

THE INFLUENCE OF SIGNIFICANT OTHERS ON ADOLESCENTS'
ACADEMIC SELF-CONCEPT DEVELOPMENT

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To the Provost of the Graduate School:

I am submitting herewith a dissertation written by Betty Bradley Junkin Guest entitled "The Influence of Significant Others on Adolescents' Academic Self-Concept Development." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Home and Family Living.

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DEDICATION

My most precious memories and my deepest love will always be with the professors of TSCW and TWU who taught me the art of becoming myself. Now as an elderly analogical being living in a modern digital world, I feel much gratitude for Dr. Sharon Underwood for patiently sharing with me her expertise in computerized statistics. Overflowing is my affection for those on my doctoral committee--Dr. Katherine Allen, Dr. Merry Evenson, Dr. Ron Fannin, Dr. Glen Jennings, Dr. Carol Kershaw--whose belief in me assured that my reach did not exceed my grasp.

To all those named and unnamed professors of TSCW and TWU, I dedicate this dissertation.

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My original goal for enrolling at Texas Woman's University during the summer of 1981 was pragmatic in that the school district by which I am employed requires completion of three hours of course work every five years. Nostalgia reigned supreme as I returned to my educational roots so firmly set by Texas State College for Women, where in 1951 I earned a B.A. degree in English and a B.S. degree in Music. New excitement began as I participated in Life Span Human Development, taught by Dr. Glen Jennings, and Theory of Human Development, taught by Dr. Janet Malone.

With this enthusiasm came a new awareness of myself and a new goal, the completion of a Ph.D. degree in Home and Family Living. Throughout the six years that I have worked toward this goal, every course that I have taken has in some way enriched not only my professional life as a school counselor but also my personal life as the daughter of Lucy Junkin, the sister of Eben and Grace Junkin, the mother of Dinah and Ed Guest, the mother-in-law of Rhonda Listar, the grandmother of Jonathan and Jaron Listar-Guest, and citizen of the world.

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ABSTRACT

From the theoretical orientation of symbolic interaction, this study investigates adolescents' academic self-concept development as influenced by adolescents' perception of their academic ability by significant others. Data for the descriptive research were gathered by administering to the population of an upper-socioeconomic suburban high school a paper-and-pencil questionnaire, the Self-Concept of Academic Ability and Perceived Evaluations of Significant Others (Brookover, Patterson, & Thomas, 1962). From the 1287 responses obtained, 727 responses were selected by stratified random sampling to produce a sample representative of the population by grade level (9, 10, 11, 12), sex, and English class level of academic intensity (less intensive, regular, advanced).

At probability levels less than .001, Pearson correlations showed significance in all measured relationships: Self-Concept of Academic Ability for the total group (grades 9, 10, 11, 12) and for individual

grades 9, 10, 11, 12 as well as for their subgroups of males and females in relationship to Perceived Evaluations of Significant Others (the total group including parents, friends, and teachers as well as the subgroups of parents, friends, and teachers).

At probability levels less than .001, analysis of variance showed significant differences in all Perceived Evaluations of Significant Others (the total group including parents, friends, and teachers as well as the subgroups of parents, friends, and teachers), based on Self-Concept of Academic Ability. These findings indicate that self-concept of academic ability and perceived evaluations of significant others are different perceptions although the correlations between them are high.

Males were found to have a significantly higher difference than females in Perceived Evaluations of Significant Others as a total group ($p = .001$), as the subgroup of friends ($p = .001$), and as the subgroup of teachers ($p = .05$), based on Self-Concept of Academic Ability. No significant differences were found between males and females in perceived evaluation of parents. No significant differences were found based on grade levels 9, 10, 11, 12 in any of the perceived evaluations of significant others.

Findings of this research are generalized only to the population of the specified high school from which the research sample was selected and to the analysis of data gathered by the Self-Concept of Academic Ability and Perceived Evaluations of Significant Others questionnaire.

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CHAPTER I

INTRODUCTION

Within the learning process, one of the most significant nonbiological variables identified by theorists is self-concept (Allport, 1943; Combs & Snygg, 1959; Erikson, 1968; Havighurst, 1948; Rogers, 1969). Consequently, researchers have joined theorists in an attempt to analyze the interactions of academic achievement and self-concept. Out of this research has come the identification of academic self-concepts, the evaluation of one's academic abilities in relation to the ability of others (Brookover, Patterson, & Thomas, 1962).

Theoretical Framework

The present research concerned the influence of significant others on adolescents' academic self-concept development within the theoretical framework of symbolic interaction. Early theories relevant to the idea that self-concept is formed through interaction with others were initiated by Cooley (1902) and expanded by Dewey (1922). Academic self-concept as a functionally limiting factor in school achievement grew out of the perceptual approach to

individual behavior (Combs & Snygg, 1959) and the symbolic interaction framework of social psychology (Mead, 1934).

Much of the research related to academic self-concept has stemmed from a longitudinal research project led by Brookover (Brookover, Erickson, & Joiner, 1967); Brookover et al., 1962; Brookover, LePere, Hammachek, Thomas, & Erickson, 1965). Brookover et al. (1962) were among the first researchers to apply the symbolic interaction theories of self and role performance to learning in a school environment. Underlying their investigation were three major assumptions: (a) the functional limits of students' ability are in part set by students' self-concept of ability to achieve in academic tasks relative to others; (b) academic self-concept is acquired through students' interaction with others whose behavior is significant to them in their role of students; and (c) students' behavior is not influenced by the actual behavior of significant others but rather by students' perception of the expectations of them held by significant others.

According to symbolic interaction theory (Burr, Leigh, Day, & Constantine, 1979), the expectations of others must be internalized into self-perceptions to become functional in one's behavior. By taking the role of the other, students form a perception of their ability as learners. This academic self-concept, only one of many concepts of

self, is defined as symbolic language behavior whereby students articulate a program of scholastic efforts for themselves as students in relation to others (Brookover et al., 1962). If students perceive they are unable to learn, their academic self-concept becomes the functionally limiting factor of school achievement. Functional limit does not pertain to genetic or organic limits on learning, but rather to students' perceptions of what is appropriately possible and desirable for them to learn (Brookover et al., 1962).

Statement of the Problem

Reviews of the literature by Purkey (1970) and Wylie (1979) conclude that both research and theory uniformly support the assumption that the variables of self-concept and academic achievement continuously interact. The reviewers found considerable disagreement, however, as to whether academic achievement can be improved through self-enhancement.

This lack of agreement has been frequently the result of the research being dominated by two major issues: global versus multifaceted self-concept (Griffin, Chassin, & Young, 1981) and skill development versus self-enhancement (Calsyn & Kenny, 1977). Although few in number, empirical studies using the multifaceted

self-concept supported by symbolic interactionists have found stronger correlation with a specific behavior than has research using global self-concept (Shavelson & Bolus, 1982). Also from the symbolic interaction perspective, both skill development and self-enhancement are necessary. Brookover et al. (1967) concluded from their extensive research that students' academic self-concept limits the level of academic achievement attempted and is a "necessary but not a sufficient condition for the occurrence of a particular level of academic performance" (p. 140).

The present research accepts the symbolic interaction assumptions of the self-concept being multifaceted and the need for self-enhancement to be accompanied by skill development. With that acceptance, this research focused on the gap in empirical efforts to investigate the influence of significant others on adolescents' academic self-concept development (Leviton, 1975; Shavelson & Bolus, 1982; Zarb, 1981). Awareness of developmental differences affecting academic self-concept could suggest modification of self-enhancement techniques used by significant others to increase the level of academic achievement attempted by adolescents.

Purpose of the Study

Based on the theoretical orientation of symbolic interaction, the central purpose of this research was to investigate how adolescents' academic self-concept develops in its relationship to adolescents' perception of the evaluation of their academic ability by significant others. To accomplish that purpose, this research had three major objectives.

Objective One

The first major objective was to determine whether significant relationships exist between adolescents' academic self-concept and adolescents' perception of their academic ability by significant others for the total group (grades 9, 10, 11, 12). In these relationships the groups of significant others considered were the total group (parents, friends, teachers), the subgroup of parents, the subgroup of friends, and the subgroup of teachers. Significant relationships for the subgroups of males and females were also considered. To meet this objective, the following two hypotheses were tested.

Hypothesis one. There are no significant relationships between adolescents' academic self-concept and adolescents' perception of the evaluation of their academic ability by significant others as a total group

(parents, friends, teachers) in the total group (grades 9, 10, 11, 12) or in its subgroups of males and females.

Hypothesis two. There are no significant relationships between adolescents' academic self-concept and adolescents' perception of the evaluation of their academic ability by the subgroup of parents, the subgroup of friends, and the subgroup of teachers in the total group (grades 9, 10, 11, 12) or in its subgroups of males and females.

Objective Two

The second major objective was to determine whether significant relationships exist between adolescents' academic self-concept and adolescents' perception of the evaluation of their academic ability by significant others for individual grades 9, 10, 11, 12. In these relationships the groups of significant others considered were the total group (parents, friends, teachers), the subgroup of parents, the subgroup of friends, and the subgroup of teachers. Significant relationships for the subgroups of males and females were also considered. To meet this objective, the following two hypotheses were tested.

Hypothesis three. There are no significant relationships between adolescents' academic self-concept and adolescents' perception of the evaluation of their academic ability by significant others as a total group (parents, friends, teachers) in individual grades 9, 10, 11, 12 or in their subgroups of males and females.

Hypothesis four. There are no significant relationships between adolescents' academic self-concept and adolescents' perception of the evaluation of their academic ability by the subgroup of parents, the subgroup of friends, and the subgroup of teachers in individual grades 9, 10, 11, 12 or in their subgroups of males and females.

Objective Three

The third major objective was to determine whether significant differences exist in adolescents' perception of the evaluation of their academic ability by significant others based on adolescents' academic self-concept. Significant others were considered as a total group consisting of parents, friends, and teachers, the subgroup of parents, the subgroup of friends, and the subgroup of teachers. Significant differences were also considered based on sex and grade level (9, 10, 11, 12). To meet this objective, the following four hypotheses were tested.

Hypothesis five. There are no significant differences in adolescents' perception of the evaluation of their academic ability by significant others as a total group (parents, friends, and teachers) based on adolescents' academic self-concept, sex, or grade level (9, 10, 11, 12).

