned the children's responses about best friends to seven substantive categories (defining features, psychological attributions, shared activity, quality of interaction, intimacy and trust, faithfulness and loyal support). Results indicated that while children of all ages mentioned shared activity and quality of interaction more often than anything else, older children mentioned quality of the interaction, psychological attributes, and intimacy and trust more often than younger children. Berndt's developmental descriptions appear largely concordant with Bigelow's (1977).
Youniss and Volpe (1978) have investigated children's definitions of friendship and the actions governing relations between friends. They studied the development of social cognition and social relations, such as acts of friendship, using the Piagetian construct of operativity. Through interviews they asked children of different ages what actions (or operations) are necessary to demonstrate the establishment or maintenance of social relationships in general. Youniss and Volpe found that the younger children associated friendship with sharing of material goods or overt fun activities, whereas older children identified friendly behavior as sharing private thoughts and feelings out of a sense of mutual respect and affection.

Selman (1976) has proposed that the development of friendship can be indexed through sequential changes in the individual's reflections on five critical issues: formation, closeness and intimacy, trust and reciprocity, jealousy and resolution, and friendship termination. Selman's (1981) developmental progression of friendship evolves from momentary, physical parameters of friendship at stage 0 to friendship that is based on compatibility of interests and psychological make-up, rather than on the objective goodness or general worth of the individual.

The research cited above, promotes a greater understanding of the systematic changes that take place in children's ideas about the
defining attributes of a friend. With increasing age, children develop more abstract psychological aspects of relationships such as intimacy.

**Sex Differences in Intimacy of Relationships**

While early adolescence seems to mark a major period of transition in the development of intimacy for both sexes, gender differences in this development nevertheless exist. For example, many, but not all studies of self-disclosure to parents, have found that girls disclose more than do boys, and this difference may increase during early (and late) adolescence (Kon & Losenkov, 1978). Boys and girls have different types of friendship and express intimacy in different ways (Duck, 1983; Kon, 1981). The literature has typically shown that adolescent females are more expressive and concerned with maintaining interpersonal relationships than are males (Sharabany, 1974). Males focus frequently on shared activities rather than on a sense of intimacy in terms of shared feelings or acceptance (e.g., see Douvan & Adelson, 1966; Hill & Lynch, 1983; Maccoby and Jacklin, 1974).

Duck (1983) reports: "Females disclose more intimate information to their partners than males do.... It does not seem to matter whether the partner is male or female" (p. 76).
and Adelson (1966) and Simmons and Rosenberg (1975) have indicated that interpersonal relationships have a greater primacy for adolescent girls than for boys. Female adolescents seemed to find a greater degree of intimacy in friendship than did males (e.g., Kon & Losenkov, 1978; LaGaipa, 1979) and, therefore, to develop intimate friendships before males (Douvan & Adelson, 1966; Kon, 1983; Sharabany et al, 1981). Since females mature faster than males physically and emotionally, intimate peer interaction may be necessary to help them cope with the changes.

**Sex Differences in Intimacy of Opposite-Sex Relationships**

As with same-sex relationships, females tend to be more expressive in opposite-sex relationships and involved at an earlier age (Duck, 1983). Fischer (1981) suggests that this is due in part to their earlier need for intimacy. Since they begin intimate same-sex relationships earlier, they also experience an earlier transition from same-sex to opposite-sex relationships.

Sharabany et al. (1981) found several interesting results in their study on adolescent relationships. Intimacy with same- and opposite-sex friends increased for both girls and boys simultaneously during adolescence. Intimacy increased for opposite-sex friends with age and increased more for girls' relationships with boys than boy's relationships with girls. However, by seventh grade, girls reported greater intimacy toward boys than boys did for girls. Sharabany et al. (1981) suggest this may reflect their earlier transition of moving away from same-sex relationships and
thus, their earlier need for intimacy with the opposite sex.

Only when males enter into an exclusive dating relationship is disclosure socially acceptable (Rubin et al., 1980). Males are encouraged to retain their feelings while females are encouraged to expose their feelings and weaknesses to males. Nevertheless, males value emotionally intimate relations with their female friends, as females do with both their male and female friends (Reisman, 1981).

In summary, the age-related increase in intimacy, particularly in friendship has been reported by several studies (Bigelow & LaGaipa, 1975; Hunter & Youniss, 1982; Kon & Losenkov, 1978; LaGaipa, 1979; Reisman & Shorr, 1978). Such an increase seems to be more prominent among female adolescents (Berndt, 1981; Hunter & Youniss, 1982; Kon & Losenkov, 1978; LaGaipa, 1979) than males and to begin at a younger age.

**Studies of Relationships with Both Parents and Peers**

It is important to study intimacy in relationship with parents and peers not in isolation, but in an interactional model. A clearer understanding of the level of intimacy within these relationships can be gained by exploring each within the relational context of the other.

A study by Kon and Losenkov (1978) used a questionnaire survey of more than 1500 Soviet adolescents to clarify "meaningful criteria for teenage friendship" (p. 143). This research is more comprehensive than previously cited studies for two reasons: First, it integrates qualitative and quantitative characteristics of the
adolescents' relationships; and second, it looks at friendship relationships within the context of relations with other significant others namely parents, teachers, and family members using a more holistic framework. The research asks two basic questions: "what are the important and meaningful criteria of adolescent friendship?" and "what is the correlation of the emotionally meaningful and the instrumental functions of friendship in adolescence?" Kon and Losenkov state that, "in order to evaluate the degree of intimacy and the unique importance of a friendship, it is necessary to compare the alleged significance of the friendship with the actual state of affairs such as: 1) number of friends, 2) differentiating friends from "just acquaintances", 3) the frequency and substance of friendly relationships." (p. 145).

The more integrative studies have produced different findings than the more fragmented past studies. For example, an increase in friends helping during adolescence was reported by several studies (Berndt, 1979; Bigelow & LaGaipa, 1975) when the focus was solely on peers. However, when both parents and friends were compared for giving practical advice and guidance, Kon and Losenkov (1978) found mothers to be the first and friends second for females, whereas fathers came in second for males. Kandel and Leser (1972) found the ordering to be mother first, followed by friend, and then father for both sexes; however, the males considered fathers to be more helpful than the females did. The present study will examine the relative role of mother, father, and friend's impact on adolescent's self-esteem.
According to Steinberg (1985) while adolescence is a time of changes in the "targets" of intimate behavior, intimacy with peers does not "replace" intimacy with parents as some of the traditional theorists have suggested (Bronfenbrenner, 1970). One recent study by Hunter and Youniss (1982), cited earlier, empirically supports Steinberg's (1985) thesis in changing "targets" of intimate behavior. From age 12 on, adolescents described their relationships with their best friend as more intimate than with their mother or father. Both sexes reported highest intimacy in friendship, second in mother child relations, and lowest in father-child relations. Hunter and Youniss (1982) attribute that the difference between parent and peer intimacy to increases in intimacy with peers, and not to decreases in intimacy with parents. This study supports the importance of looking at these relational influences not in isolation, but in a combined more integrative model.

Findings consistent with Hunter and Youniss (1982) were obtained when nearly 2,500 students in a large midwestern school district were asked to list the important people in their lives—people they cared about, went for advice, or did thing with (Blyth, Hill, & Thiel, 1982). As in the Hunter and Youniss findings, the number of peers listed increased over the course of the age-range studied (from grades seven through ten). However, no changes were found across this same age range in the percentage of adolescents listing their mother or father. In each grade, for both boys and girls, about 93% of the adolescents sampled listed their parents.
Studies of males and females separately (Josselson et al., 1977a, 1977b) found age-related trends. Older boys had more intimate same-sex friendships than did younger boys (1977a) and older girls, compared with younger girls, seemed to seek more intimate same-sex friendships.

Summary

Most past literature on intimacy has focused on separate realms of the adolescent social world such as parents "versus" peers (Berndt, 1979; Biddle, Bank, & Marlin, 1980; Condry & Simon, 1974; Emmerich, 1978) or parents alone (Baumrind, 1975) or peers alone (Bigelow & LaGaipa, 1975; Selman, 1981). In addition, past research has focused on either dyadic relationships with regard to intimacy (child-parent, child-best friend) or to overall level of intimacy in aggregate relationships (groups of peers). Few studies have looked at all of these aspects of relationships as they relate to self-esteem. The last chapter of this literature review will focus on those studies that explore perceived intimacy with parents, same and opposite-sex peers, and its relation to the adolescent developing self-esteem.
CHAPTER FOUR

EMPIRICAL RESEARCH INTEGRATING SELF-ESTEEM AND PERCEIVED INTIMACY
OF RELATIONSHIPS WITH PARENTS, SAME- AND OPPOSITE-SEX PEERS

Having discussed the theoretical and empirical research on self-esteem and developmental changes in relationships with parents and peers, the final chapter of this literature review will focus upon the current empirical work that has attempted to integrate these areas of interest. Specifically, the chapter will review the few studies that do integrate qualitative or intimacy aspects of relationship with parents and peers and self-esteem.

Self-Esteem and Perceived Intimacy with Parents

A study by Gecas (1972) was done to examine the affect of contextual frames of reference on the level of self-esteem expressed by adolescents. Gecas' (1972) measure of self-evaluation was a modified version of the Osgood Semantic Differential. Subjects are asked to rate themselves in different social context: classroom, family, group of friends, opposite-sex friends, and with adults. In addition, Gecas (1972) found parental support to be somewhat more strongly related to adolescent self-worth than to feelings of power,
although there was a strong positive relationship for both of these dimensions.

The findings from this study indicated that the relationship between parental support and self-esteem was strongest in adult contexts (e.g., family), but it also carried over to other contexts similar to the family authority structure (e.g., school and other adult contexts). However, the relationship of parental support and self-esteem was not significant in peer contexts (e.g., when with friends or members of the opposite sex). In other words, parental support is related to adolescents' self-esteem primarily when adult frames of reference are used.

Jourard (1979) used an affective aspect of relationships namely self-disclosure to explore the association between female undergraduate students' self-esteem and their self-disclosure to parents and peers. Using a self-disclosure questionnaire and the Tennessee Department of Mental Health Self-Concept Scale, he found that the self-esteem of these women was related to their disclosure to their parents, but not to their disclosure to male and female friends. Support for this view is provided by the relatively high correlation between disclosure to parents, and scores on the "primary-group relationship" subscale of the Tennessee Self-Concept Scale used by Jourard (1979, p. 76). Analysis of the items that comprise this subscale show that they represent judgments about the quality of the family relationships.

According to Jourard (1979), a provisional general theory to account for the obtained correlations may be stated as follows: "a
person's self-esteem derives, in large measure, from the experience of having been accepted by his parents" (Jourard & Remy, 1955, p. 76). Jourard goes on to explain that the more that a person accepts himself, the less readily is he threatened by the experience of being known by others. Consequently, he will be better able to establish close relationships with others more than a person who rejects much of his real self. It is important to remember that Jourard's sample was restricted to female college students. Furthermore, self-disclosure, Jourard's construct used in this study to assess quality of relationship is only one dimension of the broader construct of intimacy (Blyth et al., 1982).

In a study by Richardson (1984) adolescents' overall ratings of the quality of their relationships with mother and father were examined in terms of several adjustment measures. These indicators of adolescent adjustment include scores on the family scale of the Self-Image Questionnaire for Young Adolescents (SIQYA), the total Self-Image score, and responses to questions about past or present incidence of clinical problems). Correlations between self-image measures and both father-adolescent and mother-adolescent qualities were highly significant and positive. Youngsters who rated the "quality" of their relationships with parents as good had higher self-image scores.

The Richardson (1984) study noted that only global indicators of relationship quality were related to self-esteem. In her study on parent-adolescent relationship quality, it appears that while measures of specific features of the relationship (e.g., level of
support, strictness) are not predictive of adolescent adjustment, more global indicators of relationship quality are. That is, subjective evaluations of the overall quality of the parent-adolescent relationship is more important than the specific content of the relationship for predicting adolescent adjustment. This suggestion is consistent with the literature on social support which argues that satisfaction with support rather than sheer level of support is most important for mental health and coping (Colletta, 1979).

The purpose of the Peterson and Atakan (1984) study was to identify perceived qualities of parents that determine the extent to which they function as significant others for adolescents. A second objective was to determine whether the use of peers as significant others was either consistent or compatible with the selection of parents as significant others.

Adolescents' perceptions of parental behavior support and parental power were used to predict adolescents' perceptions of parents as significant others. The project questionnaire entitled "Survey of High School Students (SHSS)" was used to assess sociodemographic, family background, family structure, individual and family relation variables. The measure of parents as significant others was a scale of three Likert-type items. A similar set of three Likert-type items were used to assess peers as significant others. A 27-item scale was used to measure expert parental power dimensions. The Parent Behavior Measure (PBM) was used to assess the adolescents' perceptions of their parents'
child-rearing behaviors. Included in this study was also a measure of adolescents' independence from parents. This was 10 Likert-type items based on a scale developed by Elder (1963).

Peterson and Atakan's (1984) findings indicate a significant correlation between Mom (.33, p < .001) and Dad (.34, p < .001) as significant others with adolescent self-esteem. The strongest contributor to the parents' significant other status appeared to be expert power or the perception by adolescents that their parents had substantial information. As Rosenberg (1979) indicated, parents become significant others and affect the self-esteem of adolescents to the extent that they are perceived as having expertise. A second influence of the parents as significant others was the amount of supportiveness they provide for the adolescent. This supports Rosenberg's self-maintenance function—that adolescents have the goal of maintaining their self-esteem. That is, adolescents would be more likely to choose as significant others parents and peers who are supportive and demonstrate an appreciation for their merits.

Self-Esteem and Perceived Intimacy with Peers

Only a few studies were found in the literature that look at relationships with peers and self-esteem (Crockett, 1984; Jourard, 1979; Mannarino, 1975; O'Donnell, 1975; Peterson & Atakan, 1984; Rosenberg & Simmons, 1975). Each of these shall be examined briefly.

In a study by O'Donnell (1975), self-esteem was found to be positively related to feelings toward friends for eighth graders and
for eleventh graders. When feelings toward best male and best female friend were considered separately, eighth graders' feelings toward the same-sex friend were more positively related to self-esteem than feelings toward the opposite-sex friend. Female adolescents showed a shift from same-sex to opposite-sex friends as the friend for whom feelings are more closely related to self-esteem. Males showed no such shift. This study will be discussed in detail in the next section.

In a series of studies by Mannarino (1975, 1978), he attempted to develop the hypothesis that an intimate friendship (a chumship in Sullivan's terms) contributes to positive self-esteem. He selected one group of sixth grade males who (a) named the same person as a best friend on two occasions, two weeks apart, (b) stated that they preferred to spend time with a single friend rather than a group of friends, and (c) indicated their friendship was close and satisfying in various ways (e.g., they frequently interacted and often had intimate conversations). The comparison group included sixth grade males whose friendships did not meet these criteria but matched the subjects in the first group on popularity. As expected, subjects with a close and stable best friendship had higher self-esteem than those who did not have such a close friend.

Berndt (1982) questions the validity of this study based on the reasoning that the differences in self-esteem between the two groups of sixth graders could be due to the effects of friendships on self-esteem or vice versa. That is, children with higher self-esteem might be preferred as friends and so have closer and more stable
friendships. He also states that because the selection of sixth graders for the close-friendship group was based on several criteria, it is not clear that their higher self-esteem was related to the intimacy of their friendships rather than to the other criteria. In addition, he criticizes the study on the grounds that it is not developmental. No younger children or late adolescents were included in the study nor were females studied. Nevertheless, Mannarino's (1975, 1978) attempt to correlate peer intimacy with developing self-esteem is an example of the kind of research that is needed.

According to Simmons and Rosenberg (1975), the adolescent's experiences and feelings about peer relationships in general and about relationships with the opposite-sex in particular play a role in determining his or her changing self-picture. Furthermore, Douvan and Adelson (1966) and Simmons and Rosenberg (1975) have indicated that interpersonal relationships have a greater primacy for adolescent girls than for boys.