Hypothesis six. There are no significant differences in adolescents' perception of the evaluation of their academic ability by parents based on adolescents' academic self-concept, sex, or grade level (9, 10, 11, 12).

Hypothesis seven. There are no significant differences in adolescents' perception of the evaluation of their academic ability by friends based on adolescents' academic self-concept, sex, or grade level (9, 10, 11, 12).

Hypothesis eight. There are no significant differences in adolescents' perception of the evaluation of their academic ability by teachers based on adolescents' academic self-concept, sex, or grade level (9, 10, 11, 12).

Definition of Terms

Many of the terms used in this research have multiple meanings and have been used by other researchers in a variety of ways. The following definitions of terms are

provided to promote clarity and understanding of the present research.

Academic ability refers to students' native capacity to perform scholastic tasks as measured by standardized psychological testing (Brookover et al., 1967).

Academic achievement refers to the evaluation of students' scholastic efforts as measured by grades earned in courses of study taken in a school environment (Brookover et al., 1967).

Academic self-concept refers to students' self-evaluation of their ability to achieve in scholastic tasks as compared with others (Brookover et al., 1967).

Adolescence refers generally to the period from 13 through 18 years of age (Ellis & Davis, 1982).

Global self-concept refers to the single and total self-evaluation (Griffin, Chassin, & Young, 1981).

Multifaceted self-concept refers to the multiple self-evaluations within the self-concept, such as social self-concept, physical self-concept, and academic self-concept. Each self-evaluation is distinguished by the self-behavior being evaluated (Shavelson & Bolus, 1982).

Self refers to the psychological and physical totality of the individual (Ellis & Davis, 1982).

Self-concept refers to a component within the self that is the cognitive self-evaluation (Hammachek, 1985).

Self-esteem refers to a component within the self and is the affective self-evaluation (Hammachek, 1985).

Significant others refers to parents, friends, and teachers whose influence predominantly affects adolescents' academic self-concept (Peck, 1981).

Delimitations

This research is delimited in the following ways:

1. All subjects in this research were students in the only high school of a public, independent school district located in a suburb of a large metropolitan area.

2. All subjects were from middle- to upper-socioeconomic families.

3. Approximately 98% of the subjects were Caucasian.

4. Approximately 97% of the subjects will go immediately to college following high-school graduation.

5. Although all students enrolled in the high school were given an opportunity to complete the questionnaire, all questionnaires were completed anonymously and on a totally voluntary basis.

Summary

Academic self-concept has been found to be a modifying variable with respect to academic achievement. Success has been limited, however, in determining intervention methods to improve academic achievement through enhancement of

academic self-concept. Few empirical efforts have been made thus far to investigate developmental differences that might improve the efficacy of self-enhancement techniques. From the theoretical orientation of symbolic interaction, this research attempted to identify academic self-concept development as influenced by adolescents' perception of the evaluation of their academic ability held by significant others including parents, friends, and teachers.

CHAPTER II

REVIEW OF LITERATURE

This review of the literature is divided into three major parts. First, theories relevant to the research of academic self-concept development are examined. Second, an exploration is made of the research concerning the relationship between academic self-concept and academic achievement. Third, researchers' investigations of the influence of significant others on academic self-concept development are reviewed.

Theories Relevant to Academic Self-Concept Research

Much of the research investigating the interaction between academic achievement and academic self-concept has been founded on the theoretical orientation of symbolic interaction. Researchers, however, have also drawn from growth-directed theories of self-actualization and fully functioning self as well as from the stage-related theories of psychosocial development and cognitive development.

Terminology Related to Academic Self-Concept

Symbolic interaction and growth-directed theories have used a variety of approaches in explaining the concepts of self, self-concept, and self-esteem. Overlapping definitions of those terms have complicated the literature related to academic self-concept.

Definitions of self. Theorists have described the self in a myriad of ways, among them "the material, social, spiritual self" (James, 1890), the "looking-glass self" (Cooley, 1902), the "socially formed self" (Mead, 1934}, "the inner nature, essential nature" (Fromm, 1941). James' (1890) conception of the "self-as-doer" and "self-as-object" led to the well-known I-me dichotomy in which the total self is perceived as having two distinct parts. Hammachek (1985), defining the "I" as "agent of experience" and the "me" as the "content of experience"(p. 139), concludes that the cumulative studies of psychologists have evolved into a generally accepted belief. This belief is that the "I" is the knower through perceiving, performing, thinking, and remembering; the "me" becomes the known through attributes of the physical (how one looks), the social (how one relates), the emotional (how one feels), and the intellectual (how one thinks).

Unique and spontaneous, the "I" is unknown to the outside observer who knows only the social, predictable "me."

Definitions of self-concept. Given this description of the self, the self-concept is formed through a cluster of ideas and attitudes coming together when the "I," as knower, perceives the "me," as known. This "perceived self" (the way one sees oneself), according to Horney (1950), must be distinguished from the "real self" (as one is actually measured by objective tests or clinical assessments). Rosenberg (1979) alludes to a similar distinction by explaining that "the self-concept is not the 'real self' but, rather, the picture of the self" (p. 7). These views of the self that make up the self-concept should not be seen as isolated concepts, suggest Combs and Soper (1957), but as a "patterned interrelationship" (p. 136). This integration of the various self-perceptions into a composite self-concept is the result of a natural striving toward a coherent self-picture with which one strives to be consistent in one's actions (Epstein, 1973; Lecky, 1945). Such consistency and congruence of self-perception and behavior, in Roger's (1969) view, fulfill one's compelling need for stability, which gives feelings of security and freedom from tension.

Definitions of self-esteem. An equally compelling need is for self-worth, which comes from one's perception of the evaluations by significant others as well as from one's self-assessment of behavior (Shavelson & Bolus, 1982). This identification of self-worth comprises the self-esteem, the affective component of the self (how one feels about oneself), and interacts with the self-concept, the cognitive component of the self (how one thinks about oneself). A motivating factor in this interaction is suggested by Horney's (1950) concept of the "ideal self," defined as the way in which one would like to be perceived by others. Hilgard (1949) uses the term "inferred self" to describe the ego-boundaries that surround the interaction of self-concept and self-esteem. Although those ego-boundaries may become rigid and inflexible through the drive to live in accord with one's established self-theories (Epstein, 1973), they are resilient and flexible in one who is fully functioning (Rogers, 1969) or self-actualizing (Maslow, 1970).

Interaction in Self-Concept Development

Self-concept is created through the interaction of one's symbolic and physical worlds (Mead, 1934). The self as the instrument of this interaction determines the academic self-concept when the "I" as knower perceives the

"me" as known. Piaget's (1970) theory of intellectual development considered together with Erikson's (1968) theory of psychosocial development illustrates the process of learning in the full context of both cognitive and affective growth patterns. Although Erikson's focus is on the acquisition of ego identity and Piaget's focus is on the acquisition of learning operations, both theorists acknowledge the interdependence of psychosocial and cognitive development. The two theorists also attest to the influence of the self's interacting social, emotional, physical, and intellectual attributes as identified through the self's functions of perceiving, remembering, thinking, and performing. Additionally, both theorists agree that underlying the developmental process is a growth-directed striving for a harmonious balance between one's inner and outer worlds (Maslow, 1970; Rogers, 1969).

Significant Others in Academic Self-Concept Development

The symbolic interaction perspective. Societal influences on academic self-concept development are specifically addressed by two major assumptions in symbolic interaction theory. The first of these assumptions is that academic self-concept is acquired through students' interaction with others whose behavior is significant to

them. The second of these assumptions is that students' scholastic behavior is governed by students' perception of the academic expectations of them held by significant others. Mead's (1934) concept of the "generalized other" has been supported by a number of researchers. Among those supporters are Miyamoto and Dornbusch (1956), who found that the self-concept is more closely related to one's estimate of the general attitudes toward the self than to the perceptions of the evaluations of oneself by a specific person or group. Brookover et al. (1967) also found students' academic self-concept to have a higher correlation with students' perception of the evaluation of their academic ability by significant others as a total group consisting of parents, friends, and teachers than with students' perception of the evaluation of their academic ability by a single individual. Significant correlations, nevertheless, were found between students' academic self-concept and students' perception of the evaluation of their academic ability by the subgroup of parents, the subgroup of friends, and the subgroup of teachers.

The cognitive development perspective. Piaget's (1970) emphasis on social interaction as a major propellant to cognitive growth is frequently reflected in research

related to adolescents' intellectual development (Smart, 1978). Social interaction, according to Piaget, offers students opportunities for the observation of a wide variety of behaviors for direct instruction and for feedback concerning students' performance. Piaget views cognition and affect as inseparable and constantly intermingled in the learning process (Whitelaw, 1982). This interaction develops students' methods not only of perceiving but also of acting. Piaget names an organized set of actions and ways of perceiving a schema. The changes in schema come about through adaptation, a process of assimilation (taking in new information to add to present knowledge) and accommodation (changing ideas to fit additions to knowledge). To assist students in this adaptation process, significant others involved in students' learning should be aware of two major issues generated by Piaget's theory: the uniqueness of individual learning and the necessity for social interaction (Webb, 1980). Although students' individual efforts are necessary for cognitive growth, interaction with significant others provides encouragement and assistance.

The psychosocial development perspective. Peck's (1981) review of the literature found a strong influence from the Eriksonian concept of identity versus identity

diffusion in adolescents. If adolescents have not yet developed a stable identity, according to Peck's findings, the images of perceived behavior and role expectations by friends and parents are often conflicting. Such identity diffusion leads to lowered self-esteem and learning maladjustments. These academic difficulties can result in adolescents' perception of negative evaluation from teachers. If these negative evaluations of scholastic ability perceived from teachers are confirmed by friends and parents, a reinforcement cycle begins that continues to lower adolescents' academic self-concept. Giving further credence to adolescents' negative image is the labeling of adolescents by the school/teacher system and the parental value system. Peck concludes that adolescents' achievement-related problems may have less to do with their actual academic abilities than to do with their distorted academic self-concept.