Rosenberg's theory of "selective valuation" states that not all significant others are equally significant to the adolescent, and those who are more significant have greater influence on self-esteem. In accordance with this notion, findings of the Rosenberg and Simmon's (1975) study indicate that among girls who feel themselves unpopular with the boys, those who care more about boys' opinions suffer more in terms of their self-esteem. For example, among the girls who do not believe boys like them, 90% of those who said boys did not like them showed high self-consciousness in
comparison to 52% of those who said boys like them "pretty much" and 24% of those who said boys like them "very much." Only among girls who do not care about popularity with the boys is a low level of popularity unrelated to disturbed self-image.

A study by Crockett (1984) based on the same data set used by Richardson (1984), focused on time spent with same-sex peers at both the dyadic and aggregate levels as they relate to self-esteem. Two self-image scores were used: the score on the peer relations subscale of the SIQA and the aggregate self-image score (based on all nine subscales). Results indicate that adolescents who felt more accepted by peers they spent time with and by same-sex peers at school had higher overall self-esteem scores. However having a best friend was not significantly related to any adjustment variables including level of self-esteem.

It is important to note that there are limitations to Crockett's study. Best friend as defined in this study does not have dimensionality. It is simply a dichotimized "yes-no" response rather than a more qualitative measure of perceived intimacy with best friend which we have attempted to get at in the present study. Furthermore, Crockett (1984) only looked at an eighth grade sample. By looking at only an eighth grade sample, you lose the ability to see the differential effect of structure and intimacy. Nevertheless, Crockett's study and its attention to the structural components of peer relationships is an important contribution and underscores the need to include both dyadic and aggregate structures of influence in research.
Both the Richardson (1984) study which explores perceived intimacy with parents and self-esteem and Crockett's (1984) study which explores perceived intimacy with peers and self-esteem are based on the same data set. Therefore, it would seem appropriate to combine these studies for comparative exploration of parents and peers and self-esteem.

While Mannarino's (1958, 1978), Simmons and Rosenberg (1975), and Crockett's (1984) studies were three of the few studies found that focused on self-esteem and perceived relationships with peers, a few other studies were found that explored adolescent self-esteem related to feelings toward both parents and peers (Jourard, 1979; O'Donnell, 1975; Peterson & Atakan, 1984).

Self-Esteem and Perceived Intimacy with Parents and Peers

O'Donnell (1975) attempted to look at adolescent self-esteem in the context of both parent and peer relational influence. The study was conducted to see if there is a developmental process whereby the self-esteem of young adolescents is more closely related to feelings toward parents and that of older adolescents is more closely related to feelings toward best friends. The subjects, 138 eighth graders and 139 eleventh graders, completed the Inventory of Family Feelings with regard to parents and best male and female friends and the Tennessee Self-Concept Scale. Self-esteem was found to be significantly related to feelings toward parents and towards friends for adolescents of both grades. Feelings toward parents were generally more closely related to self-esteem than feelings toward
friends, although the relationship between self-esteem and feelings toward parents was slightly lower with the older group. According to O'Donnell (1975) if a developmental shift in the relationship between self-esteem and feelings toward friends occurs, it does so slowly, showing only a slight beginning by the eleventh grade (O'Donnell, 1975). While O'Donnell's study is an excellent example of a more integrative study focusing on both parents and peers, when it assesses peer influence, it does not look at the set of aggregate peers, but only focuses on the dyadic relationship of "best friend."

As indicated earlier, Jourard (1979) found that the self-esteem of female undergraduates was related to their disclosure to their parents, but not their disclosure to male or female friends.

Finally, the study by Peterson and Atakan, described earlier, is an appropriate study with which to conclude this literature review for its supports several of the premises upon which the present study was developed. First, it uses the Rosenberg self-esteem scale which will be the measure used in this study and supports Rosenberg's basic notions of "selective valuation" and "self-maintenance." Secondly, the study focuses on perceived qualities of parents as well as peers as significant others.

An important result in the Peterson and Atakan (1984) study was the fact that choosing parents and peers as significant others were not contradictory orientations. Furthermore, findings indicated that adolescents who use parents as significant others seem to balance independence with conformity to parents and development of high self-esteem.
Summary

As indicated by the few studies cited above on intimacy and self-esteem, there is a need for further research in this area. O'Donnell (1975), Jourard (1979), and Peterson and Atakan (1984) support Steinberg's (1985) premise that intimacy with parents remains important throughout adolescent development (Hunter & Youniss, 1982). However, both the O'Donnell (1975) and the Jourard (1979) studies, contrary to the literature, give weak support for a gradual shift to peers (e.g., not until 11th grade, O'Donnell, 1975) in influencing self-esteem or no support to peer influence on self-esteem by the end of adolescence (Jourard, 1979). Furthermore, both studies looked only at "male or female friend" dyads and not at the aggregate set of peers. It would appear, therefore, that one could not generalize results of the dyadic relationship of "best friend" to the set of peers based on this study.

No studies were found that took a more comprehensive approach to understanding self-esteem using other aspects of relationship in addition to intimacy such as quantity and frequency of contact. It is for this reason that the following study is proposed.

Limitations of Current Integrative Studies

While there does appear to be a direction toward more integrative studies, there are several limitations. The research on adolescent adjustment and parent and peer support reviewed in the last chapter may perhaps imply notions about self-esteem, however,
they do not directly deal with how these relationships impact on self-esteem development. Furthermore, while the research received is more integrative because it focused on dyadic and aggregate, and/or quantity, frequency, and intimacy, and/or both parents and peers, it does not look at these more integrative aspects in terms of their impact on self-esteem. Finally, the few studies that did focus directly on self-esteem, only focused on the qualitative aspect of intimacy and did not also include other aspects of relationships such as quantity and frequency in their research. Theoretically, one might expect that the more frequently parents or peers are seen, the more likely they would be to be intimate in relationships that would effect self-esteem. Furthermore, given that males prefer relationships based on shared activities, one would expect the relationship aspect of frequency of contact to have greater impact on self-esteem for males than for females (Kon, 1981). We would also suggest integrating with an intimacy aspect of relationship, a quantitative aspect of relationship in terms of the number of friends a person lists and its impact on self-esteem. There is some research that indicates that females report larger groups of friends than males (Garbarino et al., 1978). It is important therefore to explore how the number of friends a person has interacts with intimacy and frequency to predict self-esteem.

**Problem Statement**

The purpose of the present study will be to examine three aspects of relationships (Quantity, Frequency, and Quality) with
respect to three different types of people (Parents, Same-Sex Peers, and Opposite-Sex Peers) to see the extent to which they are correlated with the early adolescent's global self-esteem. The study will focus on three issues. The first issue has to do with the extent that the relationships' variables of frequency and quality (intimacy) with parents, both mom and dad examined separately, allow for prediction of self-esteem of adolescents from grades 7 through 10. In addition, I will look at the extent to which there are differences in the relationships of frequency of contact and intimacy to self-esteem, across grade and sex categories.

The second issue will be to look at the same types of factors, but for same-sex peer relationships. Peers will be explored at two levels of analysis: 1) dyadic, and 2) aggregate. By dyadic I mean specific direct influence on relations between the adolescent and his most intimate same- and opposite-sex friend. The most intimate friend is the friend who has the maximum intimacy score. By aggregate level of analysis, I mean summing information across the set of same-sex peers listed by the subject. Along with frequency and intimacy, quantity or number of peers listed will be assessed as relationship variables. This study will explore the extent to which these relationships or characteristics of sets of relationships allow for prediction of adolescent self-esteem across grade and sex.

Finally, since seventh through tenth grade years are the ones in which the development of opposite-sex friendships begins, the
third issue will be to look at the same types of factors for opposite-sex relationships with peers. Analyses for opposite-sex peers will also be at both the dyadic and aggregate levels.

**Research Questions**

The following research questions will be explored using an existing data set of over 2,400 seventh through tenth grade subjects in a suburban school district. Particular attention will be paid to sex and grade-level differences.

**Parent Dyads**

1. What is the level of association between self-esteem and the perceived level of intimacy and frequency of contact with Mother and Father? Does this relationship change as a function of grade or sex?

**Same and Opposite-Sex Peers--Both Dyadic and Aggregate Peers**

2. To what extent are perceived characteristics of the most intimate friend dyad and set of peers predictive of self-esteem? The aggregate characteristics of the set of peers will include the number of friends listed, mean and total frequency of contact, and the mean and total level of intimacy. Does this relationship change as a function of grade or sex?
Comparison of Parent and Peer Contributions to Self-Esteem

3. What is the comparative influence of these dyadic and aggregate characteristics of the adolescent social relations on self-esteem? That is, which of the three characteristics (quantity, quality, and frequency) at which level (dyadic or aggregate) for which type of relation (parental or peer) is most important for self-esteem? Does this change as a function of age or sex?

Hypotheses

The following is a list of the specific hypotheses which will be tested:

Parental Dyads Hypotheses

I. Adolescent-Mother Dyad

1) The perceived frequency of contact with mother will be positively related to subjects' self-esteem
   a) Perceived frequency of contact with mother will predict self-esteem better in earlier grades than in later grades.
   b) The relationships between frequency of contact with mom and self-esteem will be stronger for girls than boys.

2) The perceived level of intimacy with mother will be positively related to self-esteem.
   a) Perceived level of intimacy with mother will predict
self-esteem better in earlier grades than in later grades.

b) This relationship between intimacy and self-esteem will be stronger for girls than boys.

II. Adolescent-Father Dyad

1) The perceived frequency of contact with father will be positively related to self-esteem.

a) The perceived frequency of contact with father will predict self-esteem better in earlier grades than in later grades.

b) This relationship between frequency and self-esteem will be stronger for girls than boys.

2) The perceived level of intimacy with father will be positively related to self-esteem.

a. Perceived level in intimacy with father will predict self-esteem better in earlier grades than in later grades.

b. This relationship between intimacy and self-esteem will be stronger for girls than boys.

Same-Sex Peers Hypotheses

I. Adolescent--Closest Friend Dyads

1) The perceived frequency of contact with a most frequently seen friend is positively related to self-esteem.

a) The perceived frequency of contact with a most frequently seen friend will predict self-esteem better
in later than in earlier grades.

b) This relationship between frequency and self-esteem will be stronger for girls than boys.

2) The perceived level of intimacy with a most intimate friend is positively related to self-esteem.

a) The perceived level of intimacy with a most intimate friend will predict self-esteem better in later grades than in earlier grades.

b) This relationship between intimacy and self-esteem will be stronger for girls than boys.

Set of Same-Sex Peers Aggregate

Since most previous research has not examined the aggregation of perceived characteristics of the set of same-sex peers on self-esteem, the following are research questions to be explored rather than specific hypotheses to be tested.

II. Quantity

1) Is the number of same-sex peers listed related to self-esteem and is the relationship affected by grade or sex differences?

III. Frequency (Mean and Total)

1) Is the mean frequency of contact with same sex peers related to self-esteem and is the relationship affected by grade or sex differences?

2) Is the total frequency of contact with same-sex peers positively related to self-esteem and is the relationship
affected by grade or sex differences?

IV. Intimacy (Mean and Total)

1) Is the mean level of intimacy with same-sex peers related to self-esteem and is the relationship affected by grade or sex differences?

2) Is the total level of intimacy with same-sex peers related to self-esteem and is the relationship affected by grade and sex differences?

Opposite-Sex Peers Hypotheses

I. Adolescent—Closest Friend Dyads

1) The perceived frequency of contact with a most frequently seen friend is positively related to self-esteem.
   a) The perceived frequency of contact with a most frequently seen friend will predict self-esteem better in later than in earlier grades.
   b) This relationship between frequency and self-esteem will be stronger for girls than boys.

2) The perceived level of intimacy with a most intimate friend is positively related to self-esteem.
   a) The perceived level of intimacy with a most intimate friend will predict self-esteem better in later grades than in earlier grades.
   b) This relationship between intimacy and self-esteem will be stronger for girls than boys.
Set of Opposite-Sex Peers Aggregate Hypotheses

Since most previous research has not examined the aggregation of perceived characteristics of opposite-sex peers on self-esteem, the following are research questions to be explored rather than specific hypotheses to be tested.

II. Quantity

1) Is the number of opposite-sex friends listed related to self-esteem and is the relationship affected by grade or sex differences?

III. Frequency (Mean and Total)

1) Is the mean frequency of contact with opposite-sex peers related to self-esteem and is the relationship affected by grade and sex differences?

2) Is the total frequency of contact with opposite-sex peers related to self-esteem and is the relationship affected by grade or sex differences?

IV. Intimacy (Mean and Total)

1) Is the mean level of intimacy with opposite-sex peers related to self-esteem and is the relationship affected by grade or sex differences?

2) Is the total level of intimacy with opposite-sex peers related to self-esteem and is the relationship affected by grade or sex differences?
Comparison of Parent and Peer Contributions to Self-Esteem

In order to explore the relative role of the various dyadic and aggregate relationship qualities on self-esteem, I shall examine how much each contributes to explaining self-esteem by noting the order in which they enter a stepwise multiple regression analysis using all items. Rather than formulating specific hypotheses as to the order of importance, I shall simply note the results of a multivariate analysis of multiple regression analysis using all items.
CHAPTER FIVE

METHODS

The proposed study entails secondary analyses of data collected in the Spring of 1979 as part of a research project which was directed by principal investigators Dale A. Blyth and John P. Hill. The ensuing account of procedures undertaken in the project is based upon information reported by the principal investigators and their associates (Blyth, Hill, & Smyth, 1981; Blyth, Hill, & Thiel, 1982).

Sample

Over 2,800 seventh through tenth grade male and female students of a midwestern, suburban, public school district were given two questionnaires: the Background and Outcome Survey and the Social Relations Questionnaire. Students from the intermediate high school (consisting of only 9th and 10th grades) and two junior high schools (comprised of grades 7 and 8) were included in the research. Approximately 92% of the population of 7th through 10th grade students within the school district participated in the study. Of the 8% who did not complete the questionnaires, approximately 4% were absent on the days of administration, and 4% lacked parental permission.
The families served by the school district were largely white, middle-class, intact, and college-educated. For example, 70% of the participants' fathers held middle to upper-middle class jobs, and 60% were college educated. Eighty-five percent of the respondents reported that their parents were presently married and living together.

Procedure

The Background and Outcome Survey was developed during the research project for the purpose of assessing the effects of grade-level arrangements on students' attitudes, behaviors, and experiences (Blyth, Hill, & Smyth, 1981). The questionnaire is comprised of items dealing with students' perceptions of a number of domains, such as: self-esteem, the school environment, victimization experiences, dating and sexual behavior, substance use, and participation in school activities and organizations. Questions relating to family background, family interaction, and self-evaluations are also included. The majority of questions require the respondent to select from among a set of response alternatives provided for each item.

The Social Relations Questionnaire was designed to provide an inclusive description of significant others in the social world of adolescents as well as data concerning adolescents' perceptions of their relationships with each of these significant others (see Appendix A). It consists of three parts: 1) a few questions pertaining to demographic information on the student, 2) a sheet
asking the respondent to list significant others in his or her life, and 3) a series of questions about each of the significant others listed (Person Questions). Blyth, Hill, and Thiel (1982) use the term "significant others" in reference to "persons in an adolescent's social relations with whom there is a perceived attachment and/or social influence relationship" (p. 429).

The Social Relations Questionnaire employs an approach to eliciting lists of significant others which represent a combination of "relationship" and "structural" techniques (Blyth, 1982). The relationship method involves defining for the respondent a relationship or set of relationships which describes the type of person to be listed (e.g., person to whom one goes for advice or a friend). The structural technique uses elicitors which define structural characteristics of the respondent's social world or ways in which the social world can be organized (e.g., age level of significant others, type of setting they might be known in) as the basis for listing individuals (see Blyth, 1982 for a discussion of the benefits and limitations of various social mapping techniques).

In employing the relationship approach, the Social Relations Questionnaire asks participants to provide the initials, first or last names of "important people in their lives." As shown in Appendix A, the defining criteria for "important people" were presented as follows:
Important people are described:

PEOPLE YOU SPEND TIME WITH OR DO THINGS WITH,
PEOPLE WHO LIKE YOU A LOT OR WHO YOU LIKE A LOT OR BOTH,
PEOPLE WHO MAKE IMPORTANT DECISIONS ABOUT THINGS IN YOUR LIFE,
PEOPLE YOU GO TO FOR ADVICE, OR
PEOPLE YOU WOULD LIKE TO BE LIKE

These "relationship" categories were designed to be inclusive so as to encourage the listing of as many important others in the adolescent's social world as possible.

The Social Relations Questionnaire also utilizes the structural framework for generating names of significant others, as it asks respondents to consider important people in terms of two dimensions: age (adult and young people) and contexts in which the important other may be seen (family, school, neighborhood, activities outside of school, and "other").

The listing of significant others thus involved identifying persons meeting any of the relationship criteria in each of the different structured settings. By combining the two age levels with the five contextual levels, 10 categories were formed, each defining a separate list of significant others. For each of the 10 categories, space was allotted to list up to 10 people. It was believed that such an approach to eliciting significant others would facilitate the respondent's task of examining his or her social world for possible important persons, as it divided the social world into more manageable units (Blyth, 1982). It was also hoped that
such a procedure would serve to partially control for differences in
cognitive ability by making the task more uniform across respondents
(Blyth, Hill, & thiel, 1982).

After completing all lists of important others, participants
were given the set of "person questions" for each individual listed.
A few of these items inquired about characteristics of the
significant other (gender, age level, residence, familial
relationship to the respondent and grade level and school, if
applicable). Also included were a series of questions concerning
how frequently the respondent saw or talked with the significant
other in different contexts and a number of questions about the
nature of their relationship. These will be examined below in more
detail.

Administration

During the first week of data collection in the Spring of 1979,
the Background and Outcome Survey was administered to students
during regularly scheduled classes. A standard set of instructions
was given to students by administrators hired specifically for the
study (classroom teacher were not used). Students were asked to
write their name on a separate sheet inserted in the questionnaire
so as to facilitate the identification of students over the course
of the project, but also to protect their identity by separating it
from the questionnaires. The name sheets were collected before
students began to fill out the questionnaire and physically removed
from the school before questionnaires were completed. Students were
assured of the confidentiality of their responses.

The following week the Social Relations Questionnaire was administered to the same students during the same regular classroom period. Trained personnel provided detailed instructions on questionnaire completion, using overhead transparencies to illustrate examples. For the most part, unusable questionnaires resulted from the failure of respondents to follow instructions or take the task seriously as reflected in non-sensical answers or a large number of imaginary characters.

**Proposed Subsample**

The sample for the present analysis will be drawn from the 2,403 respondents who completed usable questionnaires and will consist of only those who reported that they: 1) had parents who were currently married and living together, and 2) were presently living in the same household as their parents.

These criteria eliminated respondents from broken homes and those from families in which the children were of different parentage. Intact families comprise roughly 85% of the original sample (Blyth et al., 1982). The subsample will be divided into two random halves for some analyses in order to permit split-half replication and make more effective use of the large sample size. The overall data set consisted of 1,617 males and females (see Table 1). They were roughly equally distributed across the four grades.
Table 1
Distribution of Cases by Grade and Sex

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<td>108</td>
<td>79</td>
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</tbody>
</table>

**Measures**

The present study will involve only a limited portion of the Background and Outcome Survey data. Specifically, information about respondents themselves (age, sex, and grade in school), their parents (marital status and living arrangements), and the respondents' level of self-esteem.

**Global Self-Esteem.** The major dependent variable used in this analysis is global self-esteem. Self-esteem is defined here as an individual's global positive or negative attitude toward him- or herself. In this usage the individual with high self-esteem considers her/himself to be a person of worth, though not necessarily superior to others. Low self-esteem, on the other hand, implies self-rejection, self-dissatisfaction, or self-contempt.

Self-esteem is measured in this study by a six-item Guttman Scale which is a modified version of the Rosenberg self-esteem scale which was specifically developed for younger age groups (see Simmons, Rosenberg, & Rosenberg, 1973). The Guttman scaling procedure is a technique for estimating the internal consistency and reliability of a series of responses. The Guttman procedure builds a continuous scale by combining dichotomize items. The following is a sample item from the scale "Everybody has some things about him which are good and some things about him which are bad. Are most of the things about you...Good, Bad, or Both about the same" (See Appendix B for full scale). In a sample of early adolescents, the scale has previously been shown to have a coefficient of reproducibility of .90, a coefficient of scalability of .68, and a 20% improvement factor.

This scale has undergone extensive validation tests which are summarized in Rosenberg and Simmons (1972); Simmons et al. (1973); Simmons et al. (1979). First of all, it has been validated against another measure of the same concept; that is, it appears to have trait validity (Simmons, Rosenberg, & Rosenberg, 1973). It is satisfactorily correlated with adolescents' scores on the Rosenberg
measure of self-esteem which had been validated in previous research (Rosenberg, 1965).

Secondly, this scale has construct validity. Ten theoretical predictions were made concerning self-esteem and in all cases these predictions were confirmed using the scale. Self-esteem was shown to correlate with measures of depression and anxiety, with marks in school, with indicators of school leadership, and with the perceived opinions of how several significant others (including parents, teachers, and friends) evaluated the subject.

Third, the scale appears to satisfy the interchangeability criterion: it "behaves" the same way as the Rosenberg measure of self-esteem in relation to other variables. Finally, it appears to have face validity as a measure of the individual's global feelings about this own self-worth (Simmons, Rosenberg, & Rosenberg, 1973).

Selection of Significant Others

Three types of significant others listed by each subject on the Social Relations Questionnaire will be included in the present study: parents, same- and opposite-sex peers. Results of Blyth et al.'s (1982) study indicated that parents and siblings were almost always listed as significant others by adolescents in all four grade levels. Approximately 90 to 93% of the subjects listed parents as significant others (Blyth et al., 1982).

A peer will be defined as a nonrelated young person who was in the same grade level as the subject or one grade level above or below. The set of peers to be analyzed will be the total of all
such adolescent-peer dyads. Significant other nonrelated young people who were two or more years younger or older than the subject were eliminated because they were not considered to be peers in a technical sense. Peers will be separated into same-sex and opposite-sex sets. Blyth, Hill and Thiel (1982) found that an average of 50% to 55% of the nonrelated same-sex young people listed were from the same grade, same school, and same neighborhood as the respondent. Results from previous analyses indicated that more than 75% of all same-sex, non-related young people listed will be included in the present analysis.

Since early adolescence is a time when one begins to see the development of opposite-sex friendships, opposite-sex peers will also be examined.

Data about the quality or intimacy of the relationship and the frequency of contact in various settings for such persons will be examined. In addition, the quantity or number of same-sex and opposite-sex peers listed will be examined. The next section will describe how each of the major relationship concepts of intimacy, frequency, and quantity will be measured in this study.

**Quantity of Peer Relationships**

Two measures of quantity will be obtained by counting the number of peers listed who are of the same-sex or the opposite-sex as subject, and are in the subject's grade level or one grade above or below the subject's grade level.
Frequency of Contact Scale

The measure of frequency of contact was obtained by examining subjects' responses to six questions relating to frequency of contact with each person listed in different contexts. The six items on the frequency scale were as follows:

"How often do you see or talk with this person at either your home or their home?"

"How often do you see or talk with this person on the telephone?"

"How often do you see or talk with this person on the way to or from school?"

"How often do you see or talk with this person during school or school activities?"

"How often do you see or talk with this person at organized, non-school activities?"

"How often do you see or talk with this person at other places where you hang out or do things?"

The frequency scale was built in such a way as to preserve the importance of different contexts as well as provide a readily interpretable sense of frequency. The subjects responded using categories of "almost daily," "weekly," "monthly or less," and "almost never" for each of the different contexts. These responses were weighted and summed across contexts so as to construct a single scale value for each significant other which could be roughly interpreted as an estimate of the number of times per month that the subject saw that significant other in any of the contexts noted.
The frequency scale just described was then used to determine frequency of contact with mom and frequency of contact with dad.

At the dyadic level, the frequency scale was also used to determine the values of two other major independent variables representing frequency of contact with same- and opposite-sex most frequently seen friends. The most frequently seen friends is defined in this study as the peer listed by the subject as receiving the highest frequency score among the set of either same- or opposite-sex peers.

At the aggregate level of set, two types of same- or opposite-sex peer frequency were derived from the Frequency Scale: 1) the average, and 2) the total. The average level of perceived frequency of contact that the subject reported with either same- or opposite-sex peers was determined by summing the frequency scale score for each same and opposite-sex peer listed and then dividing by the number of such peers (the quantity measure noted above). Total frequency of contact within the set of same- or opposite-sex peers was determined by summing the Frequency Scale values for all same- or opposite-sex peers listed. The total frequency of contact measures for same- and opposite-sex peers thus represents the sheer volume of frequency with peers reported by the subject and is not adjusted for the number of peers listed.

The level of "intimacy" which subjects report having with these specific significant others will have similar dyadic and aggregate counterparts to those noted for frequency. The following section will describe the intimacy scale.
Intimacy Scale

Responses to four questions will constitute the index of the perceived quality of the subject's relationships with each parent and peer listed. The four items in the intimacy scale were as follows:

"How much do you go to this person for advice?"

"How much does this person accept you no matter what you do?"

"How much does this person understand what you're really like?"

"How much do you share your inner feelings with this person?"

These same intimacy questions were asked for each significant other listed. Each of these four items calls for one of three responses indicating the extent to which the item in question applies to the respondent's relationship with the specific significant other. The response categories were "not at all," "some," and "a lot."

The intimacy scale was built from four of the original six items asked. Two items ("Is this person a close friend?" and "How much do you want to be like this person?") were dropped to improve internal consistency reliability. The alpha level for the four-item scale across all types of relationships is .815. The scale works equally well for males and females and for a wide variety of different types of relationships (all alphas were over .77). The scale has been shown to validly and effectively discriminate between relationships which can be presumed to be at different levels of
intimacy (e.g., mom versus extended family member) (Blyth et al., 1984).

The intimacy scale will be used to create several different measures used in this study. At the dyadic level, the subject's responses to the items in relation to mom and dad will be used to measure perceived intimacy with mom and perceived intimacy with dad.

For same- and opposite-sex peers, three different measures will be examined. At the dyadic level, the intimacy scale was used to determine the values of perceived intimacy with same- and opposite-sex intimate friends. The most intimate friend is defined in this study as the peer listed by the subject as receiving the highest intimacy score among the set of either same-sex or opposite-sex peers.

At the aggregate or set of peers level, two types of same- and opposite-sex peer intimacy variables are derived from the intimacy scale: 1) the average, and 2) the total. The average level of perceived intimacy that the subject reported with either same- or opposite-sex peers was determined by summing the intimacy scale scores for all same- or opposite-sex peers listed and then dividing by the number of such peers (the quantity measure noted above). Total intimacy within the set of same- and opposite-sex peers was determined by summing the intimacy scale values for all same- or opposite-sex peers listed. The total intimacy measures for same- and opposite-sex peers thus represent the sheer volume of intimacy with peers reported by the subject and is not adjusted for the number of peers listed.
Analysis

Given the large number of hypotheses and the generally interval level of measurement, most of the statistical analyses will be done within a multiple regression framework. Zero-order correlations will be reported for all interrelations to check for possible multicollinearity problems. The use of multiplicative interaction terms will permit testing of sex and grade effects for selected hypotheses. Since the sample is so large that even small effects may be significant, many of the statistics will also be run on two randomly split halves of the sample to test for the robustness of the effect. In order to test the robustness of these effects, the same tests in each of the two split-half samples was looked at. If the same effect is present in both subsamples, the effect was considered robust. If it does not, the effect is considered weak and unstable.

Limitations

There are some limitations to this study which must be acknowledged. The first is the perceptual nature of the measures. Every variable except grade-level and sex of subject is based on the adolescent's own perceptions. Furthermore, the dependent variable used in this study is a very global measure of self-esteem. Because the data is taken solely from the perspective of the adolescent, it has the advantage of the accuracy of adolescent self-report. However, it has the disadvantage of no "other report" such as
parental report that would help to understand how accurate or inaccurate the adolescent's self-perceptions may be.

The intimacy scale has limitations in that it is also a global measure and more emotionally based (perhaps favoring females) rather than more gender nonspecific. The frequency of contact scale, on the other hand, does get in some ways gets at shared activities which is a more male-oriented approach to friendship.

There are limitations in the definition of best friend in that it was created by statistical criteria (the subject receiving the maximum intimacy and frequency score) and not by directly asking the subject to list his best friend. Based on this criteria, the presumption is made that the peer who receives the highest intimacy score (the most-intimate friend) or the peer who receives the highest frequency score (the friend seen most frequently) is the same as a "best friend" or "chum" in Sullivanian (1953) terminology. Two criteria are used to define "best friend": frequency of contact and intimacy. It is possible, however, that neither of these criterion is the subject's criterion for best friend.

Limitations are also inherent in the definition of peer used in this study as a nonrelated young person who was in the same grade level as the subject or one grade level above or below. Alternative definitions of peer such as restriction to the same grade as the subject would perhaps create different results. The literature has indicated that there are different dynamics involved with a subject who might choose younger or older friends as peers than a subject who would choose same-age friends (Ladd, 1983).
There are also cohort and time of measurement limitations. The original sample for this study was collected in the Spring of 1979 (Blyth, Hill, & Thiel, 1982). This might have implications for gender differences in part to the extent that changes have occurred in society favoring attitudes toward women.

Because the sample is from a white, middle-class suburban school system and the present analysis only uses intact families, another limitation is that it is not possible to generalize the results to populations widely different from this. Finally, this study is correlational and, therefore, the significant relationships found cannot be interpreted in terms of causality even though the development of the adolescent's relationship with parents presumably precedes the development of relationships with same- and then opposite-sex friends. One is not be able to determine if higher self-esteem results from better relationships with various types of people or if it helps to create them. Ultimately, both processes are probably involved.
CHAPTER SIX

RESULTS

This chapter is divided into three major sections. The first section contains some descriptive information about the concepts under study including analyses of variance results to explore sex differences and grade differences. The next section presents the regression results for the major hypotheses regarding self-esteem. This section is subdivided into three parts. One part is developed for each of the significant others (e.g., Parental, Same-Sex peers and Opposite-sex peers). Within each part, results are given for perceived frequency, quantity, and intimacy. The subject's grade level and sex are also included in these analyses. The third and final section compares the contribution of different types of significant others and different aspects of their relationships to self-esteem.

Description of Major Variables

In this section a brief examination of each of the major variables will be presented along with a test for significant sex and grade differences.
Quantity

Quantity refers to the sheer number of people of a certain type that were listed by adolescents. Since all adolescents included in this study came from intact homes, the number of parents can be assumed to be a constant (2), although not all youth may have elected to list both. A measure of quantity for peers was obtained by counting the number of peers listed who are the same-sex as the subject, and who are in the subject’s grade-level or one grade above or below the subject’s grade-level. The number of same-sex peers listed ranged from 0 to 15 with an average of 4.3. Fifty-seven percent of the subjects listed four or less same-sex friends. The number of opposite-sex peers was counted in a similar manner, lists ranged from 0 to 14 with a mean of 1.4. Sixty-four percent of the subjects listed one or fewer opposite-sex friends. Descriptive statistics and the results of a two-way analysis of variance (Grade x Sex) on the same-sex and opposite-sex quantity variables are presented in Table 2.