Age in Academic Self-Concept Development

Significant development of academic self-concept begins during adolescence. Both Piaget (1970) and Erikson (1968) based their theories on the epigenetic principle that each of the parts comprising the human organism has a special time of ascendancy that must be followed until the organism is complete. However, both

theorists stress that the stages in their developmental theories are age-related rather than age-specific.

The influence of age in cognitive development. The ability to view oneself reflectively as well as to perceive the views of others, according to Piaget's (1970) theory of cognitive development, emerges when adolescents acquire the capacity to perform symbolic intellectual operations on objects not present. This capacity allows adolescents for the first time to conceptualize not only their own thoughts but others' thoughts as well. Elkind (1975) proposes that this new acquisition of formal operational thought leads to egocentrism in adolescents. From this self-focus comes adolescents' "imaginary audience" who they believe are constantly observing them and who, therefore, comprise the significant others in their lives. Elkind concludes that these conceptualizations by adolescents of how significant others view them are intertwined with adolescents' reflective view of themselves to form their self-concept. Using these new conceptual abilities, adolescents make frequent comparisons of themselves with others whose evaluations they deem important. Such comparisons lead to adolescents' primary feelings of success and failure in school (Goodlad, 1984).

The influence of age in psychosocial development.

Using a psychosocial approach, Erikson (1968) describes the development of personality as being dominated by "steps predetermined in the human organism's readiness to be driven toward, to be aware of, and to interact with a widening radius of significant individuals and institutions" (p. 83). These steps involve eight developmental stages on a birth-to-death continuum with adolescence occurring during the fifth stage that includes a conflict between identity and identity diffusion. Adolescence is described by Erikson in terms of the psychosocial changes that affect the reorganization of identity in relation to society with the desired resolution being a crystallized self-image. Erikson observes that the development of ego identity is relative to adolescents' examination of alternatives. Erikson further notes that technological advances have extended the time between early school life and entry into a specialized work environment. Adolescence has thus become, according to Erikson, a most critical stage of development in which adolescents are intently concerned with what they appear to be in the view of others as compared with how they see themselves.

Gender in Academic Self-Concept Development

Recent theoretical and empirical studies have been more acutely aware than has been earlier research in the interpretation of differences of development in males and females. More care has been taken in identifying theories and research based primarily on male samples. Operating from an eclectic theoretical orientation, Fiske (1980) believes gender differences in human development greatly exceed age or stage differences found within either sex alone.

Early theory development. In tracing adolescents' search for identity, Erikson (1968) describes the male identity as linked to the world at large with female identity as a relationship of intimacy with another person. This difference Erikson found to be the result of females' resolving the crisis of stage six, intimacy versus isolation, by choosing mates through whom they establish identities. Chodorow (1978) suggests that the mother's being the primary caretaker of children is a major factor in the differences in the interpersonal dynamics of gender identity formation. Thus, females, according to Chodorow, fuse their identities with their mothers thereby strengthening their need for attachment; whereas males seek a separate identity from that of their mothers thereby

increasing their need for individuation. Although Erikson did not identify this developmental difference in females as inferior to that of males, the expected order of the Eriksonian stages remains with identity resolution preceding that of intimacy resolution. Other prominent theorists whose observations were primarily of males (Freud, 1961; Kohlberg, 1969; Piaget, 1932), however, indicated that female moral development was impeded by their need for attachment rather than for individuation.

Current research and theory. In the current decade of the 1980s, women have taken more part in the research of general principles in human development of males and females. Like Gilligan (1984), these theorists and researchers are describing the voice with which women speak as being different but not inferior to that of men. Rossi (1980), using the terms "affiliation" and "agency," and Fiske (1980), using "interpersonal" and "mastery/competency," propose that the timing of men's and women's roles results in the timing in which men and women seek attachment and individuation. Erikson's (1968) model of life-span development's being closely tied to the need for an historical perspective allows for the changing cultural patterns in which fathers now share more parenting responsibilities with mothers and in which young women are

being encouraged as much as young men to seek careers before marriage.

The Historical Perspective in Academic

Self-Concept Development

Theorists are becoming more aware of the influence of changing social conditions in the application of theories to the growth of individuals as well as social groups. Key elements in this influence are noted by Hareven (1977):

Historical time is generally defined as a linear chronological movement of changes in a society over decades or centuries, while individual lifetime is measured according to age. But age and chronology both need social contexts to be meaningful. Social age is different from chronological age: in certain societies, a twelve-year-old is an adolescent; in others, he is already an adult; . . . (p. 59).

A basic proposition in symbolic interaction theory is that, given the boundaries set by physiological and neurological structures of the human organism, variations of behavior are directed by variations in socialization (Brookover et al., 1967). In the growth-directed theories, the inner self's interaction with the outer world may further expand or diminish the congruence of the fully functioning self or the needs of the self's actualization (Maslow, 1970; Rogers, 1969). The direction of the self's growth is specifically influenced by the self's own unique interaction with the self's own unique environment but may be generally influenced by the economics and culture of a

particular historical period. During the ongoing process of adaptation to new thoughts, according to Piaget's (1970) theory of cognitive development, the level of complexity with which the self is able to utilize learning operations depends on the particulars of the outer world with which the particulars of the self interact. The self's uniqueness, varying environments, and historical influences affect the time length of Erikson's (1968) psychosocial stages. Because a psychosocial crisis may be resolved in either a dystonic or syntonc manner, the opposing traits in a given psychosocial stage increase or decrease on a continuum throughout one's lifetime.

Academic Self-Concept in Relationship to Academic Achievement

In a review of the literature, Leviton (1975) observed that beginning in the middle 1950s much research had been done concerning the relationship between self-concept and academic achievement. Research using academic self-concept rather than global self-concept in this relationship was largely the result of the extensive work of Brookover et al. (1962, 1965, 1967), who developed the Self-Concept of Ability Scale. Using a longitudinal research method, Brookover et al. followed 1,050 7th-grade (1960) students of an urban school system through the 12th grade (1966).

From the theoretical orientation of symbolic interaction, Brookover et al. (1962) described the student role as being composed of several subroles, including one pertaining to academic achievement. Brookover et al. also described students' self-concept as multifaceted, one facet being the self-concept of academic ability. By means of a standardized group test, Brookover et al. measured the subjects' I.Q. With the variable of the subjects' measured I.Q. partialled out, Brookover et al. found a strong positive correlation between the student subrole of academic achievement and the student self-concept of academic ability. Findings by Brookover et al. (1967) indicated that, although experience of success does indeed improve academic self-concept, such experience is not a necessary prior condition for academic self-concept enhancement. Brookover et al. also concluded that students' academic self-concept limits the level of academic achievement attempted and is thereby a modifying variable in relationship to academic achievement.

Jones and Strowing (1968) found the results from the Brookover Self-Concept of Ability Scale to be as effective in predicting senior-year grade-point averages for 317 rural Wisconsin students as the results from the Henmon-Nelson Test of Mental Ability. Baken (1971) used the Brookover Self-Concept of Ability Scale in a 5-year

longitudinal study of 639 students originally in the 8th grade of schools in a medium-sized midwestern city. The focus of Bakan's research was on the relationship of achievement-variability, as indicated by school grades, to changes over time in academic achievement and self-concept of academic ability. Bakan's findings were that those students with high achievement variability over the 5-year period had a greater drop in grades as well as in self-concept of academic ability than did the students with low achievement variability. Zarb (1981) used a sample of "normal" 10th-grade students in a commercial school located in a working-class, urban neighborhood. The purpose of Zarb's research was to compare six non-academic predictors of successful academic achievement: study habits, self-concept relative to family, general achievement motivation, self-concept relative to peers, acceptance of education system, and academic self-concept. Zarb found that academic self-concept, as measured by the Brookover Self-Concept of Ability Scale, was the strongest predictor of academic achievement when the effects of the other five variables were partialled out in the data analysis.

Academic Self-Concept as a Causal Versus
Modifying Variable

The research of Calsyn and Kenny (1977) and Shavelson and Bolus (1981) reflects the debate between proponents of skill-development and self-enhancement educational models. Underlying the debate is the direction of the causal asymmetry observed in the relationship between academic self-concept and academic achievement.

Calsyn and Kenny (1977) used a cross-lagged panel correlation, a recently developed statistical technique unavailable to Brookover et al. in 1967, to reanalyze the data from Brookover et al.'s research. This reanalysis indicated that academic achievement was causally predominant over academic self-concept. These findings led Calsyn and Kenny to give support to the skill-development method of education.

Shavelson and Bolus (1981) also used the Brookover Self-Concept of Ability Scale but generated their own research data, which they analyzed by analysis of covariance. Their research sample consisted of 99 7th- and 8th-grade students from an intermediate school located in a predominantly white, upper middle-class, suburban community in a metropolitan area. From their findings, the researchers concluded that academic self-concept appeared to be causally predominant over academic achievement.

Consequently, Shavelson and Bolus give preference to the self-enhancement educational methods.

From the original findings of Brookover et al. (1967) and the symbolic interactionist perspective, such efforts to prove causal predominance are unwarranted. This belief is based on the assumption that academic self-concept and academic achievement are in a reciprocal relationship with skill development and self-enhancement needed simultaneously in the learning process.

Global Self-Concept Versus Academic Self-Concept

The research of Shavelson and Bolus (1981) was also designed to test a basic symbolic interaction assumption that self-concept is multifaceted. Global self-concept, academic self-concept, and specific subject-matter self-concept were investigated. The findings showed that (a) global self-concept can be interpreted as distinct from but correlated with academic self-concept and (b) specific subject-matter self-conception can be interpreted as distinct from but correlated with each other as well as with academic self-concept and global self-concept. The strongest correlation found by the researchers was between specific subject-matter grades and specific subject-matter self-concept.

A similar interest in the hierarchial, multifaceted nature of self-concept directed the research of Griffin, Chassin, and Young (1981). Their subjects were 100 11th- and 12th-grade students in a midwestern, parochial high school with a student population from families of predominantly upper-middle socioeconomic status. Findings of the research were that global self-ratings significantly differed from the role-specific ratings of student, athlete, son/daughter, and best friend. The researchers concluded that adolescents' conception of themselves is highly dependent upon the interactional context in which the self-perception is formed.

Ellis, Gehmann, and Katzenmeyer (1980) used the Self Observation Scales to identify the dimensions of self-concept in students 13 through 15 years of age. Their data analysis yielded eight dimensions of self-concept: self-acceptance, self-security, social confidence, school affiliation, teacher affiliation, peer affiliation, family affiliation, and self-assertion. The findings further showed that each of these eight dimensions was modified by periods of both stabilization and reorganization as students progressed from age 13 through age 15.

Gender Differences in Achievement
and Academic Self-Concept

In a review of the literature concerning the psychology of sex differences, Maccoby and Jacklin (1974) concluded that males hold higher academic expectations for themselves than do females. Considering the traits of masculinity and femininity, the reviewers also found the research to indicate that males rate themselves highest in personal power, strength, and dominance with females rating themselves highest in social competencies of warmth and cooperation. Conceding that agency has traditionally been considered a masculine trait and affiliation a feminine trait, Rossi (1980) explains that in agency the stress is for separation, an urge to master, and to repress feelings, whereas in affiliation, the stress is for union, cooperation, and openness. Katz's (1979) literature review concludes that sex development occurring in stages affects males and females differently as a result of the developmental task pertinent at each age. For males, Katz observes, sex-role expectations remain more constant than for females who experience a shift in norms from childhood to adolescence. Katz believes that this shift in expectations accounts for adolescent females experiencing more stress about their physical appearance, more concern about dating, and less concern about academic performance

than do adolescent males. Rossi (1980), however, suggests that rather than encouraging the gender-role stereotyping of the past, today's society requires that men and women function well in both polarities; therefore, the integration of agency and affiliation has become a significant developmental task for all individuals at all ages.

The results of the data collected by Brookover et al. (1967) showed males to have a higher correlation between academic self-concept and achievement than females in grades 7 through 11, with females having the higher correlation in grade 12. However, there was little change in the correlations for females during the 6-year period whereas males had a significant decrease in the correlation between grades 11 and 12. Reanalysis of the Brookover et al. (1967) data by Calsyn and Kenny (1977) showed that the patterns of causal predominance of grade-point average over academic self-concept were much stronger for females than for males. In Zarb's (1981) research, academic self-concept was a significant predictor of grade-point average for both males and females. For males, however, academic self-concept accounted for a greater percentage of the variance in grade-point average than for females. Although the grade-point average for females in Bakan's (1971) research was significantly higher than that of

males, females had significantly lower academic self-concept scores. In the research of Griffin et al. (1981), the results were that females made more significant distinctions than males between self as son/daughter and self as best friend. On the other hand, males made more significant distinctions than females between self as athlete and self as student. From these gender-related role distinctions, the researchers suggest that adolescent males and females may differ in their role perceptions because behavioral expectations for a given role may be different for males and females.

The Influence of Significant Others on Adolescents' Academic Self-Concept

Research by Brookover et al. (1967) hypothesized that academic self-concept is a necessary but not a sufficient condition for the occurrence of a particular level of academic performance. However, this research further hypothesized that adolescents' perception of the evaluations of their academic ability by significant others is both a necessary and sufficient condition for a change to occur in adolescents' academic self-concept. Therefore, academic self-concept is viewed by Brookover et al. as an intervening variable between the perceived evaluations of significant others and academic achievement. Findings by

Brookover et al., as well as significant literature reviews (Floyd & Smith, 1972; Payne & Farquhar, 1963; Peck, 1981), indicate that the groups of significant others that are the source of adolescents' developing academic self-concept are parents, friends/peers, and teachers.

Adolescents' Images of Academic Self-Concept

Perceived from Parents

Studying the traits of healthy families, Curran (1983) identified among those families four commonly held characteristics: effective communication and listening skills, affirmation and support for one another, respect for others, and sense of trust. Coopersmith (1967), investigating the parental role in the development of children's self-concept, found three major conditions leading to children's reliance on parental attitudes: parental warmth, respectful treatment, and clearly defined tasks. Similarly, Bandera (1972) presented findings to illustrate that where there were harmonious family relationships adolescents aligned with parental values and chose to associate with peers who also supported those values.

Good family communications reflecting respect for oneself as well as for others and parental support of the school are significantly facilitative in the development of

adolescents' positive self-images and high level achievement (Goodlad, 1984; Matteson, 1974; Smith, 1977). In a comparison of remedial students with nonremedial students in grades 9 and 10, Zarb (1984) discovered the unsuccessful students to be low in family self-concept. Adolescents with the lowest academic self-concept, as revealed by Peck's (1981) literature review, were those whose parental response to their school activities was indifferent. Erickson's (1965) research, involving 962 10th-grade students of an urban school system, indicated that parents who value education and who have clearly defined academic expectations for their children play a major role in enhancing children's scholastic achievement.

The dominant factor within parental influence on school achievement, according to Smith's (1982) research, is students' interpretation of parental views. Smith's data were gathered from 6th-, 8th-, and 10th-grade students and their parents in 206 white, intact, predominantly middle-class families. Analysis of the data showed a high degree of inaccuracy in offspring perception of parental communication. Accuracy of parental transmission of educational goals increased when parents used strong, overt encouragement. Further evidence of the strong impact of parental encouragement on offspring achievement was revealed by a University of Chicago research team in their

study of 120 world-class artists, athletes, and scholars, few of whom had indicated uncommon talents at an early age (Herchinger, 1985).

Investigating parents' potential to motivate academic achievement in adolescents, Strom (1985) used a structured interview technique with parents of students in grades 8 through 12. The findings of Strom's research were that most parents demonstrated both the desire and capacity to motivate their children toward scholastic success. Of those parents, however, most had been unsuccessful in utilizing their potential in assisting their adolescents toward greater academic achievement. Parents of adolescents interviewed by Holcomb and Stith (1985) felt they had been effective in parenting skills up to the time their offspring reached adolescence. Those parents most often sought help from teachers, family physicians, church personnel, or psychologists to reestablish health family relations. Because learning parenting techniques in the midst of a crisis is impossible and foresight often lessens anxiety, parents need guidance in understanding adolescent development and an awareness of adolescent needs before those needs become problems (Strom, 1985).

Adolescents' Images of Academic Self-Concept

Perceived from Friends/Peers

With little "anticipatory socialization" for parenting and with the role of parenting inadequately defined (LeMasters & DeFrain, 1983), parents of adolescents striving for independence are often negative or ambiguous in their parenting responses to their adolescents. Through a sense of pseudo-speciation (Erikson, 1968), adolescents seek to define their differences from their family. By means of peer-group identity, adolescents maintain their socialization through a "we" feeling different from that of the family (Smart, 1978). If parents perceive this adolescent need as threatening to the family or they disapprove of the peer group with which the adolescent chooses to identify, role antagonism develops (parents versus peers) resulting in adolescents' negative self-evaluations (Peck, 1981). These negative self images result in adolescents' having ineffective relationships with peers as well as with parents.

Although in healthy developmental patterns adolescents receive the strongest directions from parents, the increased socialization with peers beginning in elementary school leads to increased influence by peers (Brendt, 1979). A developmental movement away from overall family orientation with a corresponding increase in peer

orientation begins during the middle years of elementary school and peaks during the early years of high school (Bowerman & Kinch, 1959; Costanzo, Cole, Dorval, & Young, 1977; Iscoe, Williams, & Harvey, 1963). The shift toward peer conformity appears to be in the areas of prevailing social-status norms and friendships, whereas parent conformity continues to take precedence over peer conformity in the areas of achievement and aspirations for the future (Utech & Hoving, 1969; Young and Ferguson, 1979).

In 1976, Sebald and White (1980) duplicated their 1960 research concerning the influence of parents and peers on adolescents. For each of the projects, the researchers selected 100 high-school students from suburban areas located outside major metropolitan areas. Similar to the 1960 cohort, the 1976 cohort continued to rely on parents in matters of money, college selection, and career plans while conforming to peers in areas of hobby selection, dating, and club affiliations. Over the 16 years separating the two cohorts, however, the researchers found a shift toward more peer orientation and a trend toward individualism. Such a trend is healthy given that the achievement of behavioral autonomy and psychological independence from the family is considered a significant

developmental task of adolescents (Conger, 1977; Douvan & Adelson, 1966; Tosi, 1974; Young & Ferguson, 1979).

Over the past 20 years, research has indicated that as students progress from elementary to secondary school, they feel less good about themselves academically (Goodlad, 1984; Morse, 1963). Feeling less able to be successful in what the school deems important, adolescents place less emphasis on scholastic endeavors while giving increasing attention to athletic skills, appearance, and peer relationships (Goodlad, 1984). When nonacademic achievements have a higher status among adolescents than academic achievements, academic achievements diminish as adolescents seek peer-group affiliation. Even in school districts where the majority of students are strongly motivated toward academic success, the pressure to succeed as a student will have negative effects on students who perceive themselves as less able to learn than their peers (Skipper, 1974). However, when consistent and effective family interactions are supportive of adolescents' academic accomplishments at all levels, parental influence will supersede peer influence on adolescents' efforts toward their educational goals (Bandera, 1972; Larson, 1972; Skipper, 1974; Strom, 1985; Troll & Bengtson, 1979).

Adolescents' Images of Academic Self-Concept
Perceived from Teachers

In 1965, Hess & Shipman proposed that parents who began early in their children's lives to set expectations for school achievement and who consistently reinforced those expectations would offset any negative circumstances their offspring might encounter in school. The widely read Coleman report of 1966 confirmed and spread the belief of Hess and Shipman. Two decades of changing cultural patterns and equal access to education for all children have altered the premises of Hess and Coleman. Goodlad (1984) identifies the historical developments that have brought about changes within the school environments: loss of family and church stability; deterioration of relationship between home and school; disappearance of neighborhood cohesiveness; disintegration of political coalitions that supported schools; division among educators in teaching methods and learning goals; addition of television to the home, church, and school as primary learning resources; incorporation of a widely diverse student population within single schools.

The change in student population has perhaps had the greatest effect on the development of students' academic self-concept. Educators' effort to meet the varying needs of their more diverse student bodies through tracking not

only has failed to produce gains in academic achievement but also has created misperceptions in students' views of their ability to learn. As early as 1971, students in lower tracks were found to be lower in self-esteem leading to behavior problems, truancy, and dropouts (Schafer & Olexa, 1971). In 1978, research by Alexander, Cook, and McDill revealed that track levels had a greater effect upon students' future educational goals than aptitudes or grades. Goodlad's 1984 research confirmed the earlier evidence that tracking was nonproductive in enhancing students' learning environment. Despite the failure of tracking to improve students' academic success and despite research projects indicating the need for students to be evaluated in terms of individual growth rather than group patterns (Skipper, 1974), tracking continues in many schools across the country today (Goodlad, 1984).