For quantity measures, there were clear sex differences with females listing more peers than males. Females listed 4.9 same-sex peers and 1.7 opposite-sex peers compared to 3.8 same-sex peers and 1.1 respectively for males. The difference in the distribution of the number of friends listed by males and females is also interesting. For females, only 2% listed no same-sex peers, while 32% listed no opposite-sex peers. For males, 7% listed no same-sex peers and 48% listed no opposite-sex peers. Grade differences were
Table 2
Mean Values and ANOVA Results for Quantity of Peers by Grade and Sex

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>Total</th>
<th>Grade</th>
<th>Sex</th>
<th>Inter-Action</th>
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</thead>
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<td><strong>Same-Sex Peers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Overall</td>
<td>4.3</td>
<td>4.5</td>
<td>5.4</td>
<td>4.3</td>
<td>4.6</td>
<td>NS</td>
<td>.00</td>
<td>NS</td>
</tr>
<tr>
<td>Male</td>
<td>3.7</td>
<td>3.7</td>
<td>4.0</td>
<td>3.9</td>
<td>3.8</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>4.8</td>
<td>5.2</td>
<td>5.0</td>
<td>4.6</td>
<td>4.9</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Opposite-Sex Peers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>1.0</td>
<td>1.4</td>
<td>1.7</td>
<td>1.6</td>
<td>1.4</td>
<td>.00</td>
<td>.00</td>
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<td>.7</td>
<td>1.1</td>
<td>1.3</td>
<td>1.5</td>
<td>1.1</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>1.3</td>
<td>1.7</td>
<td>2.0</td>
<td>1.7</td>
<td></td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
noted for opposite-sex peers, but not for same-sex peers. Number of opposite-sex peers listed increased by grade for both sexes with females listing more opposite-sex peers than males.

**Frequency**

All frequency scores were constructed by summing the weighted values associated with the response option chosen for each particular significant other (see chapter five). The range of this frequency score was from 0 to 120 and it can be best interpreted as an estimate of the number of times per month the other person or type of people are seen in any of the different contexts asked about. Both dyadic and aggregate frequency variables are based on this scale.

Dyadic frequency variables include: perceived frequency of contact with Mom, perceived frequency with Dad, perceived frequency with most-frequently seen same-sex friend and perceived frequency with most-frequently seen opposite-sex friend. Descriptive statistics on the dyadic frequency variables are described in Table 3. Of particular interest is the fact that the highest perceived frequency for females (76.0) and males (65.8) is with the same-sex most frequent friend. Perceived frequency with parents is lower than perceived frequency with most frequent same-sex friend. Males report higher perceived frequency of contact with Mom (39.2) and with Dad (36.8) than females. Females' frequency of contact with Mom is (38.2) and with Dad (32.8).
Both the mean or average level of frequency of contact in the set of same-sex and opposite-sex peers set and the total frequency of contact summed across the set of peers will be looked at. These two measures provide alternative ways of looking at the sets of peers. Descriptive statistics on these aggregate variables are also presented in Table 3. Of particular interest is the fact that total amount of perceived frequency with opposite-sex peers at these ages is low for both females (51.0) and males (41.7). This is compared to a total amount of frequency with same-sex peers which females reported 232.8 and males reported 184.2. Females are generally higher than males on frequency of contact with same- and opposite-sex peers.

For the various frequency measures, the ANOVA results indicate several small sex effects with boys having slightly lower frequency of contact with same-sex and opposite-sex peers, but slightly higher frequency of contact with Dad. No sex differences were indicated for Mom.

There were also a few grade effects and grade by sex interactions. With regard to parents, the perceived frequency of contact with parents changes with both sex and grade. Males' perceived frequency with both Mom and Dad generally increased across grades, while females generally decreased with grade. Males perceived frequency with Mom goes from 37.2 to 38.6 in 10th grade. The highest frequency with Mom for females is in the 7th grade and goes from 39.9 in 7th grade to 35.6 in 10th grade. For females, perceived frequency with Dad goes down with grade from
Table 3

Mean Value and ANOVA Results for Perceived Frequency* of Contact by Grade and Sex

<table>
<thead>
<tr>
<th></th>
<th>Grade Level</th>
<th>ANOVA Results</th>
<th>Inter-</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td><strong>Parents</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mom</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>38.4</td>
<td>41.3</td>
<td>37.6</td>
</tr>
<tr>
<td>Male</td>
<td>37.2</td>
<td>43.8</td>
<td>37.4</td>
</tr>
<tr>
<td>Female</td>
<td>39.9</td>
<td>39.2</td>
<td>37.8</td>
</tr>
<tr>
<td><strong>Dad</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>34.1</td>
<td>37.3</td>
<td>34.4</td>
</tr>
<tr>
<td>Male</td>
<td>34.7</td>
<td>41.8</td>
<td>35.7</td>
</tr>
<tr>
<td>Female</td>
<td>33.4</td>
<td>33.4</td>
<td>33.2</td>
</tr>
<tr>
<td><strong>Same-Sex Peers</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Most Frequent</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friend</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>69.0</td>
<td>70.1</td>
<td>74.2</td>
</tr>
<tr>
<td>Male</td>
<td>63.4</td>
<td>62.7</td>
<td>69.3</td>
</tr>
<tr>
<td>Female</td>
<td>75.0</td>
<td>76.4</td>
<td>78.6</td>
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<tr>
<td><strong>Total</strong></td>
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<tr>
<td>Overall</td>
<td>201.3</td>
<td>210.5</td>
<td>222.2</td>
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<tr>
<td>Male</td>
<td>172.2</td>
<td>175.6</td>
<td>200.0</td>
</tr>
<tr>
<td>Female</td>
<td>232.9</td>
<td>240.5</td>
<td>242.2</td>
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<tr>
<td><strong>Opposite-Sex Peers</strong></td>
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<tr>
<td><strong>Most Frequent</strong></td>
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<td></td>
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</tr>
<tr>
<td>Friend</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>23.3</td>
<td>29.3</td>
<td>30.1</td>
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<tr>
<td>Male</td>
<td>18.8</td>
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<td>27.2</td>
</tr>
<tr>
<td>Female</td>
<td>28.8</td>
<td>32.0</td>
<td>32.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>33.2</td>
<td>50.0</td>
<td>51.8</td>
</tr>
<tr>
<td>Male</td>
<td>24.1</td>
<td>45.7</td>
<td>49.1</td>
</tr>
<tr>
<td>Female</td>
<td>43.0</td>
<td>53.7</td>
<td>54.2</td>
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<tr>
<td><strong>Self-Esteem</strong></td>
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<tr>
<td>Overall</td>
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<td>4.0</td>
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</tr>
<tr>
<td>Female</td>
<td>3.9</td>
<td>3.7</td>
<td>3.9</td>
</tr>
</tbody>
</table>

*These responses were weighted and summed across contexts so as to construct a single scale value for each significant other which could be roughly interpreted as an estimate of the number of times per month that the subject saw that significant other in any of the contexts noted.
33.4 in 7th grade to a mean of 30.2 in 10th grade. For males, perceived frequency with Dad went up with grade from a mean of 34.7 in 7th grade to a mean of 35.4 in 10th grade.

With regard to peers, total amount of frequency with opposite-sex peers also changes with grade and sex for both males and females (see Table 3). No significant grade effects were found for same-sex peers. Males' grade pattern of total frequency with opposite-sex peers increases from 24.1 to 51.7. Females' grade pattern also generally increases going from a frequency of 43.0 to a 52.5. The highest frequency with opposite-sex peers for females is in the 9th grade (54.2).

**Intimacy**

The intimacy score was constructed from multiple items. The ranges of this intimacy score was from 0 to 2 with a higher score indicating greater intimacy. Descriptive statistics on the intimacy variables are provided in Table 4. Several observations are important to note. For females the highest perceived intimacy (1.7) is with same-sex most-intimate friend. In contrast, for males the highest perceived intimacy is with Mom (1.5) and Dad (1.4) and most-intimate same-sex friend is at only 1.3. In addition, perceived intimacy with opposite-sex most-intimate friend is extremely low for both sexes. Females report 1.0 perceived intimacy with opposite-sex most-intimate friend and males report .7.

For the various intimacy measures, there are sex differences and small grade differences as expected from the literature (e.g.,
Berndt, 1979; Bigelow & LaGaipa, 1975; Selman, 1981). Females reported higher levels of intimacy than males (see Table 4). Intimacy with Dad is the only case in which males report higher intimacy than females.

Females total amount of intimacy with same- and opposite-sex peers was also higher than males. Females' total intimacy with same-sex peers was 7.0 and total intimacy with opposite-sex peers was 1.5. Males' total intimacy with same-sex peers was 4.1 and only 1.2 total intimacy with opposite-sex peers. This is because females list more same-sex peers.

There are also significant grade effects for same- and opposite-sex peers intimacy measures. Both types of peer intimacy increased with grade level (see Table 4) although the patterns are not totally consistent and the biggest differences appear between seventh grade and the other grade levels (Berndt, 1979; Bigelow, & LaGaipa, 1975). From 7th to 10th grades females' total intimacy with same-sex peers goes from 6.4 to 7.0. Males' total intimacy with same-sex peers goes from 3.7 in the 7th grade to 4.4 in the 10th grade. Females' total intimacy with opposite-sex peers increased from 1.2 in 7th grade to 1.7 in 10th grade. Males' total intimacy with opposite-sex peers went from .7 in 7th grade to 1.6 in 10th.

Self-esteem

For self-esteem no grade effects were observed. There were considerable sex differences with males (4.3) reporting higher
Table 4

Mean Values and ANOVA Results of Perceived Intimacy by Grade and Sex

<table>
<thead>
<tr>
<th></th>
<th>Grade Level</th>
<th>ANOVA Results</th>
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<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>7 8 9 10 Total</td>
<td>Grade Sex Action</td>
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<tr>
<td>Mom</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Overall</td>
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<td>1.5 1.5</td>
<td>NS NS NS</td>
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</tr>
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<td>1.5 1.5 1.4</td>
<td>1.5</td>
<td></td>
<td></td>
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<tr>
<td>Female</td>
<td>1.5 1.5 1.6</td>
<td>1.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dad</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Overall</td>
<td>1.4 1.4 1.3</td>
<td>1.3 1.3</td>
<td>NS .00 NS</td>
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<td>Same-Sex Peers</td>
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<tr>
<td>Most Intimate Friend</td>
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<td>1.4 1.5 1.5</td>
<td>1.6 1.5</td>
<td>.00 .00 NS</td>
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<tr>
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<tr>
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</table>
self-esteem than females (3.9). These results are presented in Table 5. Sex differences in self-esteem are supported by the literature particularly by studies using a similar measure (Monge, 1973; Simmons & Rosenberg, 1975).

Because of the large sex differences in most variables further analyses will generally be run for all subjects as well as on males and females separately.

Correlations for Quantity, Frequency, and Intimacy

The correlation matrix for all major variables is presented in Table 6. The correlations ranged from -.11 to .97. Several observations are important to note. For parents, frequency and intimacy are weakly correlated (.16), the measures of frequency with Mother and Father are highly correlated (.73). The measures of intimacy with Mother and Father are also highly correlated (.65). Thus, it appears as though one can be intimate with one's parents even with low frequency of contact, but intimacy and frequency with one parent is likely to be reflected in a similar score for the other parent.

For same-sex peers, mean level of intimacy and the level of intimacy with most-intimate friend are very highly correlated (.87). It was logical, therefore, to drop one from the analysis. Since the value for most-intimate friend represents an actual dyadic level relationship, we shall drop the mean level. The total or summed scores for the set of same-sex peers will still be used to characterize the set of peers.
Table 5
Mean Values and ANOVA Results of Global Self-Esteem by Grade and Sex

<table>
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<tr>
<th></th>
<th>Grade Level</th>
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### Table 6

Correlation Matrix of Independent and Dependent Variables

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<th>C</th>
<th>D</th>
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<th>G</th>
<th>H</th>
<th>I</th>
<th>J</th>
<th>K</th>
<th>L</th>
<th>M</th>
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<th>O</th>
<th>P</th>
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<th>R</th>
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<tr>
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<th>I</th>
<th>J</th>
<th>K</th>
<th>L</th>
<th>M</th>
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<th>O</th>
<th>P</th>
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<td>.14***</td>
<td>.05*</td>
<td>.13***</td>
<td>.06**</td>
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<td>.07**</td>
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<td>.09***</td>
<td>.07***</td>
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<td>.12***</td>
<td>.07***</td>
<td>.07***</td>
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<td>.84***</td>
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<td>.19***</td>
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<table>
<thead>
<tr>
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<th>M</th>
<th>N</th>
<th>O</th>
<th>P</th>
<th>Q</th>
<th>R</th>
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<td>.02</td>
<td>-.07**</td>
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<td>.30***</td>
<td>.18***</td>
<td>.12***</td>
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<td>M. Frequency with Most Frequent Friend</td>
<td>-.05*</td>
<td>.08***</td>
<td>-.03</td>
<td>.07***</td>
<td>.24***</td>
<td>.27***</td>
<td>.12***</td>
</tr>
<tr>
<td>N. Number</td>
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<td>-.03</td>
<td>-.11***</td>
<td>.00</td>
<td>.23***</td>
<td>.12***</td>
<td>.16***</td>
</tr>
<tr>
<td>O. Mean Intimacy with Peers</td>
<td>-.03</td>
<td>.03</td>
<td>-.04</td>
<td>.02</td>
<td>.35**</td>
<td>.18***</td>
<td>.09***</td>
</tr>
<tr>
<td>P. Mean Frequency with Peers</td>
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<td>-.01</td>
<td>.07***</td>
<td>.21***</td>
<td>.25***</td>
<td>.08***</td>
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<tr>
<td>Q. Total Intimacy with Peers</td>
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<td>R. Total Frequency with Peers</td>
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<td>-.03</td>
<td>.08***</td>
<td>.16***</td>
<td>.17***</td>
<td>.12***</td>
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</table>

| Self-Esteem | .17*** | .05* | .19*** | .06** | .02 | .02** | .00 | .05 | .07** | .02 | .04 | .02 | .01 | .01 | .03 | .02 | .04 | .02 |

*P < .05
**P < .01
***P < .001
Given the similarly highly correlation between the number of same-sex peers and the total amount or volume of same-sex intimacy (.84) with peers, the results for quantity and Total intimacy and parallel frequency measures will be expected to be similar.

For opposite-sex peers, as with same-sex peers average intimacy was highly correlated with perceived intimacy with most intimate friend (.97). Therefore, as with same-sex peers, we decided to drop average intimacy and parallel frequency measures and only report total scores for the set of opposite-sex peers.

Tests of Hypotheses

In order to test hypotheses, a series of simple regressions were run on self-esteem to look at the effect of each independent variable. These were then repeated on each sex separately. In addition, all analyses were run on each split-half sample in order to test the robustness of the results.

The conditional hypotheses which refer to grade or sex differences in the prediction of self-esteem were tested using a multiple regression framework. The use of multiplicative interaction terms was used to test the sex and grade effects for selected hypotheses.

Results from these analyses will be presented in three sections: Parental, Same-Sex Peers, and Opposite-Sex Peers. Within each section we shall look at the various characteristics of the relationships (e.g., Quantity, Frequency, and Intimacy).
Parental Relationships

Relationship with Mother

It was hypothesized that the perceived frequency of contact and the perceived level of intimacy with mother would be positively related to self-esteem. It was further hypothesized that these effects would be stronger for females than males and in the younger grades than in the older grades. Results of the tests of these hypotheses are shown in Table 7.

**Frequency.** A simple regression on the overall sample indicates that the reported frequency of contact with Mother was significantly related to self-esteem $F(1,1373) = 3.8$, $p = .05$. The effect was small ($r = .05$), however, and explained less than 1% of the variance in self-esteem. Furthermore, it was not robust in that it appeared in only one of the two split-half samples.

No significant effect was found for the perceived frequency of contact with Mother when explored separately for males and females. The lack of a significant result for either sex was supported in both of the split-half samples.

In order to see if the effect of frequency of contact with Mother on self-esteem was differentially related to grade-level, a multiple regression model was used with only frequency of contact, grade and a grade by frequency interaction term (Table 7). The interaction term did add significantly to the explained variance $F(1,1465) = 3.93$, $p = .05$. However, the hypothesis that the effect of frequency of contact with Mother would be weaker at the older
Table 7

Relationship with Mother: The Effect of Perceived Frequency of Contact and Intimacy with Mother on Self-Esteem by Sex and Grade

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<tr>
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<td></td>
<td>R</td>
<td>R^2</td>
<td>F</td>
<td>R</td>
</tr>
<tr>
<td>Overall</td>
<td>.05</td>
<td>.00</td>
<td>3.8*</td>
<td>.16</td>
</tr>
<tr>
<td>Males</td>
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</tr>
<tr>
<td>Females</td>
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<td>.00</td>
<td>1.5</td>
<td>.19</td>
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Test for Significance of...

<table>
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<th>Change in</th>
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<td>F</td>
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<tr>
<td>Grade Interaction</td>
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<td>Overall</td>
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<td>.0273</td>
<td>45.38***</td>
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<td>1.8</td>
<td>.0261</td>
<td>20.75***</td>
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<tr>
<td>Females</td>
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<td>.0355</td>
<td>30.82***</td>
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<td>Sex Interaction</td>
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<td>.0021</td>
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</table>

*p < .05
**p < .01
***p < .001
grade-levels is not supported. If anything, there is a very slight increase in the older grades. This interaction effect, however, explains less than 1% of the variance. No significant effect was found for the interaction term when explored separately for males and females.

A multiple regression model was also used in order to see if the effect of frequency of contact with Mother on self-esteem was differentially related to sex of the subject. Included in the interaction model were only frequency of contact, sex, and a sex by frequency interaction term. The interaction term did not add significantly to the explained variance ($F(1,1465) = 3.17, p = NS$). Thus, the hypothesis that the effect of frequency of contact with Mother would be stronger for females than males was not supported.

**Intimacy.** The simple regression results indicated that a highly significant main effect for perceived intimacy with Mom was found, $F(1,1617) = 44.67, p = .00$ (see Table 7). This result supports the hypothesis that perceived intimacy with Mom is positively related to self-esteem. The effect is small (.16) and explains only 3% of the variance but was robust in that it appeared in both of the two split-half samples.

Furthermore, significant results were found for both males $F(1,1775) = 19.23, p = .00$, and females, $F(1,838) = 30.45, p = .00$. These results were also robust as they appeared in both split-half samples. The effect of perceived intimacy with Mother was similar for both males ($r = .19$) and females ($r = .19$).
A multiple regression was performed with only perceived intimacy, grade, and a grade by intimacy interaction in order to see if the effect of perceived intimacy with Mother on self-esteem was differentially related to grade-level. The interaction term did add significantly to the explained variance in the overall sample, $F(1,1615) = 45.38, p < .001$ with an unstandardized regression coefficient of .05518. However, the hypothesis that the effect of perceived intimacy with Mother would be weaker at the older grades was not supported. If anything, there is a slight increase in the older grades. The interaction effect, however, explains less than 3% of the variance. Significant effects were indicated for the interaction term for both males $F(1,775) = 20.75, p < .001$ and females $F(1,838) = 30.82, p < .001$. The effects, however, are not consistently stronger at older grade levels but rather reflect bigger effects at some grades than others.

In order to see if the effect of perceived intimacy with Mother on self-esteem was differentially related to sex of the subject, a multiple regression was also performed with only perceived intimacy, sex, and a sex by intimacy interaction in the model. The interaction term did not add significantly to the explained variance $F(1,1615) = 3.50, p = NS$. The hypothesis that the effect of perceived intimacy with Mother would be stronger for females than males was therefore rejected.
Relationship with Father

It was hypothesized that perceived frequency of contact and intimacy with Father would be positively related to self-esteem. It was further hypothesized that these effects would be stronger for females than males and in the younger grades than in the older grades. The results of the tests of these hypotheses are shown in Table 8.

Frequency. A simple regression on the overall sample indicates that the reported frequency of contact with Dad was significantly related to self-esteem $F(1,1373) = 4.7$, $p = .03$. The effect is small ($r = .06$), explained less than 1% of the variance and was not significant in either of the two split-half samples.

No significance was found for perceived frequency of contact with Dad when explored separately for males and females. This lack of results was supported by both split-half samples.

A multiple regression model with frequency of contact, grade and a grade by frequency interaction was used in order to see if the effect of frequency of contact with Father on self-esteem was differentially related to grade-level. The interaction term did add significantly to the explained variance $F(1,1416) = 5.75$, $p = .02$ but the effect was positive. Thus, the hypothesis that the effect of frequency of contact with Father would be weaker at the older grade level was not supported. If anything, there is a slight increase in the older grades. This interaction effect, however, explains less than 1% of the variance. No significance was
Table 8

Relationship with Father: The Effect of Perceived Frequency of Contact and Intimacy on Self-Esteem by Sex and Grade

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<td>R²</td>
<td>F</td>
<td>R</td>
<td>R²</td>
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Test for Significance of...

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<td>R²</td>
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*p < .05
**p < .01
***p < .001
indicated for the interaction term when explored separately for males and females.

A similar multiple regression model was used in order to see if the effect of perceived frequency of contact with Father on self-esteem was differentially related to sex of the subject. The interaction term did not add significantly to the explained variance $F(1,1416) = 1.97, p = \text{NS}$. Thus, the hypothesis that the effect of perceived frequency of contact with Father would be stronger for females than for males was not supported.

**Intimacy.** Simple regression results indicate a highly significant main effect for perceived intimacy with Dad, $F(1,1617) = 40.58, p < .001$, supporting the hypothesis that perceived intimacy with Dad is positively related to self-esteem. The effect is small (.16), but is highly robust in that it appeared in both split-half samples at the $p = .001$ level.

Furthermore, high significance was found for perceived intimacy with Dad when explored separately for both males, $F(1,1775) = 3.97, p < .001$, and females, $F(1,838) = 17.88, p < .001$. These results were not robust in that they appeared consistently in only one of the two split-half samples.

In order to see if the effect of perceived intimacy with Father on self-esteem was differentially related to grade-level, a multiple regression model was used with only perceived intimacy, grade and a grade by intimacy interaction terms. The interaction terms did add significantly to the explained variance $F(1,1615) = 43.90, p < .001$ but with a positive regression coefficient of .05259. Thus, the
hypothesis that the perceived intimacy with Father would be weaker at the older grade-levels was not supported. If anything, there is a very slight increase in the older grades. This interaction effect, however, explained less than 3% of the variance.

Significance was indicated for the interaction term for both males $F(1,775) = 17.01, p < .001$ and females $F(1,838) = 18.63, p < .001$.

A similar multiple regression was performed using only intimacy with Father, sex, and a sex by intimacy interaction term in order to see if the effect of perceived intimacy with Father on self-esteem was differentially related to sex of subject. The interaction term did add significantly to the explained variance $F(1,615) = 6.08, p = .01$ with a positive regression coefficient of .09659. However, the hypothesis that the effect of perceived intimacy with Father would be stronger for females than males was not supported. If anything, there is a slight increase for males. The interaction effect, however, explains less than 1% of the variance.
Relationships With Same-Sex Peers

In exploring the various same-sex friend and set of peer hypotheses, we shall move from an examination of the highest levels reported for any same-sex peer at a dyadic level (most-intimate friend and most-frequently seen friend), to an examination of the number of peers, and finally look to the total frequency and intimacy with the set of peers. As noted above, the results for mean levels of frequency and intimacy will not be presented because of the very high correlation (over .80) between mean levels and the levels with most intimate or frequently seen friend.

Closest-Friend Dyad

The hypotheses stated that the highest level of perceived frequency and intimacy with a single same-sex friend would be positively related to self-esteem. It was further hypothesized that these effects would be stronger for females than males and in the later grades than in the younger grades. The results of the tests of these hypotheses are shown in Table 9.

Frequency. A simple regression on the overall sample indicate that a significant main effect was found for perceived frequency with the most-frequently seen same-sex friend $F(1,1373) = 6.49, p = .01$ supporting the hypothesis that perceived frequency with the most-frequently seen same-sex friend or "chum" in Sullivan's (1953) terms is positively related to self-esteem. The effect, however, is small (.07), and explains less than 1% of the variance and unstable
Table 9

Relationship with Closest Same-Sex Friend: The Effect of Perceived Frequency of Contact and Intimacy with Closest Same-Sex Friend on Self-Esteem by Sex and Grade

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th></th>
<th></th>
<th>Intimacy</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R</td>
<td>R²</td>
<td>F</td>
<td>R</td>
<td>R²</td>
</tr>
<tr>
<td>Overall</td>
<td>.07</td>
<td>.00</td>
<td>6.49***</td>
<td>.03</td>
<td>.00</td>
</tr>
<tr>
<td>Males</td>
<td>.17</td>
<td>.03</td>
<td>19.06***</td>
<td>.12</td>
<td>.01</td>
</tr>
<tr>
<td>Females</td>
<td>.02</td>
<td>.00</td>
<td>.24</td>
<td>.07</td>
<td>.01</td>
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</table>

Test for Significance of...

<table>
<thead>
<tr>
<th>Grade Interaction</th>
<th>Change in R²</th>
<th>F</th>
<th>Change in R²</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
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<td>10.69***</td>
<td>.0018</td>
<td>2.83</td>
</tr>
<tr>
<td>Males</td>
<td>.0298</td>
<td>23.78***</td>
<td>.0167</td>
<td>13.17***</td>
</tr>
<tr>
<td>Females</td>
<td>.0015</td>
<td>1.22</td>
<td>.0068</td>
<td>5.74**</td>
</tr>
<tr>
<td>Sex Interaction</td>
<td>.0012</td>
<td>1.97</td>
<td>.0041</td>
<td>6.70**</td>
</tr>
</tbody>
</table>

*p < .05  
**p < .01  
***p < .001
in that it did not appear in either of the two split-half samples.

A significant effect was found for perceived frequency with most-frequent same-sex friend when explored separately for males $F(1,663) = 19.06, p < .001$ but not for females $F(1,706) = .24, p = \text{NS}$. These results are robust in that they appeared essentially the same in both split-half samples.

A multiple regression model was used in order to see if the effect of perceived frequency of contact with most-frequently seen same-sex friend on self-esteem was differentially related to sex of subject. The interaction did not add significantly to the explained variance $F(1,1615) = 1.97, p = \text{NS}$ with a regression coefficient of $-.00088$. Thus, the hypothesis that the effect of frequency of contact with the most-frequently seen same-sex friend would be stronger for females than for males was not supported. If anything, there is a very slight increase for males. The interaction effect, however, explains less than 1% of the variance.

In order to see if the effect of perceived frequency with the most-frequently seen same-sex friend on self-esteem was differentially related to grade level, a multiple regression was performed with only perceived frequency, grade, and a grade by frequency with most-frequently seen same-sex friend interaction. The interaction did add significantly to the explained variance $F(1,1615) = 10.69, p < .001$ with a regression coefficient of $.00046$. Thus, the hypothesis that the effect of perceived frequency of contact with the most-frequently seen same-sex friend would be stronger at older grades than younger grades was supported. The
interaction term, however, explains less than 1% of the variance. Furthermore, a significant effect for the interaction term was indicated when explored separately for males \( F(1,775) = 23.78, \ p < .001 \), but not for females.

**Intimacy.** Simple regression on the overall sample indicates that the effect of perceived intimacy with most-intimate same-sex friend was found to be nonsignificant \( F(1,1617) = 1.47, \ p = \text{NS} \). Thus the hypothesis that perceived intimacy with most-intimate same-sex friend is positively related to self-esteem must be rejected. The effect is small \( (r = .03) \), and explains less than 1% of the variance. It is also weak insofar as it did not appear in either of the split-half samples.

When explored separately for males \( F(1,1775) = 11.60, \ p < .001 \) and females \( F(1,838) = 4.53, \ p = .03 \), however, significance was indicated. This result was not robust in that it appeared in only one of the two split-half samples.

A multiple regression model was used in order to see if the effect of perceived intimacy with the most intimate same-sex friend on self-esteem was differentially related to sex of the subject. The interaction term did add significantly to the explained variance \( F(1,1615) = 6.70, \ p = .01 \) with an unstandardized regression coefficient of \(-.08295\). Thus, the hypothesis that the effect of perceived intimacy with the most intimate same-sex friend would be stronger for females than males was not supported. If anything, there is a slightly stronger effect for males. The interaction effect, however, explains less than 1% of the variance.
In order to see if the effect of perceived intimacy with the most intimate same-sex friend on self-esteem was differentially related to grade level, a multiple regression was performed with only perceived intimacy, grade, and a grade by intimacy interaction in the model. The interaction term did not add significantly to the explained variance, $F(1,1615) = 2.83$, $p = NS$. Thus, the hypothesis that perceived intimacy with the most intimate same-sex friend would be stronger in the older grades was not supported. The interaction effect, however, explains less than 1% of the variance. When the interaction term is explored separately for males and females significance is indicated for both males $F(1,775) = 13.17$, $p < .001$ and females $F(1,883) = 5.74$, $p = .02$

Set of Same-Sex Peers

Given the exploratory nature of the hypotheses in this section and because most previous research has not examined the aggregate characteristics of the set of same-sex peers on self-esteem, we have generally elected to stated all issues for aggregate variables as research questions rather than hypotheses.

Number of Same-Sex Peers

Is the number of same-sex peers listed related to self-esteem and is the relationship stronger for females than males and in the younger grades than in the older grades? The results are shown in Table 10.
Table 10

Number of Same-Sex Peers: The Effect of Perceived Number of Same-Sex Peers on Self-Esteem by Sex and Grade

<table>
<thead>
<tr>
<th></th>
<th>R</th>
<th>R²</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>.01</td>
<td>.00</td>
<td>.12</td>
</tr>
<tr>
<td>Males</td>
<td>.05</td>
<td>.00</td>
<td>2.27</td>
</tr>
<tr>
<td>Females</td>
<td>.03</td>
<td>.00</td>
<td>.60</td>
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Test for Significance of...

<table>
<thead>
<tr>
<th>Change in</th>
<th>R</th>
<th>F</th>
</tr>
</thead>
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<tr>
<td>Grade Interaction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>.0002</td>
<td>.29</td>
</tr>
<tr>
<td>Males</td>
<td>.0032</td>
<td>2.48</td>
</tr>
<tr>
<td>Females</td>
<td>.0011</td>
<td>.89</td>
</tr>
<tr>
<td>Sex Interaction</td>
<td>.0032</td>
<td>5.10**</td>
</tr>
</tbody>
</table>

*p < .05  
**p < .01  
***p < .001
A simple regression on the overall sample indicates that number of same-sex peers was found to be nonsignificant $F(1,1617) = .12$, $p = \text{NS}$. This result was supported by both split-half samples. Furthermore no significant effect was found for number of same-sex peers when explored separately for males and females. This result was also supported by both split-half samples.

A multiple regression model was used to see if the effect of number of same-sex peers on self-esteem was differentially related to sex of the subject. The interaction term did add significantly to the explained variance $F(1,1615) = 5.10$, $p = .02$ with an unstandardized regression coefficient of $-.01920$. If anything, there is more of an effect for boys, but the interaction effect explains less than 1% of the variance.