Related to the concept of tracking is the much reviewed experiment of Rosenthal and Jacobson (1968) in which students showing potential of expected significant intellectual growth did indeed by the end of the year secure much higher gains in measured I.Q. and achievement than did the control group whose potential was equal that of the experimental group but who had not been so identified to teachers. One review of this experiment claimed that data were insufficient to back up claims of

I.Q. increases being the result of teacher expectancies (Thorndike, 1968). Another review of the same research indicated that the data did demonstrate the possibility of teacher expectations becoming self-fulfilling prophecies of student achievement (Naylor, 1972). In a review of research concerning teacher influence on student performance, Palfrey (1973) found a common theme of differing levels of academic self-concept in relation to the differing levels of expectations set for students by their teachers. Palfrey concludes that teachers by predetermining children's expected achievement also predetermine children's developing images of themselves as students as well as their self-perceptions of personal worth. Students whose self-images perceived from teachers include a sense of academic adequacy and accomplishment will utilize their abilities to the fullest capacity (Leviton, 1975; Purkey, 1970; Wilkerson, Protinsky, Maxwell, & Lentner, 1982).

Age-Related Factors Influencing Adolescent

Interaction with Significant Others

Emphasizing that their model of adolescent self-concept development was age-related rather than age-specific, Ellis and Davis (1982) declare that an awareness of adolescents' exact chronological age is not so

important as an awareness of the unique changes occurring in adolescents. Anderson (1983) notes throughout her description of the high-school years that adolescents are not all "typical" of a behavior pattern, that past experiences and current environment cause many variations on grade-level themes of behavior. According to Ellis and Davis as well as to Anderson, however, some general characteristics are frequently predominant among adolescents at specific high-school grade levels. Although high-school freshmen (9th grade) continue their vigorous expansiveness from the previous year, they appear to be relatively stable and contented with a zest for excitement and experimentation. In the sophomore year, adolescents begin to achieve independence, to calm down, to look inward, often becoming dissatisfied with what they perceive in themselves and in others. The junior year is one of reorganization and integration of conflicting perceptions and projections of the future, and the formulation of new decisions about oneself. Seniors, reflecting their place as "number one" in the high-school hierarchy of grade levels, seem sure of themselves, less intimidated, less dependent on reference groups but more eager to please others.

Noting the frequent research documentation of the close relationship between self-concept and the social

interaction with significant others, Street (1981) investigated eight aspects of social self-concept development. The subjects of this research were 493 students in grades 9 through 12 who were selected from a population of 3300 students attending an urban high school. Findings of this research showed none of the eight social self-concept aspects to be highest during grade 9. Students in grade 10 were highest in the number of facets of self perceived and highest in perceiving their environment from their own point of view rather than from others' point of view. Students in grade 11 had the largest range of identification with others, the closest relationship with significant others, and the highest perception of self as consistently either inferior or superior to others. Students in grade 12 had the highest perception of similarity with others, the highest sense of inclusion within a field of significant others, and the highest self-esteem.

Young and Ferguson (1979) interviewed 96 subjects in grades 5, 7, 9, and 12 at schools located in a semirural middle-class community to determine whether dependence on reference groups was affected by increasing age. The results of this research showed that on a continuing basis adolescents chose parents as the predominant reference group for moral values, peers for social decisions, and

school personnel for general information. There were trends due to age, however. Considering all three areas (moral, social, informational) as a group, parent reference declined between ninth and twelfth grades with reference to peers and school personnel increasing in almost similar proportions. Considering each area separately to determine the extent of changes from ninth to twelfth grades, reliance on school personnel for general information rose substantially, reliance on parents for moral values showed no significant change, and reference to peers for social decisions declined.

Summary

In attempting to isolate and explain nonacademic factors affecting academic achievement, theorists and researchers have affirmed that self-concept has great significance. The manner in which academic self-concept is developed in adolescents and its interaction with other nonacademic variables affecting achievement is a relatively new endeavor with results still inconclusive. Developmental patterns emerging from age and sex have been extensively documented, but the results of current research are showing modifications reflecting a changing culture. More consistent is the impact of significant others on the academic self-concept. Among relationships with

significant others including parents, friends, and teachers, adolescents maintain a common set of role expectancies centering upon being defined as a "student." Adolescents' perception of the evaluation of their academic ability by significant others results in adolescents' academic self-concept that serves as an intervening variable between expectations of others and academic achievement.

CHAPTER III

RESEARCH METHODOLOGY

The following sections describe the purpose, population environment, sample selection, instrumentation, data collection, pilot study, and data analysis for the present research. Specific details of the methodology are presented so that the research may be replicated.

Purpose

The central purpose of the research was to investigate the influence of significant others on adolescents' academic self-concept development. To achieve that purpose, the research was directed toward examining significant relationships as well as significant differences between adolescents' academic self-concept and adolescents' perception of their academic ability by significant others. Significant others were considered as a total group consisting of parents, friends, and teachers as well as the subgroup of parents, the subgroup of friends, and the subgroup of teachers. The variables of sex and grade level (9, 10, 11, 12) were also included in the examination of significant relationships as well as significant differences.

Population Environment

The sample studied was drawn from a single high-school population for two interrelated reasons. The first reason was the researcher's acceptance of Goodlad's (1984) premise that averaging data across schools obscures individual differences within schools as well as among students. The second reason was in anticipation that the research findings could suggest improvement of self-enhancement techniques for the specified high-school population through the incorporation of that population's observed developmental differences affecting academic self-concept.

Because this research was generalized only to the population of the specified high school where the sample was selected, environmental factors influencing that population have significant implications for the research findings. The following descriptors, as well as Appendix A, define the specified high-school's surrounding and immediate communities.

Surrounding Community

The school system containing the population studied serves two adjacent incorporated cities located in a suburb of a metropolitan area. A major private university is part of this community of 35,000 residents. Approximately 74% of the families with school-age children are intact; 20%

are single-parent families; and 6% are blended families. Approximately 99% of the fathers and 47% of the mothers of school-age children are employed in salaried positions. Over 90% of the fathers belong to the Dad's Club, and over 90% of both parents are members of the PTA.

The School System

The specified high school, at the time of the research, had a population of 1433 in grades 9 through 12 and is the only high school of the suburb's independent school district of approximately 4100 students. Additionally the school system contains a middle school (grades 6 through 8) and four elementary schools (grades K through 5). Per-student expense is approximately \$4,085, largely funded by local tax revenues.

High-school students. The majority of the high-school students began their education in the school system's kindergarten or first grade. Students new to the school district comprise fewer than 10% of the high-school population during any given year. Student drop-out rate is less than 1%.

High-school curriculum. The school district does not have a tracking system whereby students are selected by ability level to follow a certain curriculum. At the high

school, however, the major areas of study (English, mathematics, natural sciences, and social sciences) have three levels of academic intensity available to students. Those three levels are as follows: less intensive, designed for one or more years below grade level; regular, designed for grade level; and honors/advanced placement, designed for one or more years above grade level. Consideration for placement into these classes specified for below- or above-grade-level performance is the result of student, parent, or teacher recommendation. These recommendations are reviewed by a committee of school personnel, with the committee chairman being the head of the department for the subject area in which special placement has been requested. The committee's decisions for placement are based on evaluation of students' ability, identified by standardized test scores; performance, identified by grades earned; class participation, identified by attendance records; and subjective criteria, such as consistency of students' efforts, identified by teacher reports. With the exception of special-education students, all students are required to be enrolled in one of the three levels of English classes during each of their four years in high school.

Sample Selection

Rationale for Sample Selection

The questionnaire was administered to the entire high-school population, partially for logistical reasons but primarily for the avoidance of the "Hawthorne Effect" that might have occurred in the administration to a selected sample. The only means to avoid a selected sample was to ensure that the total population of the specified high school would have an opportunity to respond to the questionnaire. This condition was met by administering the questionnaire in English classes for which each student must be enrolled. However, the administration of a questionnaire to students throughout a seven-hour school day could threaten internal validity as a result of unforeseen events and changes in students' energy or emotional level that might occur during the day's progression. To guard against such possible internal validity threats, the researcher chose to study a randomly selected sample from the responses made by the high-school population.

Method of Sample Selection

The sample studied was systematically selected from the high-school population responses by stratified random sampling of grade level, sex, and English-class level of

academic intensity. Each grade level (9, 10, 11, 12) was composed of from 296 to 401 students, not including the 51 students enrolled in the special-education component of the high school. A table for determining sample size for a given population (Krijcie & Morgan, 1970) provided the sample size for each grade level based on each grade-level's population. The composition of each grade-level's population included student enrollment of from 5% to 10% in less-intensive English (correlated language arts), from 71% to 78% in regular English, and from 12% to 22% in honors/advanced placement English. Following the recommendations for stratified sampling (Fitz-Gibbon & Morris, 1979), the researcher selected the total sample responses to represent the three English class levels of academic intensity in the exact proportions by males and females to which they contributed to the population of each grade level. The size of the total sample was 727 (380 males, 347 females). Appendix B provides in tabular form the exact population and sample size for the total school population as well as for each grade-level and English-class level of academic intensity.

Instrumentation

The instruments used in this research are the Self-Concept of Academic Ability (SCA) Scale and the

Perceived Evaluations of Significant Others (PESO) Scale (Brookover et al., 1962). These instruments are reproduced with the SCA immediately followed by the PESO in the single questionnaire format appearing in Appendix C.