In order to see if the effect of number of same-sex peers on self-esteem was differentially related to grade-level, a multiple regression model was used with only number, grade, and a grade by number interaction term. The interaction term did not add significantly to the explained variance $F(1,1615) = .29$, $p = \text{NS}$. When explored separately for males and females, no significance is indicated for the grade by number interaction term.
Total for Set of Same-Sex Peers

Will the perceived total amount of perceived frequency of contact and intimacy with all same-sex peers be positively related to self-esteem? Will these effects be stronger for males than for females in the older grades than in earlier grades? Results of the tests of these research questions are shown in Table 11.

Frequency. A simple regression on the overall sample indicates that the total amount of frequency with all same-sex peers was not significant $F(1,1373) = 2.19, p = NS$. This lack of a relationship was supported by both split-half samples. The effect is small ($r = .04$) and explains less than 1% of the variance.

When explored separately for males and females, significant effects were indicated for males $F(1,663) = 11.31, p < .001$, but not for females $F(1,706) = .02, p = NS$. The effect was not robust in that it appeared in only one of the two split-half samples.

In order to see if the effect of total amount of frequency with all same-sex peers was differentially related to sex of subject, a multiple regression was also performed with only total amount of frequency, sex, and a sex by total amount of frequency interaction in the model. The interaction did not add significantly to the explained variance $F(1,1615) = 1.53, p = NS$.

A multiple regression model with total amount of frequency with all same-sex peers, grade and a grade by total amount of frequency interaction was used in order to see if the effect of total amount of frequency with all same-sex peers on self-esteem was
Table 11

Total for Set of Same-Sex Peers: The Effect of Total Perceived Frequency of Contact and Total Intimacy with Set of Same-Sex Peers on Self-Esteem by Sex and Grade

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Intimacy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R</td>
<td>$R^2$</td>
</tr>
<tr>
<td>Overall</td>
<td>.04</td>
<td>.00</td>
</tr>
<tr>
<td>Males</td>
<td>.13</td>
<td>.02</td>
</tr>
<tr>
<td>Females</td>
<td>.01</td>
<td>.00</td>
</tr>
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</table>

Test for Significance of...

<table>
<thead>
<tr>
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<th>Change in $R^2$</th>
<th>Change in F</th>
</tr>
</thead>
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<tr>
<td></td>
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<tr>
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<td></td>
</tr>
<tr>
<td>Overall</td>
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<tr>
<td>Males</td>
<td>.0169</td>
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</tr>
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<td>Females</td>
<td>.0001</td>
<td>.08</td>
</tr>
<tr>
<td>Sex Interaction</td>
<td>.0010</td>
<td>1.53</td>
</tr>
</tbody>
</table>

* $p < .05$
** $p < .01$
*** $p < .001$
differentially related to grade level. The interaction term did not add significantly to the explained variance $F(1,1613) = 3.08, p = \text{NS}$. When explored separately for males and females, significance was indicated for the interaction effect for males $F(1,774) = 13.30, p < .001$, but not for females.

**Intimacy.** A simple regression on the overall sample indicates that the reported total amount of intimacy with all same-sex peers was not positively related to self-esteem and was found to be nonsignificant $F(1,1617) = 1.26, p = \text{NS}$. The lack of a relationship was supported by both split-half samples.

Significant effects were found, however, for total amount of intimacy with all same-sex peers when explored separately for males $F(1,775) = 10.72, p < .001$, but not for females. The effect was not robust in that it appeared in only one of the two split-half samples.

A multiple regression model was used to see if the effect of total amount of intimacy with all same-sex peers on self-esteem was differentially related to sex of the subject. The interaction term did not add significantly to the explained variance $F(1,1615) = 1.37, p = \text{NS}$.

In order to see if the effect of total intimacy with all same-sex peers on self-esteem was differentially related to grade-level,
a multiple regression was used with only total amount of intimacy, grade, and grade by total intimacy interaction term. The interaction term did not add significantly to the explained variance $F(1,1615) = 1.80, p = NS$. When explored separately for males and females, significance was indicated for the interaction term for both males $F(1,775) = 10.53, p = .001$ and females $F(1,883) = 4.08, p = .04$.

**Relationships With Opposite-Sex Peers**

As with the same-sex peers, in exploring the various opposite-sex friend and set of peer hypotheses, we shall move from an examination of the most-intimate and most-frequently seen opposite-sex friend to an examination of number of opposite-sex peers, and finally look to the total frequency and intimacy with the set of opposite-sex peers. As with same-sex peers, the results for mean levels of frequency and intimacy with opposite-sex will not be presented.

**Closest-Friend Dyad**

The hypotheses stated that the highest level of perceived frequency and intimacy with a single opposite-sex friend would be positively related to self-esteem. It was further hypothesized that these effects would be stronger for females than males and in the later grades than in the younger grades. Results of the tests of these hypotheses are shown in Table 12.
Table 12

Relationship with Closest Opposite-Sex Friend: The Effect of Perceived Frequency of Contact and Intimacy with Closest Opposite-Sex Friend on Self-Esteem by Sex and Grade

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th></th>
<th>Intimacy</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
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<td></td>
<td>R</td>
<td>R^2</td>
<td>F</td>
<td>R</td>
<td>R^2</td>
</tr>
<tr>
<td>Overall</td>
<td>.01</td>
<td>.00</td>
<td>.29</td>
<td>.02</td>
<td>.00</td>
</tr>
<tr>
<td>Males</td>
<td>.08</td>
<td>.01</td>
<td>3.94*</td>
<td>.03</td>
<td>.00</td>
</tr>
<tr>
<td>Females</td>
<td>.01</td>
<td>.00</td>
<td>.08</td>
<td>.05</td>
<td>.00</td>
</tr>
</tbody>
</table>

Test for Significance of...

<table>
<thead>
<tr>
<th>Change in</th>
<th>Change in</th>
</tr>
</thead>
<tbody>
<tr>
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<td>F</td>
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<tr>
<td>Grade Interaction</td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>.0003</td>
</tr>
<tr>
<td>Males</td>
<td>.0034</td>
</tr>
<tr>
<td>Females</td>
<td>.0001</td>
</tr>
<tr>
<td>Sex Interaction</td>
<td>.0009</td>
</tr>
</tbody>
</table>

*p < .05  
**p < .01  
***p < .001
Frequency. A simple regression on the overall sample indicates that perceived frequency of contact with the most-frequently seen friend was found to be nonsignificant $F(1,1373)= .29, \ p = NS$. Thus the hypothesis that frequency of contact with most-frequently seen friend is positively related to self-esteem was rejected. The effect is small ($r = .01$) and explains less than 1% of the variance. The result was supported in both split-half samples.

When explored separately for males and females, significance was indicated for males $F(1,663) = 3.9, \ p = .05$, but not for females. The effect is not robust in that it appeared in only one of the two split-half samples.

In order to see if the effect of perceived frequency of contact with most-frequently seen friend on self-esteem was differentially related to sex of the subject, a similar multiple regression model was used. The interaction term did not add significantly to the explained variance $F(1,1612) = 1.42, \ p = NS$. Thus, the hypothesis that the effect of frequency of contact with the opposite-sex most-frequently seen friend on self-esteem would be stronger for females than for males was supported.

The grade by frequency interaction term did not add significantly to the explained variance $F(1,1612) = .40, \ p = NS$. Thus, the hypothesis that the effect of frequency of contact with the opposite-sex most frequently seen friend on self-esteem would be stronger in the older grades than in the younger grades was supported. The interaction effect, however, explains less than
1% of the variance. When explored separately for males and females, no significance was indicated for the interaction effect.

**Intimacy.** Simple regression on the overall sample indicates that perceived intimacy with the most-intimate opposite-sex friend was found to be nonsignificant was \( F(1,1617) = .38, p = NS \). The effect is small (\( r = .02 \)) and explains less than 1% of the variance. The lack of results was supported by both split-half samples.

No significance was also found for perceived intimacy with opposite-sex most-intimate friend when explored separately for males and females. The result was supported in both split-half samples. Furthermore, neither the grade by intimacy or sex by intimacy interactions were significant so that all opposite-sex hypotheses for intimacy with the most-intimate friend were rejected.

**Set of Opposite-Sex Peers**

Similarly to same-sex peers, given the exploratory nature of the hypotheses in this section and because most previous research has not examined the aggregate characteristics of the set of opposite-sex peers on self-esteem, I have elected to state all issues for aggregate variables as research questions rather than hypotheses.

**Number of Opposite-Sex Peers**

Is the number of opposite-sex peers listed related to self-esteem and is the relationship stronger for females than for males
and stronger in the younger grades than in the later grades? The results for these tests are shown in Table 13.

A simple regression on the overall sample indicates that reported number of opposite-sex peers with self-esteem is not positively related to self-esteem was found not significant $F(1,1617) = .78, p = NS$. Thus, the null hypothesis was rejected. The results were supported by both split-half samples. Furthermore, the sex by number interaction term did not add significantly to the explained variance.

No significance was found for number of opposite-sex peers when explored separately for males and females. These results were also supported in both split-half samples. Furthermore, the sex by number interaction term did not add significantly to the explained variance.

In order to see if the effect of number of opposite-sex peers listed on self-esteem was differentially related to grade-level, a multiple regression model was used with only number, grade, and a grade by number interaction term. The interaction term did add significantly to the explained variance $F(1,1615) = 4.25, p = .04$. When the interaction effect was explored separately for males and females, no significance was indicated.

**Total Set of Opposite-Sex Peers**

Will the perceived total amount of frequency of contact and intimacy with all opposite-sex peers be positively related to self-esteem? Will these effects be stronger for males than for females
Table 13

Number of Opposite-Sex Peers: The Effect of Perceived Number of Opposite-Sex Peers on Self-Esteem by Sex and Grade

<table>
<thead>
<tr>
<th></th>
<th>R</th>
<th>R^2</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>.02</td>
<td>.00</td>
<td>.78</td>
</tr>
<tr>
<td>Males</td>
<td>.00</td>
<td>.00</td>
<td>.01</td>
</tr>
<tr>
<td>Females</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
</tr>
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</table>

**Test for Significance of...**

<table>
<thead>
<tr>
<th>Change in R^2</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade Interaction</td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>.0026</td>
</tr>
<tr>
<td>Males</td>
<td>.0001</td>
</tr>
<tr>
<td>Females</td>
<td>.0000</td>
</tr>
<tr>
<td>Sex Interaction</td>
<td>.0003</td>
</tr>
</tbody>
</table>

*p < .05
**p < .01
***p < .001
and in the older grades than in the younger grades? Results of the tests of these hypotheses are shown in Table 14.

**Frequency.** A simple regression on the overall sample indicates that no perceived total amount of frequency of contact with all opposite-sex peers was not significant, $F(1,1373) = .79$, $p = \text{NS}$. The result is stable in that no significant results appeared in either of the split-half samples.

No significance was found for perceived total frequency with opposite-sex peers when explored separately for males and females. The result was stable in that no significant results appeared in either of the two split-half samples. Furthermore, neither the grade by total frequency of contact interaction with opposite-sex peers or the sex by total frequency interaction terms added significantly to the explained variance.

**Intimacy.** A simple regression on the overall sample indicates that reported total amount of intimacy on all opposite-sex peers was significantly related to self-esteem $F(1,1617) = 1.9$, $p = \text{NS}$. The effect was small ($r = .04$), however, and explained less than 1% of the variance. The result was supported in both of the split-half samples.

A significant effect was found for perceived total intimacy with opposite-sex peers when explored separately females $F(1,838) = 4.23$, $p = .04$ but not for males. The result was unstable in that no significant results appeared in either of the two split-half samples.
Table 14

Total for Set of Opposite-Sex Peers: The Effect of Perceived Total Frequency of Contact and Total Intimacy for Set of Opposite-Sex Peers on Self-Esteem by Sex and Grade

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th></th>
<th></th>
<th>Intimacy</th>
<th></th>
<th></th>
</tr>
</thead>
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<td>$F$</td>
<td>R</td>
<td>$R^2$</td>
<td>$F$</td>
</tr>
<tr>
<td>Overall</td>
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<td>0.00</td>
<td>0.79</td>
<td>0.03</td>
<td>0.00</td>
<td>1.9</td>
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<tr>
<td>Males</td>
<td>0.03</td>
<td>0.00</td>
<td>0.73</td>
<td>0.02</td>
<td>0.01</td>
<td>0.33</td>
</tr>
<tr>
<td>Females</td>
<td>0.04</td>
<td>0.00</td>
<td>0.92</td>
<td>0.07</td>
<td>0.01</td>
<td>4.23*</td>
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Test for Significance of...

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<th>Change in</th>
<th></th>
<th></th>
<th>Change in</th>
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<tbody>
<tr>
<td></td>
<td>$R^2$</td>
<td>$F$</td>
<td>$R^2$</td>
<td>$F$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade Interaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>0.0010</td>
<td>1.67</td>
<td>0.0015</td>
<td>2.39</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>0.0013</td>
<td>0.98</td>
<td>0.0005</td>
<td>0.40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Females</td>
<td>0.0020</td>
<td>1.65</td>
<td>0.0055</td>
<td>4.65*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex Interaction</td>
<td>0.0000</td>
<td>0.03</td>
<td>0.0002</td>
<td>0.24</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05
**p < .01
***p < .001
A multiple regression model was used in order to see if the effect of total intimacy with opposite-sex peers was differentially related to grade-level. The interaction term did not add significantly to the explained variance $F(1,1615) = 2.39, p = \text{NS}$ with a regression coefficient of .00337. The interaction term, however, explains less than 1% of the variance. When explored separately for males and females, significance of the interaction effect was indicated for females $F(1,838) = 4.65, p = .03$, but not for males. The result was unstable in that no significant results appeared in either of the two split half samples. Neither the grade by total intimacy with opposite-sex friends or the sex by total intimacy with opposite-sex friends interaction terms added significantly to the explained variance.

A similar multiple regression model was used to see if the effect of total intimacy with all same-sex peers on self-esteem was differentially related to the sex of the subject. The interaction term did not add significantly to the explained variance $F(1,1615) = .24, p = \text{NS}$.

**Comparison of Parent and Peer Contributions to Self-Esteem**

In order to compare the relative contributions of the various types of significant others and the different aspects of the relationships, a multiple stepwise regression procedure was used. All variables discussed thus far were available for entry. The analyses were run separately for males and females. The results of the stepwise analyses for males and females are reported in
Table 15. For females, perceived intimacy with Mother entered into
the equation first followed by the total perceived intimacy with
opposite-sex peers. No other variables were able to enter the
equation. For males, perceived frequency with most-frequently seen
same-sex friend enter the equation first. In the second step,
perceived intimacy with Mother entered. No other variables entered
the equation.

There are two main reasons for the small number of variables
entering during the stepwise procedure. Many, if not most, of the
relationships between the various variables and self-esteem are
small and often unstable (see Table 15). In addition, an
examination of the correlation matrix presented in Table 5 indicates
a moderate to high degree of multicollinearity. Such
multicollinearity means that once one variable enters (such as
intimacy with Mother), much of the important variance for other
variables has also been used up (e.g., intimacy with Father) and
hence it will not be able to add significantly to the variance
explained. Thus, the stepwise results do not provide an exact
comparison of the relative contributions of each type of
relationship or characteristic. An examination of the zero-order
correlations of each variable with self-esteem provides an
alternative method of making the comparison. The information needed
for this approach is presented in Table 16.