Construction of SCA and PESO Scales

Brookover et al. (1962) began the longitudinal study of adolescents' self-concept of academic ability in relation to school achievement by developing the SCA and PESO scales in the form of a questionnaire. Because no other measures of self-concept of academic ability existed, Brookover's research staff and a panel of consultants established construct validity for the SCA, out of which the PESO was formed. Members of this group considered the construct of perceived academic ability and consistent with that construct developed questions that asked students to compare themselves with others in their social system on the dimension of academic ability. Those questions were administered in a preliminary pretest with the results submitted to item analysis. That analysis was made with a correlation matrix to determine which questions actually differentiated students on achievement. Based on that examination, 16 questions were selected for a formal pretest, the results of which were subjected to Guttman scalogram analysis. Questions yielding less than .50 point

biserial correlation with the total score were eliminated. Using item content analysis, the researchers also removed questions that duplicated areas within the designated construct. A Guttman scalogram analysis of the remaining eight items yielded a reproducibility coefficient of .91.

Those eight questions with established validity and reliability make up the SCA scale. Five of the eight questions are repeated in parallel form in each of the three subscales that comprise the PESO: Perceived Evaluations of Parents (PEP); Perceived Evaluations of Friends (PEF); Perceived Evaluations of Teachers (PET). For each question in the SCA and PESO questionnaire there are five multiple-choice responses allowing students to compare themselves with others in their social system in terms of academic ability. The following illustration provides the eight questions appearing on the SCA. Under the PEP, PEF, and PET columns, an "X" identifies those SCA questions that are restated in the PESO to obtain the respondents' perception of the evaluations they would receive by parents, friends, and teachers.

SCA Questions	PESO		
	PEP	PEF	PET
1. How do you rate yourself in school ability compared with your friends?			
2. How do you rate yourself in school ability compared with those in your class at high school?	X	X	X
3. Considering the grades you make, where do you think you rank in your class at high school?	X	X	X
4. Do you think you have the ability to complete college?	X	X	X
5. Where do you think you would rank in your class in college?			
6. In order to become a doctor, lawyer, or university professor, work beyond four years of college is necessary. How likely do you think it is that you could complete such work?	X	X	X
7. Forget for a moment how others grade your work. In your opinion, how good do you think your work is?			
8. What kind of grades do you think you are capable of getting?	X	X	X

Reliability of SCA and PESO Scales

Brookover et al. (1962) established reliability coefficients of the SCA scale and each subscale of the PESO: SCA, .852 to .865; PEP, .782 to .849; PEF, .755 to .880; PET, .912 to .927. The researchers state that these reliability coefficients are higher than those typically found for attitude tests and emphasized that the instruments were designed for the study of groups rather than for comparing individuals. Pearson Product Moment correlations on test-retest data over a one-year period yielded high stability coefficients for the SCA scale (.688 to .727), with somewhat lower stability coefficients for the PESO subscales: PEP, .640 to .762; PEF, .518 to .635; PET, .441 to .601.

Data Collection

The researcher secured permission from the school district's superintendent and the high-school principal to administer the SCA and PESO questionnaire to all students in grades 9 through 12 in the specified high school. Documentation of this approval is provided in Appendix D.

Preparation of Questionnaire

The questionnaire, reproduced in Appendix C, is printed on four sheets of white 8 X 11 paper that are stapled together. Printed at the beginning of the

questionnaire are general but complete instructions requiring the respondent's anonymity and requesting identification of the respondent's grade level, sex, and English-class level of academic intensity. Instructions for responding to the questions precede each section of the questionnaire: SCA, eight questions; PEP, five questions; PEF, five questions; PET, five questions. A Scan-Tron response sheet, Form 882, accompanied the questionnaire. Student identification data were coded to represent the respondent's grade level, sex, and English-class level of academic intensity. Question-response data were coded for scores from 1 to 5 with the higher self-concept and perceived evaluation alternatives receiving the lower values.

Administration of Questionnaire

The researcher, in consultation with the English-department chairman, chose November 21, 1986, for the questionnaire administration. Teachers were requested not to discuss the questionnaire administration with their students in advance of the questionnaire administration. Prior to the day of the questionnaire administration, printed procedures for administering the questionnaire were provided to the English teachers to assure standardized administration. This printed procedural format was again

given to all English teachers along with their supply of questionnaires and Scan-Tron response sheets on the day of the questionnaire administration. Appendix E provides a copy of these printed procedures.

Student responses were obtained from 93% of the total population of the high school. Approximately 99% of the variance between responses obtained and total population is due to students' nonattendance at the time the survey was administered. Appendix F provides in tabular form the number of responses obtained in relation to total population of each grade level as well as to total population of each English-class level of academic intensity within each grade level.

Pilot Study

Four weeks prior to the scheduled date for the questionnaire administration, the researcher did a pilot study with the primary purpose of identifying any unanticipated problems in the administration of the questionnaire or in the retrieval of data. The site of the pilot study was a private school located in the same metropolitan area as the high school designated for the actual research. Subjects used in the pilot study were 30 students, males and females, representing grades 9 through 12. Several modifications in administration procedures

were made as a result of the pilot study. No modifications were found to be necessary in the data retrieval methods.

Data Analysis

The research data were first analyzed using Pearson correlation to determine whether significant relationships exist between students' scores on the Self-Concept of Academic Ability (SCA) scale and students' scores on the Perceived Evaluation of Significant Others (PESO) scale as well as on its subscales of Perceived Evaluation by Parents (PEP), Perceived Evaluation by Friends (PEF), and Perceived Evaluation by Teachers (PET). These relationships were analyzed further by grouping on the basis of sex and grade level (9, 10, 11, 12). Significance at .001 determined the rejection of hypotheses.

The research data were next analyzed using analysis of variance to determine whether significant differences exist in students' scores on the Perceived Evaluation of Significant Others (PESO) scale as well as in its subscales of Perceived Evaluation by Parents (PEP), Perceived Evaluation by Friends (PEF), and Perceived Evaluation by Teachers (PET) based on students' scores on the Self-Concept of Academic Ability (SCA) scale. Differences in the PESO, PEP, PEF, and PET were further analyzed based

on sex and grade level (9, 10, 11, 12). Significance at .05 determined the rejection of hypotheses.

Summary

The research methodology was designed to accommodate the primary purpose of this research: to identify within a specified high-school community the relationship between adolescents' academic self-concept and adolescents' perception of the evaluation of their academic ability by significant others including parents, friends, and teachers. Presentation of the methodology was directed toward providing a detailed model of research that could be replicated by researchers having a similar interest in other specified high-school populations. The researcher, therefore, attempted to describe precisely the population to which the research was generalized and to secure strong internal validity by thorough attention to the questionnaire administration. The method of data analysis allowed for the identification of significant influences affecting adolescents' academic self-concept development.

CHAPTER IV

FINDINGS

The central purpose of this research was to investigate how adolescents' academic self-concept develops in its relationship to adolescents' perception of the evaluation of their academic ability by significant others. Parents, friends, and teachers were considered as the significant others whose influence has the greatest effect on adolescents' academic self-concept development. Sex and high-school grades 9, 10, 11, 12 were the variables used to determine whether developmental differences exist in academic self-concept as influenced by significant others.

Instruments used in the research were the Self-Concept of Academic Ability (SCA) scale and the Perceived Evaluations of Significant Others (PESO) scale (Brookover, Patterson, & Thomas, 1962), with the two scales reproduced in a single paper-and-pencil questionnaire. The SCA is designed to measure adolescents' own evaluation of their academic ability. The PESO, designed to measure adolescents' perception of the evaluation of their academic ability by significant others, is composed of three subscales: Perceived Evaluation of Parents (PEP),

Perceived Evaluation of Friends (PEF), and Perceived Evaluation of Teachers (PET). For each of the 23 questions in the SCA and PESO questionnaire, there are five multiple-choice responses. Each question response is scored from 1 to 5, with the higher academic self-concept and perceived evaluations receiving the lower values.

Data for the descriptive research were gathered by administering the SCA and PESO questionnaire during English classes to the entire population of a suburban high school. From the 1287 responses obtained, 93% of the total population, 727 responses were selected for study. Stratified random sampling was used to produce a sample representative of the population by grade level (9, 10, 11, 12), sex, and English class level of academic intensity (correlated language arts, regular, honors/advanced placement). Appendices B and F provide in tabular form complete numbers on population composition as well as sample size and on responses received.

Findings Related to Data Analysis for Significant Relationships

The first two objectives were to determine whether significant relationships exist between adolescents' academic self-concept (measured by SCA) and adolescents' perception of the evaluation of their academic ability by

significant others. Significant others were examined as a total group consisting of parents, friends, and teachers (measured by PESO) and as the subgroups of parents (measured by PEP), of friends (measured by PEF), and of teachers (measured by PET). Relationships were examined for the total group (grades 9, 10, 11, 12) as well as for individual grades 9, 10, 11, 12. For each of these groups, the subgroups of males and females were also examined.

Objective One

To meet Objective One, two hypotheses concerned with significant relationships for the total group (grades 9, 10, 11, 12) and for its subgroups of males and females were tested. Pearson correlations were used to measure for significant relationships by comparing the mean scores on the SCA scale with the mean scores on the PESO, PEP, PEF, and PET scales. Chance distribution of mean scores is 20.0 for SCA, 37.5 for PESO, and 12.5 each for PEP, PEF, PET. Significance at .001 determined the rejection of hypotheses.

Hypothesis one. There are no significant relationships between adolescents' academic self-concept and adolescents' perception of the evaluation of their

academic ability by significant others as a total group (parents, friends, teachers) in the total group (grades 9, 10, 11, 12) or in its subgroups of males and females.

In this hypothesis, adolescents' academic self-concept (SCA) is the dependent variable. Adolescents' perception of the evaluation of their academic ability by significant others as a total group consisting of parents, friends, and teachers (PESO) is the independent variable. By comparing the mean scores on the SCA with the mean scores on the PESO, r 's were obtained showing significant relationships existing between the SCA and PESO at a probability level less than .001 in each of the correlations. Table 1

Table 1

Pearson Correlations Between SCA and PESO Mean Scores of Total Group (Grades 9, 10, 11, 12) (H_{01})

Group	$\underline{n}$	$\bar{X}$		$\underline{r}$	$\underline{r}^2$
		SCA	PESO		
Total	727	17.12	27.65	.80*	.64
Males	380	16.77	27.71	.81*	.66
Females	347	17.50	27.56	.81*	.66

* $p < .001$.

provides the results of the data analysis by which Hypothesis One was rejected.