Several observations are important to note. For both males and
females perceived intimacy with Mother entered the equation on
either the first or second step. The correlation of perceived
Table 15
Multivariate Stepwise Regression Models for Self-Esteem

<table>
<thead>
<tr>
<th></th>
<th>Multiple</th>
<th>Change in</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R</td>
<td>$R^2$</td>
</tr>
</tbody>
</table>

**Males**

Variables Entering Equation (in order)
1. Perceived frequency with most-frequently seen friend .17 .0280
2. Perceived Intimacy with mother .21 .0160

Variables not Entering Equation

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency with Mom</td>
<td>.20</td>
<td>.16</td>
</tr>
<tr>
<td>Intimacy with Mom</td>
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</tr>
<tr>
<td>Frequency with Dad</td>
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<td>.15</td>
</tr>
<tr>
<td>Intimacy with Dad</td>
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<td>.68</td>
</tr>
<tr>
<td>Most-Intimate Same-Sex Friend</td>
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</tr>
<tr>
<td>Number of Same-Sex Peers</td>
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<td>.06</td>
</tr>
<tr>
<td>Total Frequency of Same-Sex Peers</td>
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<td>.17</td>
</tr>
<tr>
<td>Most Frequently Seen Opposite-Sex Friend</td>
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<td>.04</td>
</tr>
<tr>
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<td>.16</td>
<td>.02</td>
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<tr>
<td>Number of Opposite-Sex Peers</td>
<td>.04</td>
<td>.08</td>
</tr>
<tr>
<td>Total Frequency of Opposite-Sex Peers</td>
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<td>.03</td>
</tr>
<tr>
<td>Total Intimacy of Opposite Sex Peers</td>
<td>.10</td>
<td>.01</td>
</tr>
<tr>
<td>Grade</td>
<td>.10</td>
<td>.06</td>
</tr>
</tbody>
</table>

**Females**

Variables Entering Equation (in order)
1. Perceived intimacy with mother .21 .0434
2. Total intimacy with opposite-sex Peers .24 .0120

Variables Not Entering Equation

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency with Mom</td>
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<td>.03</td>
</tr>
<tr>
<td>Frequency with Dad</td>
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<td>.04</td>
</tr>
<tr>
<td>Intimacy with Dad</td>
<td>.64</td>
<td>.05</td>
</tr>
<tr>
<td>Most Frequently seen Same-Sex Friend</td>
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</tr>
<tr>
<td>Most Intimate Same-Sex Friend</td>
<td>.04</td>
<td>.24</td>
</tr>
<tr>
<td>Number of Same-Sex Peers</td>
<td>.03</td>
<td>.14</td>
</tr>
<tr>
<td>Total Frequency of Same-Sex Peers</td>
<td>.08</td>
<td>.21</td>
</tr>
<tr>
<td>Total Intimacy of Same-Sex Peers</td>
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<td>Most Frequently Seen Opposite-Sex Friend</td>
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<td>.57</td>
</tr>
<tr>
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<tr>
<td>Number of Opposite-Sex Peers</td>
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<td>.79</td>
</tr>
<tr>
<td>Total Frequency of Opposite-Sex Peers</td>
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<td>.76</td>
</tr>
<tr>
<td>Total Intimacy of Opposite Sex Peers</td>
<td>.10</td>
<td>.99</td>
</tr>
<tr>
<td>Grade</td>
<td>.02</td>
<td>.09</td>
</tr>
</tbody>
</table>
intimacy with Mom on self-esteem was .14 for males and .21 for females (see Table 16). Perceived intimacy with Father, although having almost equally strong correlations with a .15 for males and a .19 for females was not in the equation. Perceived intimacy with Father could not enter the equation due to its multicolinearity with perceived intimacy with Mother.

With regard to the impact of frequency and intimacy, it appears from the correlations that there was a stronger impact of intimacy variables for females (see Table 16). For males, however, both intimacy and frequency had high correlations. For example, for females the strongest correlations were perceived intimacy with Mother (.21), perceived intimacy with Father (.19), and perceived total intimacy with opposite-sex peers (.09). For males, the strongest correlations were perceived frequency with most-frequently seen same-sex friend (.17), perceived intimacy with father (.15), perceived intimacy with Mother (.14), and perceived total frequency with same-sex peers (.13).

In conclusion, overall few hypotheses were supported and when they were supported they were at the weakest level.
Table 16

Correlations Between Various Relationship Characteristics and Self-Esteem for Mother, Father, Same-Sex Peers and Opposite-Sex Peers

<table>
<thead>
<tr>
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<th>Female</th>
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</thead>
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<tr>
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<td></td>
</tr>
<tr>
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<tr>
<td>Frequency</td>
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<td>.05</td>
</tr>
<tr>
<td>Intimacy</td>
<td>.14</td>
<td>.21</td>
</tr>
<tr>
<td>Father</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency</td>
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<td>.03</td>
</tr>
<tr>
<td>Intimacy</td>
<td>.15</td>
<td>.19</td>
</tr>
<tr>
<td><strong>Same-Sex Peers</strong></td>
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<td></td>
</tr>
<tr>
<td>Most-Intimate Friend</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency</td>
<td>.17</td>
<td>.02</td>
</tr>
<tr>
<td>Intimacy</td>
<td>.14</td>
<td>.04</td>
</tr>
<tr>
<td>Number of Peers</td>
<td>.05</td>
<td>.01</td>
</tr>
<tr>
<td><strong>Total for Set of Peers</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency</td>
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<td>.01</td>
</tr>
<tr>
<td>Intimacy</td>
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<td>.05</td>
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<tr>
<td><strong>Opposite-Sex Peers</strong></td>
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<td>Most-Intimate Friend</td>
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<td></td>
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<tr>
<td>Frequency</td>
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</tr>
<tr>
<td>Intimacy</td>
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<td>.05</td>
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<tr>
<td>Number of Peers</td>
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<td>.03</td>
</tr>
<tr>
<td><strong>Total for Set of Peers</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency</td>
<td>.03</td>
<td>.04</td>
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<tr>
<td>Intimacy</td>
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</tr>
</tbody>
</table>
CHAPTER SEVEN

DISCUSSION

The present study investigated the association between self-esteem and perceived characteristics of relationships with parents and peers as a function of grade and sex. The discussion of the results is organized around each of the significant others explored in the study: Parents, Same-Sex Peers, and Opposite-Sex Peers. There will also be a section on the comparative influence of parents and peers on self-esteem. Within each section we will discuss what was learned by the findings and possible explanations for the concordance with or discrepancies between our findings and the literature. The chapter will conclude with a section on limitations and future research directions for exploring self-esteem and relationships with significant others.

Parents

The literature strongly suggests that the better the relationship with parents the higher a subject's self-esteem (Gecas, 1972; Jourard, 1979; Peterson & Atakan, 1984; Richardson, 1984). The present study generally supports this relationship although at a moderate level.
For parents, generally the results of this study indicate that only perceived level of intimacy with Mother and Father and not quantity or perceived frequency of contact with parents makes a difference for self-esteem. This relationship held for both sexes and for both parents although the effect was slightly stronger for perception of Mothers than for perception of Fathers. Females reported levels of intimacy with Mom similar to that for males while males reported significantly higher levels of intimacy with Dad than females. This is the only situation in all relationships examined in this study that males report higher intimacy than females.

No significant association was found between self-esteem and the frequency of contact with either parent. The appropriateness of the construct of frequency of contact is questionable as applied to parents. That is, frequency of contact, measured by the number of times seen in different contexts per month, appears to be a more useful construct when applied to peer variables. With parents, frequency of contact is not enough. Rather, it would be more appropriate to assess the duration of time spent with parents, and how the time was spent (e.g., leisure, or work-related). Csikszentmihalyi and Larson (1984) for example, note the importance of how time is spent with parents in relation to moods.

While the present study found a positive relation between perceived intimacy with parents and self-esteem, the results were weaker than those found in previous research. Studies by Gecas (1972), Jourard (1979), Peterson and Atakan (1984), and Richardson (1984) all report positive relationships in the .3 to .5 range using
some aspect of parent support and/or acceptance.

There are two possible explanations for the relative weakness of the findings in this study. One possible explanation is contextual variation. Gecas (1972) suggests in his research that in order to assess adolescent self-esteem one must pay attention to contextual variation. Gecas (1972) found that the relationship between parental support and adolescent's self-esteem only holds in adult contexts. When one uses a global measure such as the self-esteem measure used in this study, the relationship may be weakened. Therefore, potentially, the weakness is a function of using such a global measure. It should be noted, however, that the other studies indicated above also did not use contextually sensitive measures of self-esteem but still found the positive relationship.

An alternative explanation for the weak results compared to other studies in the literature is that the other studies showing higher correlations are using scales that have potential support dimensions built into their self-concept/self-esteem measure. For example, items from the Tennessee Self-Concept Scale used by Jourard (1979) include essentially family support measures such as: "I have a family that would always help me in any kind of trouble," and "I am not loved by my family." This would seem to indicate that at least part of the stronger correlations found in these studies are artificial due to overlapping scale items.

The dilemma of the researcher in using a global, more analyzed measure of self-concept (such as Rosenberg's scale) versus a more externally referenced measure (such as the Tennessee Self-Concept
scale) is important to address. That is, scales such as the Tennessee Self-Concept Scale (described above and Harter's Self-Competence Scale (1982b) use more external frames of reference such as classroom or social relations. A global scale such as Rosenberg's does not measure from any other perspective but self or subject himself.

There are problems inherent to both types of measures. That is, when one uses a global measure of self-esteem, it is difficult to know where the subject's self-evaluation came from (i.e., peers, parents, classroom). In contrast, the external measures create stronger correlations and perhaps more specific variance accounted for, however, the problems of inflated correlations exist. It is difficult to tell, due to this inflated correlation, what is accounting for the variance. In other words, it is hard to interpret or pull apart what is happening to "self" versus "self in the relationship".

As indicated earlier, a limitation in this study was perhaps in the exclusive use of a global self-esteem measure. Perhaps there is a middle ground between using such a global measure and addressing social relationships without developing overlapping scale items and inflated correlations. Harter (1983) supports and addresses this challenge. While Harter supports Rosenberg's notion of global self-esteem as the superordinate construct, she postulates a hierarchical or interactional model with several specific dimensions (competence, power or control, moral worth, and acceptance) beneath the global self-esteem construct (Harter, 1982a, 1982b). In her review, Harter
(1983) suggest that one can possess a global self-concept or self-worth and simultaneously make domain-specific evaluations. She concludes that "conceptually the study of the self has become very interactive in nature" (Harter, 1983, p. 367), but cautions that empirically the task will not be an easy one.

While there appeared to be a number of interaction effects with grade and/or sex, in general they were very small effects (accounting for less than 1% of the variance) whose significance is only detectable with a large sample. They are probably not substantively meaningful.

**Same-Sex Peers**

Most previous studies, of which there are only a few, indicate that the relationship between characteristics of relationships with peers and self-esteem ought to increase with grade (O'Donnell, 1975) and that it may be stronger for females (Crockett, 1984). For example, the literature indicates that interpersonal relationships are more important for females than for males (e.g., see Douvan & Adelson, 1966; Hill & Lynch, 1983; Maccoby & Jacklin, 1974; Sharabany et al., 1984).

Generally, findings from this study indicated that overall intimacy with same-sex peers is important for the self-esteem of both sexes and that there were generally very small grade interaction effects with an explained variance of less than 1% of the variance. O'Donnell's (1975) study provided weak support for a change with grade in the relationships between peers and self-
esteem. O'Donnell's results indicated a gradual shift to peers, but not until 11th grade. Future research is needed to provide developmental studies exploring this relationship.

The relationship between same-sex peers and self-esteem was not stronger for females as the literature had suggested it might be (Douvan & Adelson, 1966; Hill & Lynch, 1983; Maccoby & Jacklin, 1974; Sharabany et al., 1981). In fact, the findings indicate more overall prediction of the self-esteem of males using both intimacy and frequency. For males, frequency of contact was as influential or even more important in some cases than intimacy in explaining variance in self-esteem. Similar to the findings with parents, the association between various aspects of relationships with peers and self-esteem was weak, but significant.

There are several possible explanations for the discrepancy in the findings of the present study and those found in the literature cited above. With regard to the fact that findings indicate only a slight to moderate change in perceived intimacy with peers with grade (at best, only 3% explained variance), the present study may have used too old a sample or perhaps even too young a sample. The beginning of the development of the intimate "chumship" relationship as described by Sullivan (1953) occurs in preadolescence or at best at the onset of early adolescence. According to Sullivan, it is during this period when the intimacy of the chumship would most dramatically affect the child's self-esteem. The sample used in this study begins in 7th grade and therefore perhaps is too old to include this younger child. Conversely, according to O'Donnell
(1975), if a developmental shift in the relationship between self-esteem and feelings toward peers occurs, it does so slowly, showing only a slight beginning by the 11th grade. In this case, the sample used in this study is perhaps too young.

With regard to the finding that frequency of contact is important for the self-esteem of males, the literature does suggest that instrumental or shared activities with peers (which may be reflected in the frequency scale used in this study) are valued more by males than intimacy in interpersonal relationships (e.g., Hill & Lynch, 1983; Maccoby & Jacklin, 1974).

Although the literature has indicated the importance of looking at both the best friend dyadic relationship and the set of peer relationships as they effect self-esteem, the results of this study indicated that the aggregate measure (particularly mean intimacy) and the dyadic measure (the most-intimate friend) were highly correlated (.84). Therefore, interpretations based on the differences between these variables became almost meaningless. Future work may need to explore other characteristics of the set of peers including the density of group friendships and the change in intimacy as one moves from closest to least close peers.

One possible explanation for the relatively weak results comes from Rosenberg's (1979) notion of the "self-esteem maintenance function." The issue is the perceptual nature of the measures used in this study. The instrument used in this study, as indicated earlier, is a global self-perception of self-esteem. Furthermore, the open-ended listing method used to elicit names of peers enabled
subjects to list any friends they wished. If one considers Rosenberg's notion of the self-esteem maintenance function, then a subject would have the goal of maintaining his/her self-esteem and one might make a case for the subject operationalizing his list using this self-esteem maintenance function. In other words, the subject would tend to list only those people who are supportive of his/her self-esteem. If this were the case, he/she would make up a set of peers or describe a set of peers where it would be difficulty to detect differences that would be detrimental to the subject's self-esteem. This is strictly conjecture, but it is a possibility to which one must pay attention.

As indicated previously, in general significant interactions with grade and/or sex were very small. Thus, significance was only detectable with a large sample and are probably not substantively meaningful.

**Opposite-Sex Peers**

The literature has indicated that adolescents show a shift from same-sex to opposite-sex peer relationships (Blos, 1962; Dunphy, 1963; Steinberg & Hill, 1978). The study by O'Donnell (1975) was the only study found that addressed the relationship of opposite-sex peers and self-esteem. Female adolescents in O'Donnell's (1975) study showed a shift from same-sex to opposite-sex friends as the friends who were more closely related to and who have greater impact on self-esteem. Males showed no such shift.
In the current study, findings did indicate some evidence of a shift to opposite-sex peers in terms of quantity, frequency, and intimacy (see Tables 2, 3, & 4). Generally, no significance was found, however, for the overall sample on any of the hypotheses concerning relationships between opposite-sex peers and self-esteem.

A possible explanation for few significant findings with opposite-sex peers is that the sample used in this study (7th to 10th grade) is too young to expect a relationship between opposite-sex peers and self-esteem. That is, that a significant relationship to self-esteem would be indicated only with older adolescents.

In explaining the weak results with opposite-sex peers, we can also again turn to Rosenberg's notion of self-maintenance. Findings of the Simmons and Rosenberg (1975) study cited earlier indicated that among girls who feel themselves unpopular with boys, and who care more about boys' opinions suffer more in terms of their self-esteem. In the sample used in this study, because subjects were able to list any opposite-sex peers they selected, one could guess that they would select only those opposite-sex peers who would be supportive of their merits and therefore enhance their self-esteem. It would, therefore, be difficult to detect differences that would be detrimental to self-esteem.
Comparison of Parents' and Peers' Contribution to Self-Esteem

Discussion is qualified in interpreting the results of the stepwise procedure because of the multicollinearity of the variables. Frequency of contact and intimacy were significantly correlated (.3), but not highly correlated. However, perceived intimacy with Mom and perceived intimacy with Dad were highly correlated. The stepwise procedure was appropriate, but limited as to what variables "could" enter the equation. The multicollinearity must therefore be addressed and results generalized with caution.