Hypothesis two. There are no significant relationships between adolescents' academic self-concept and adolescents' perception of the evaluation of their academic ability by the subgroup of parents, the subgroup of friends, and the subgroup of teachers in the total group (grades 9, 10, 11, 12) or in its subgroups of males and females.

In this hypothesis, adolescents' academic self-concept (SCA) is the dependent variable. Adolescents' perceptions of the evaluation of their academic ability by the subgroup of parents (PEP), the subgroup of friends (PEF), and the subgroup of teachers (PET) are the independent variables. By comparing the mean scores on the SCA with the mean scores on the PEP, PEF, and PET, r 's were obtained showing significant relationships at a probability level less than .001 in each of the correlations. Table 2 provides the results of the data analysis by which Hypothesis Two was rejected.

Objective Two

To meet Objective Two, two hypotheses concerned with significant relationships for individual grades 9, 10, 11,

Table 2

Pearson Correlations Between SCA and PEP, PEF, PETMean Scores for Total Group (Grades 9, 10, 11, 12) (Ho₂)

Groups		$\bar{X}$		$\underline{r}$	$\underline{r}^2$
PESO Subgroups ^a	Sex ^b	SCA	PESO Subgroups		
PEP		17.12	8.98	.69*	.48
	Males	16.77	8.95	.67*	.45
	Females	17.50	9.03	.73*	.53
PEF		17.12	9.40	.74*	.55
	Males	16.77	9.51	.75*	.56
	Females	17.50	9.28	.74*	.55
PET		17.12	9.25	.68*	.46
	Males	16.77	9.25	.67*	.45
	Females	17.50	9.25	.70*	.49

^a $\underline{n}$ = 727 for total group.^b $\underline{n}$ = 380 males, 347 females.* $p < .001$.

12 and for their subgroups of males and females were tested. Pearson correlations were used to measure for significant relationships by comparing the mean scores on the SCA scale with the mean scores on the PESO, PEP, PEF, and PET scales. Chance distribution of mean scores is 10.00 for SCA, 37.5 for PESO, and 12.5 each for PEP, PEF, PET. Alpha level was set at .001 to determine all probability values.

Hypothesis three. There are no significant relationships between adolescents' academic self-concept and adolescents' perception of the evaluation of their academic ability by significant others as a total group (parents, friends, teachers) in individual grades 9, 10, 11, 12 or in their subgroups of males and females.

In this hypothesis, adolescents' academic self-concept (SCA) is the dependent variable. Adolescents' perception of the evaluation of their academic ability by significant others as a total group consisting of parents, friends, and teachers (PESO) is the independent variable. By comparing the mean scores on the SCA with the mean scores on the PESO, r 's were obtained showing significant relationships existing between the SCA and PESO at a probability level less than .001 in each of the correlations. Table 3 provides the results of the data analysis by which Hypothesis Three was rejected.

Table 3

Pearson Correlations Between SCA and PESO Mean Scores
for Individual Grades 9, 10, 11,12 (Ho₃)

Groups		<u>n</u>	<u>$\bar{X}$</u>		<u>r</u>	<u>r²</u>
Grade	Sex		SCA	PESO		
9		167	17.16	27.32	.81*	.66
	Males	88	16.18	26.58	.83*	.69
	Females	79	18.25	26.58	.79*	.62
10		182	17.80	28.89	.81*	.66
	Males	93	17.63	29.30	.82*	.67
	Females	89	17.98	28.45	.81*	.66
11		196	17.08	27.51	.77*	.59
	Males	105	17.14	28.09	.79*	.62
	Females	91	17.00	26.81	.83*	.69
12		182	16.44	26.81	.83*	.69
	Males	94	16.03	26.76	.80*	.64
	Females	88	16.88	26.88	.87*	.76

*p < .001.

Hypothesis four. There are no significant relationships between adolescents' academic self-concept and adolescents' perception of the evaluation of their academic ability by the subgroup of parents, the subgroup of friends, and the subgroup of teachers in individual grades 9, 10, 11, 12 or in their subgroups of males and females.

In this hypothesis, adolescents' academic self-concept is the dependent variable. Adolescents' perceptions of the evaluation of their academic ability by the subgroup of parents (PEP), the subgroup of friends (PEF), and the subgroup of teachers (PET) are the independent variables. By comparing the mean scores on the SCA with the mean scores on the PEP, PEF, and PET, r 's were obtained showing significant relationships at a probability level less than .001 in each of the correlations. Results of the data analysis by which Hypothesis Four was rejected are provided in Table 4 for grade 9, Table 5 for grade 10, Table 6 for grade 11, and Table 7 for grade 12.

Table 4

Pearson Correlations Between SCA and PEP, PEF, PETMean Scores for Grade 9 (Ho₄)

Groups		$\bar{X}$		$\underline{r}$	$\underline{r}^2$
PESO Subgroups ^a	Sex ^b	SCA	PESO Subgroups		
PEP		17.16	8.65	.74*	.55
	Males	16.18	8.48	.75*	.56
	Females	18.25	8.85	.76*	.58
PEF		17.16	9.32	.77*	.59
	Males	16.18	9.08	.83*	.69
	Females	18.25	9.60	.69*	.48
PET		17.16	9.34	.64*	.40
	Males	16.18	9.02	.58*	.34
	Females	18.25	9.70	.71*	.50

^a $\underline{n}$ = 167 for total group.

^b $\underline{n}$ = 88 males, 79 females.

* $\underline{p}$ < .001.

Table 5

Pearson Correlations Between SCA and PEP, PEF, PETMean Scores for Grade 10 (Ho₄)

Groups		$\bar{X}$		$\underline{r}$	$\underline{r}^2$
PESO Subgroups ^a	Sex ^b	SCA	PESO Subgroups		
PEP		17.80	9.33	.70*	.49
	Males	17.63	9.17	.66*	.44
	Females	17.98	9.49	.74*	.55
PEF		17.80	9.98	.70*	.49
	Males	17.63	10.28	.73*	.53
	Females	17.98	9.67	.69*	.48
PET		17.80	9.57	.69*	.48
	Males	17.63	9.85	.70*	.49
	Females	17.98	9.28	.71*	.50

^a $\underline{n}$ = 182 for total group.

^b $\underline{n}$ = 93 males, 79 females.

* $p < .001$.

Table 6

Pearson Correlations Between SCA and PEP, PEF, PET
Mean Scores for Grade 11 (Ho₄)

Groups		$\bar{X}$		$\underline{r}$	$\underline{r}^2$
PESO Subgroups ^a	Sex ^b	SCA	PESO Subgroups		
PEP		17.08	9.33	.74*	.55
	Males	17.14	9.31	.75*	.56
	Females	17.00	8.89	.76*	.58
PEF		17.08	9.28	.71*	.50
	Males	17.14	9.55	.71*	.50
	Females	17.00	8.98	.72*	.52
PET		17.08	9.11	.69*	.48
	Males	17.08	9.23	.72*	.52
	Females	17.00	8.98	.65*	.42

^a $\underline{n}$ = 196 for total group.

^b $\underline{n}$ = 105 males, 91 females.

* $p < .001$.

Table 7

Pearson Correlations Between SCA and PEP, PEF, PET
Mean Scores for Grade 12 (Ho₄)

Groups		$\bar{X}$		$\underline{r}$	$\underline{r}^2$
PESO Subgroups ^a	Sex ^b	SCA	PESO Subgroups		
PEP		16.44	8.80	.76*	.58
	Males	16.03	8.76	.73*	.53
	Females	16.88	8.85	.79*	.62
PEF		16.44	9.01	.77*	.59
	Males	16.03	9.10	.73*	.53
	Females	16.88	8.92	.82*	.67
PET		16.44	9.00	.70*	.49
	Males	16.03	8.91	.64*	.41
	Females	16.88	9.10	.75*	.56

^a $\underline{n}$ = 182 for total group.

^b $\underline{n}$ = 94 males, 88 females.

* $\underline{p}$ < .001.

Findings Related to Data Analysis for Significant Differences

The third objective was to determine whether significant differences exist in adolescents' perception of the evaluation of their academic ability by significant others based on adolescents' academic self-concept (measured by SCA). Significant others were examined as a total group consisting of parents, friends, and teachers (measured by PESO), the subgroup of parents (measured by PEP), the subgroup of friends (measured by PEF), and the subgroup of teachers (measured by PET). Significant differences were also examined based on sex and grade level (9, 10, 11, 12).

To meet Objective Three, four hypotheses concerned with significant differences in PESO, PEP, PEF, PET based on SCA, sex, and grade level (9, 10, 11, 12) were tested. The lowest and highest mean scores on the SCA were 8.00 and 32.00 respectively, yielding 24 groups of scores. Analysis of variance was used to compare the mean scores on all variables with significance at .05 to determine rejection of hypotheses.

Hypothesis Five

There are no significant differences in adolescents' perception of the evaluation of their academic ability by

significant others as a total group (parents, friends, teachers) based on adolescents' academic self-concept, sex, or grade level (9, 10, 11, 12).

In this hypothesis, adolescents' perception of the evaluation of their academic ability by significant others as a total group consisting of parents, friends, teachers (PESO) is the dependent variable. Adolescents' academic self-concept (SCA), sex, and grade level (9, 10, 11, 12) are the independent variables. Analysis of variance revealed a significant difference in PESO based on SCA at a probability level of less than .001. A significant difference was also found based on sex at a probability level of less than .001, with males scoring significantly higher on the PESO than females. No significant difference was found based on grade level (9, 10, 11, 12). Table 8 provides the results of the data analysis by which Hypothesis Five was rejected in the areas of SCA as well as sex and failed to be rejected in the area of grade level (9, 10, 11, 12).

Hypothesis Six

There are no significant differences in adolescents' perception of the evaluation of their academic ability by parents based on adolescents' academic self-concept, sex, or grade level (9, 10, 11, 12).

Table 8

Analysis of Variance Between PESO and SCA, Sex, and Grade Level (9, 10, 11, 12) (H_{05})

Main Effects	Sum SQ	df	Mean SQ	<u>F</u>	<u>p</u>
SCA	30824.438	23	1640.193	62.618	0.001
Sex	290.756	1	290.756	13.585	0.001
Grade	27.094	3	9.031	0.422	0.737

In this hypothesis, adolescents' perception of the evaluation of their academic ability by parents (PEP) is the dependent variable. Adolescents' academic self-concept (SCA), sex, and grade level (9, 10, 11, 12) are the independent variables. Analysis of variance revealed a significant difference in PET based on SCA at a probability level of less than .001. No significant differences were found based on sex or grade level (9, 10, 11, 12). Table 9 provides the results of the data analysis by which Hypothesis Six was rejected in the area of SCA and failed to be rejected in the areas of sex and grade level (9, 10, 11, 12).