Findings indicate that for females as predicted by the literature perceived intimacy with Mom entered the equation first. Perceived total intimacy with opposite-sex peers was the second variable to enter (see Table 15). Given the lack of opposite-sex results as indicated in the previous section, this finding appears inconsistent. However, an examination of the correlations between various relationship characteristics and self-esteem for opposite-sex peers (see Table 16) and the multicollinearity issue provide an explanation for this inconsistency. The important point is that in keeping with expectations of the literature, the most general results of the comparison analyses would indicate that for females intimacy with both parents and peers is most important for adolescent's self-esteem (O'Donnell, 1975; Jourard, 1979; Peterson & Atakan, 1984).

For males, findings indicate that perceived frequency of contact with the same-sex friend seen most frequently entered first,
followed in the second step by perceived intimacy with Mom. This would appear to indicate that for males, both intimacy and frequency were important, but for different types of people. This is also supported by the literature in that in addition to intimacy, the focus for males is often on the activities they engage in together (Hill & Lynch, 1983; Maccoby & Jacklin, 1974).

In conclusion, as predicted by Rosenberg (1979), the relationship with Mother is one of the most powerful relations in the adolescent's hierarchy of significant others. It is therefore logical that the perceived intimacy with Mom variable would enter the equation for both males and females. However, it is important to remember that due to the high correlation between Mom and Dad intimacy, only one of the two parental variables could enter the equation. Both intimacy and frequency with one parent is likely to be reflected in the other parent's scores also. It is also in keeping with the literature that an intimacy variable at the peer level would enter into the equation for females and that a frequency of contact variable at the peer level would enter for males (Douvan & Adelson, 1966; Maccoby & Jacklin, 1974).

It is difficult to provide an explanation for why the same-sex peer variable entered for males and the opposite-sex peer variable for females. There is some literature that indicates that males keep their same-sex friendships longer during adolescence than females (Horrocks & Buker 1951). Furthermore, the literature indicates that females demonstrate an earlier transition from same-sex to opposite-sex relationships (Fischer, 1981; Sharahany et al.,
Inherent in the limitations of any research are exciting directions for the future. New research builds on findings and limitations of past studies. One must use caution in substantive interpretation of the results of this study because the effects are small. Only a small portion of the variance in self-esteem has been explained by the perceived aspects of relationships with parents and peers. There is, however, a great deal left to explore in the area of self-esteem. This study is just a first step. What is needed is an exploration of other relationships and their effects. In this section I will review some limitations of this study as well as directions for future research.

The existing large dataset (2,800 subjects) is designed to be flexible. For example, one limitation in the present study was perhaps in the definition of "peer" as a young person who was in the same grade-level as the subject or one grade above or below. A redefinition of "peer" to same-grade would possibly create different
results. There is research to indicate that adolescents who choose younger or older peers may have different personality profiles as well as different patterns of socialization than adolescents who choose same-grade peers (e.g., Ladd, 1983). It would be interesting to explore the differences in these adolescents in terms of the significant others that make up their supportive relationships and examine how these relationships are associated with self-esteem.

Another limitation to this study was perhaps in the criteria used for listings. The present study structured the elicitation of names by asking for "important people in their lives" (see Methods, p. 100). The subject could therefore list anyone, anywhere to create his list of significant others. According to Rosenberg's self-esteem notion, the subject would tend to list only positive people who would enhance his self-esteem.

It would seem that there are other ways to elicit a list of significant others that might enable the subject to bypass Rosenberg's self-maintenance notion. For example, it would be possible to get the subject to elicit a list of people that negatively support them—such as asking for a person or persons that "give you a hard way to go". Perhaps, a second step would then be to measure other aspects of the relationship other than intimacy. The issue is to get at aspects of a given relationship that might not be pro self-esteem. For example, Wright and Keeple (1981) use a maintenance difficulty variable to measure the difficulty in maintaining a relationship. In the current dataset, there is nothing that measures whether aspects of the relationship are
promoting or not promoting to the adolescent's self-esteem.

Another limitation to this study is that there is not a measure of peer group structures per se. The study did not get at the effect of peer group structures on self-esteem in terms of such things as the density or interconnectedness of the peer group. The more standard sociometric measures might be useful here.

As stated earlier, the stepwise procedure created limitations in this study. An alternative approach might be to look at differences between groups and patterns of correlation in order to explore different typologies of adolescents in a comparative analysis. For example, typologies could be created by differentiating mean levels of intimacy with parents and creating four groups: 1) a group that has a high mean level of intimacy with Mom; 2) a group that has a high mean level of intimacy with Dad; 3) a group that has a high mean level of intimacy with both Mom and Dad, and finally 4) a group that has little intimacy with either Mom or Dad. Similar typologies could also be created for relationships with peers. An average self-esteem could then be derived for each type.

Furthermore, this type of research could be extended to explore the compensatory question. That is, do adolescents with poor parental relationships tend to be "pushed" (Smith, 1976) into and compensated with more intimate relations with peers. This pattern of compensation would perhaps be reflected in their higher self-esteem scores with peers than with parents. Development of groups or typologies would allow an exploration of the association between
self-esteem and adolescents with low intimacy with both parents, and adolescents with moderate to high intimacy with peers.

An elaborate system of intimacy typologies with peers could be developed by focusing on both the average and range of intimacy (highest intimacy minus lowest intimacy). For example, three groups could be created: "isolate group" (low mean intimacy—narrow range), "embedded in intimacy group" (high mean intimacy—narrow range) and "selective intimacy group" (intimacy with a few, but also a wide range). The "selective" group could be further subdivided into low (low intimacy and wide range) and high (high intimacy and wide range) thus, creating a group that is selective but with few or low intimacy scores and another group that is selective with many or high intimacy scores. Does the adolescent with a lot of close friends have higher self-esteem than the adolescent who has only a few close friends? Understanding these typologies as they relate to the adolescents' self-esteem is an exciting direction for the future.

A multitude of other approaches could be created and explored. For example, a trichotomized version of the self-esteem could be developed creating high, medium, and low self-esteem groups and examining aspects of their relationships with significant others. Furthermore, rejected and neglected children are currently being studied (Ladd, 1983) and would be interesting types of people to explore in terms of developing self-esteem.
There is a need to more extensively explore the significant findings of this study such as the importance of intimacy with Mom on self-esteem for both sexes and the importance of frequency with peers for males. For example, it may be that the positive quality of relationships in a "necessary relationship" such as the relationship with Mom as presented by Rosenberg (1979) has the greatest effect on self-esteem. We need to more fully understand the various subdimensions of intimacy such as disclosure and acceptance with Mom and how they interact with self-esteem. Furthermore, exploration needs to be done on the importance of frequency for males in predicting self-esteem. The findings of this study indicated that for the male, intimacy of the relationship is not the only aspect affecting self-esteem and that having frequent contact with peers is important. In some cases, frequency of contact with peers alone relates to the male adolescent's self-esteem. This distinction in the males' aspects of relation with peers and its impact on self-esteem is important. Future research is required in these areas.

Finally, because the sample is from a white, middle-class suburban school system and the present analyses uses only intact families, it is not possible to generalize the results to populations widely different from this. Furthermore, there are many parts of the adolescent's social world and relationship within it that we did not explore. For example, several studies support the importance of teachers as important significant others (Roff et al., 1972); Rosenberg, 1979) as well as grandparents and other extended family members (Minuchin, 1974). These relationships would be
interesting and important to explore as they affect self-esteem.

This is a correlational study and, therefore, the significant relationship effects cannot be interpreted in terms of causality. It is not possible to determine if higher self-esteem results from better relationships with significant others or if it helps to create them. Ultimately, both processes are probably involved.

While this study has contributed to understanding some perceived aspects of relationships with parents and peers as they relate to self-esteem, a major contribution may well be to have pointed out areas for further research which may be most productive in attaining the goal of understanding the social development and self-image development of the early adolescent.
Appendix A

Social Relations Questionnaire
INSTRUCTIONS

Please list below the important people in your life. These could be adults or young people from your FAMILY or your SCHOOL.

By important people, we mean:

- People you spend time with or do things with,
- People who like you a lot or who you like a lot or both,
- People who make important decisions about things in your life,
- People you go to for advice, or
- People you would like to be like.

THINGS TO REMEMBER

1. For each person you list put first name and middle initial (Jane D.) or last name (Mr. Smith).
2. Do not list everybody you know, just important people.
3. Most people’s lists will not fill up the space below.
4. If you know a person from more than one column, it does not matter in which column you list them.
5. Do not list a person more than once.

<table>
<thead>
<tr>
<th>FROM YOUR FAMILY</th>
<th>FROM SCHOOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>(AUNTS, BROTHERS, SISTERS, MOM, GRANDPARENTS, COUSINS, ETC.)</td>
<td></td>
</tr>
<tr>
<td>ADULTS</td>
<td>YOUNG PEOPLE</td>
</tr>
<tr>
<td>01 JANE D.</td>
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</tbody>
</table>
INSTRUCTIONS

Please list below the important people in your life. These could be adults or young people from your NEIGHBORHOOD or from ACTIVITIES OUTSIDE SCHOOL or ANY OTHER IMPORTANT PEOPLE.

By important people, we mean:
- People you spend time with or do things with,
- People who like you a lot or who you like a lot or both,
- People who make important decisions about things in your life,
- People you go to for advice, or
- People you would like to be like.

THINGS TO REMEMBER

1. For each person you list put first name and middle initial (Jane D.) or last name (Mr. Smith).
2. Do not list everybody you know, just important people.
3. Most people's lists will not fill up the space below.
4. If you know a person from more than one column, it does not matter in which column you list them.
5. DO NOT LIST A PERSON MORE THAN ONCE.

<table>
<thead>
<tr>
<th>FROM YOUR NEIGHBORHOOD</th>
<th>FROM ACTIVITIES OUTSIDE OF SCHOOL</th>
<th>ANY OTHER IMPORTANT PEOPLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADULTS</td>
<td>YOUNG PEOPLE</td>
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<td>60</td>
<td>70</td>
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</tbody>
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Appendix B
Self-Esteem Scale
PERSON QUESTIONS

C. Is this person a student?
1. NO (Skip to G.)
2. YES

D. Where does this person live?
1. IN MY HOUSE
2. IN OR NEAR MY NEIGHBORHOOD
3. OTHER PARTS OF OMAHA
4. OUTSIDE OF THE OMAHA AREA

E. About how old is this person?
1. LESS THAN 5
2. 5 TO 10
3. 11 TO 15
4. 16 TO 19
5. 20 TO 29
6. 30 TO 50
7. OLDER THAN 50

F. How is this person related to you?
00. NOT A RELATIVE
01. MOTHER OR FATHER
02. STEPMOTHER OR STEPFATHER
03. BROTHER OR SISTER
04. STEPBROTHER OR STEPSISTER
05. BRUTHER OR SISTER-IN-LAW
06. YOUR AUNT OR UNCLE
07. YOUR GRANDPARENT
08. YOUR COUSIN
09. OTHER FAMILY RELATIONSHIP

G. Is this person a student?
1. NO (Skip to F.)
2. YES

H. What grade is this person in?
00. PRESCHOOL
01. KINDERGARTEN OR 1ST
02. 2ND GRADE
03. 3RD GRADE
04. 4TH GRADE
05. 5TH GRADE
06. 6TH GRADE
07. 7TH GRADE
08. 8TH GRADE
09. 9TH GRADE
10. 10TH GRADE
11. 11TH GRADE
12. 12TH GRADE
13. COLLEGE
14. OTHER

I. What school does this person go to?
(IF YOU DON'T KNOW LEAVE BLANK)

J. AT EITHER YOUR HOME OR THEIR HOME?
1. ALWAYS
2. MOSTLY
3. SOMETIMES
4. NEVER

K. ON THE TELEPHONE?
1. ALWAYS
2. MOSTLY
3. SOMETIMES
4. NEVER

L. ON THE WAY TO OR FROM SCHOOL?
1. ALWAYS
2. MOSTLY
3. SOMETIMES
4. NEVER

M. DURING SCHOOL OR SCHOOL ACTIVITIES?
1. ALWAYS
2. MOSTLY
3. SOMETIMES
4. NEVER

N. AT UNPLANNED, IMPROMPTU ACTIVITIES? (THE Y. CHEER GROUNDS, DANCE LESSONS, ETC.)
1. ALWAYS
2. MOSTLY
3. SOMETIMES
4. NEVER

O. AT OTHER PLACES WHERE YOU SPEND TIME OR ENJOY (RESTAURANTS, SHOPS, STORES, ETC.)
1. ALWAYS
2. MOSTLY
3. SOMETIMES
4. NEVER

PLEASE CIRCLE THE NUMBER WHICH BEST ANSWERS EACH QUESTION BELOW.

H. HOW MUCH . . .
A LOT
SOME
SOMETIMES
NEVER

J. DO YOU GO TO THIS PERSON FOR ADVICE?
1. ALWAYS
2. MOSTLY
3. SOMETIMES
4. NEVER

K. DO YOU TALK TO THIS PERSON AS IF HE WERE AN ADULT?
1. ALWAYS
2. MOSTLY
3. SOMETIMES
4. NEVER

L. DOES THIS PERSON ACCEPT YOU NO MATTER WHAT YOU DO?
1. ALWAYS
2. MOSTLY
3. SOMETIMES
4. NEVER

M. DOES THIS PERSON UNDERSTAND WHAT YOU'RE REALLY LIKE?
1. ALWAYS
2. MOSTLY
3. SOMETIMES
4. NEVER

N. DO YOU SHARE YOUR INNER FEELINGS WITH THIS PERSON?
1. ALWAYS
2. MOSTLY
3. SOMETIMES
4. NEVER

O. IS THIS PERSON A REAL FRIEND?
YES
NO

PLEASE CHECK OFF THIS NAME ON THE BLUE SHEET AND GO ON TO THE NEXT PERSON YOU LISTED.
Self-Esteem Scale

Everybody has some things about him which are good and some things about him which are bad. Are more of the things about you...Good, *Bad about the same.

Another kid said, "I am no good. Do you feel like this? (IF YES, ASK): Do you feel like this a *lot, or a *little? "I am no good."

A kid told me: "There's a lot wrong with me." Do you ever feel like this? (IF YES, ASK): Do you feel like this a *lot, or a *little? "There's a lot wrong with me."

Another kid said: "I'm not much good at anything." Do you ever feel like this? (IF YES, ASK): Do you feel like this *a lot, or *a little? "I'm not much good at anything."

Another kid said, "I think I am no good at all." Do you ever feel like this? (IF YES, ASK): "Do you feel like this *a lot, or *a little. "I think I am no good at all."

How happy are you with the kind of person you are? Are you... Very happy with the kind of person you are, Pretty happy, *A little happy, or *Not at all happy.

The responses indicated by an asterisk indicate low self-esteem.

This is a Guttman scale with 90.2 percent coefficient of reproducibility, 20.4 percent improvement, 67.6 percent coefficient of scalability.

This scale has undergone extensive validation tests in Rosenberg and Simmons (1972, Ch. 2) for both whites and blacks. First of all, it has been validated against another measure of the same concept; that is it appears to have trait validity. It is satisfactorily correlated with adolescents' scores on the Rosenberg measure of self-esteem which had been validated in previous research (Rosenberg, 1965). It was not possible to use the Rosenberg for the younger children in the sample because of its adult language, therefore, this present
scale was constructed. Secondly, this scale seems to have construct
validity—ten theoretical predictions were made concerning self-esteem
and in all cases these predictions were confirmed using the scale.
Self-esteem was shown to correlate positively with measures of depression
and anxiety, with marks in school, with indicators of school leadership,
and with the opinions of several significant others including parents,
teachers, and friends, for all age groups. Third, the scale appears
to satisfy the interchangeability criterion: it "behaves" the same
way as the Rosenberg measure of self-esteem in relation to other variables.
Finally, it appears to have face validity as a measure of the individual's
global feelings about his own self-worth.


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