Hypothesis Seven

There are no significant differences in adolescents' perception of the evaluation of their academic ability by friends based on adolescents' academic self-concept, sex, or grade level (9, 10, 11, 12).

Table 9

Analysis of Variance Between PEF and SCA, Sex, and Grade Level (9, 10, 11, 12) (Ho₆)

Main Effects	Sum SQ	df	Mean SQ	F	p
SCA	3584.075	23	155.829	32.232	0.001
Sex	11.799	1	11.779	2.436	0.119
Grade	28.003	3	9.334	1.931	0.123

In this hypothesis, adolescents' perception of the evaluation of their academic ability by friends (PEF) is the dependent variable. Adolescents' academic self-concept (SCA), sex, and grade level (9, 10, 11, 12) are the independent variables. Analysis of variance revealed a significant difference in PEF based on SCA at a probability level of less than .001. A significant difference was also found based on sex at a probability level of less than .001, with males scoring significantly higher on the PEF

than females. No significant difference was found based on grade level (9, 10, 11, 12). Table 10 provides the results of the data analysis by which Hypothesis Seven was rejected in the areas of SCA as well as sex and failed to be rejected in the area of grade level (9, 10, 11, 12).

Table 10

Analysis of Variance Between PEF and SCA, Sex, and Grade Level (9, 10, 11, 12) (Ho₇)

Main Effects	Sum SQ	df	Mean SQ	F	p
SCA	3603.067	23	156.658	40.510	0.001
Sex	71.238	1	71.238	18.422	0.001
Grade	9.897	3	3.299	0.853	0.465

Hypothesis Eight

There are no significant differences in adolescents' perception of the evaluation of their academic ability by teachers based on adolescents' academic self-concept, sex, or grade level (9, 10, 11, 12).

In this hypothesis, adolescents' perception of the evaluation of their academic ability by teachers (PET) is the dependent variable. Adolescents' academic self-concept (SCA), sex, and grade level (9, 10, 11, 12) are the

independent variables. Analysis of variance revealed a significant difference in PET based on SCA at a probability level of less than .001. A significant difference was also found based on sex at a probability level of less than .05, with males scoring significantly higher on the PET than females. No significant difference was found based on grade level (9, 10, 11, 12). Table 11 provides the results of the data analysis by which Hypothesis Eight was rejected in the areas of SCA as well as sex and failed to be rejected in the area of grade level (9, 10, 11, 12).

Table 11

Analysis of Variance Between PET and SCA, Sex, and Grade Level (9, 10, 11, 12) (Hog)

Main Effects	Sum SQ	df	Mean SQ	F	p
SCA	3322.872	23	144.473	30.322	0.001
Sex	26.824	1	26.824	5.630	0.018
Grade	5.420	3	1.807	0.379	0.768

Summary of Research Findings

The purpose of this study was to investigate the development of adolescents' academic self-concept in its relationship to adolescents' perception of the evaluation

of their academic ability by significant others. Data for the research were provided by student responses to a questionnaire (Brookover et al., 1962) composed of the Self-Concept of Academic Ability (SCA) scale and Perceived Evaluations of Significant Others (PESO) scale, including its subscales Perceived Evaluation by Parents (PEP); Perceived Evaluation by Friends (PEF); and Perceived Evaluation by Teachers (PET). Pearson correlations showed significance in all measured relationships: SCA for the total group (grades 9, 10, 11, 12) and for individual grades 9, 10, 11, 12 as well as for their subgroups of males and females in relationship to PESO as well as its subscales PEP, PEF, PET. Analysis of variance showed significant differences in all perceived evaluations by significant others (PESO, PEP, PEF, PET) based on SCA. Differences were also found in PESO, PEF, and PET based on sex. No significant differences were found based on sex in the PEP. No significant differences were found based on grade levels in any of the perceived evaluations by significant others scales (PESO, PEP, PEF, PET).

CHAPTER V

SUMMARY, LIMITATIONS, RECOMMENDATIONS AND DISCUSSION

Summary

The central purpose of this research was to investigate within the framework of symbolic interaction the development of adolescents' academic self-concept in its relationship to adolescents' perception of the evaluation of their academic ability by parents, friends, and teachers. The following sections provide summaries of the research findings, population characteristics, and instrumentation considerations.

Research Findings

Data were gathered by administering to the population of a specified high school the Self-Concept of Academic Ability (SCA) and Perceived Evaluation by Significant Others (PESO) questionnaire (Brookover et al., 1962). The PESO consists of three subscales: Perceived Evaluation by Parents (PEP), Perceived Evaluation by Friends (PEF), and Perceived Evaluation by Teachers (PET). Analysis of the data retrieved showed significant relationships as well as significant differences between adolescents' academic

self-concept and adolescents' perception of the evaluation of their academic ability by significant others.

Significant Relationships

The first two objectives of the research were to examine the data retrieved for significant relationships between adolescents' academic self-concept (measured by SCA) and adolescents' perception of the evaluation of their academic ability by significant others (measured by PESO, PEP, PEF, PET). These relationships were examined for the total group (grades 9, 10, 11, 12) and its subgroups of males and females as well as for individual grades 9, 10, 11, 12 and their subgroups of males and females.

Objective one. For the total group (grades 9, 10, 11, 12) as well as for its subgroups of males and females, all relationships were significant between adolescents' academic self-concept and adolescents' perceived evaluation by significant others as a total group (consisting of parents, friends, teachers), perceived evaluation by parents, perceived evaluation by friends, perceived evaluation by teachers. Perceived evaluation by significant others as a total group accounted for the greatest variability (64%) in academic self-concept. Among perceived evaluations by the subgroups of parents, friends, and teachers, perceived evaluation by friends accounted for

the greatest variability (55%) in academic self-concept with perceived evaluation by teachers accounting for the least variability (46%). The high and low variabilities in this analysis were the same for males and females although for males the variability in academic self-concept from perceived evaluation by parents and perceived evaluation by teachers was the same (45%).

Objective two. For individual grades 9, 10, 11, 12 as well as for their subgroups of males and females, all relationships were significant between adolescents' academic self-concept and adolescents' perceived evaluation by significant others as a total group (consisting of parents, friends, teachers), perceived evaluation by parents, perceived evaluation by friends, perceived evaluation by teachers. Perceived evaluation by significant others as a total group accounted for the greatest variability in academic self-concept at grade 12 (69%) and the least variability at grade 11 (59%). A larger range of variability in academic self-concept from perceived evaluation by significant others as a total group was found for females than for males. For females, variability ranged from a high at grade 12 (72%) to a low at grade 9 (62%). For males, variability ranged from a high at grade 9 (69%) to a low at grade 11 (62%). Thus

grade 9 showed the lowest variability for females and the highest variability for males in the accountability of variance in academic self-concept from perceived evaluation by significant others as a total group.

Among grades 9, 10, 11, 12, grade 9 showed the highest and lowest variability in academic self-concept from perceived evaluations by the subgroups of parents, friends, and teachers, with perceived evaluation by friends accounting for the greatest variability (59%) and perceived evaluation by teachers accounting for the least variability (40%). Within grades 9, 10, and 12, the greatest variability in academic self-concept was from perceived evaluation by friends (grade 9, 59%; grade 10, 49%; grade 12, 59%). In grade 11, the greatest variability in academic self-concept was from perceived evaluation by parents (55%). Within all four grades, the least variability in academic self-concept was from perceived evaluation of teachers. However, this variability increased from grade 9 to grade 12 (grade 9, 40%; grade 10, 48%; grade 11, 48%; grade 12, 49%). Although perceived evaluation by teachers increased in accountability for variance in academic self-concept from grade 9 to grade 10, perceived evaluation by parents in grade 9 (55%) and perceived evaluation by friends in grade 9 (59%) decreased in grade 10 for parents (49%) as well as for friends (49%).

Grade 10 also revealed the lowest range of variability in academic self-concept accounted for among perceived evaluation of parents (49%), perceived evaluation by friends (49%), and perceived evaluation by teachers (48%).

For males, both the highest and the lowest variability in academic self-concept from perceived evaluations by the subgroups of parents, friends, and teachers, occurred at grade 9 from perceived evaluation by friends (69%) and from perceived evaluation by teachers (34%) respectively. For females, the highest variability in academic self-concept occurred at grade 12 from perceived evaluation by friends (67%) with the lowest variability occurring at grade 11 from perceived evaluation by teachers (42%).

Significant Differences

The third objective of the research was to examine the data retrieved for significant differences in adolescents' perception of the evaluation of their academic ability by significant others (measured by PESO, PEP, PEF, PET), based on adolescent's academic self-concept (measured by SCA). Significant differences were also examined based on sex and grade level (9, 10, 11, 12).

Significant differences were found in all perceived evaluations of significant others (the total group consisting of parents, friends, and teachers; the subgroup

of parents; the subgroup of friends; the subgroup of teachers), based on academic self-concept. These findings of significant differences indicate that the construct of academic self-concept and the construct of perceived evaluations by significant others are measuring different perceptions although the correlations between them are high.

Males were found to have a significantly higher difference than females in perceived evaluation by significant others as a total group, as the subgroup of friends, and as the subgroup of teachers, based on academic self-concept. No significant differences were found between males and females in perceived evaluation by parents. Thus, although the influence of parents on academic self-concept appears to be the same for males and females, females' academic self-concept shows a stronger influence than males from perceived evaluations of significant others as a total group, as the subgroup of friends, and as the subgroup of teachers. No significant differences found based on grade levels 9, 10, 11, 12 in any of the perceived evaluations by significant others (PESO, PEP, PEF, PET).

Conclusions

The findings of this research show that adolescents' academic self-concept is strongly influenced by adolescents' perception of the evaluation of their academic ability by significant others consisting of parents, friends, and teachers. These findings are in accord with the research of Brookover et al. (1961, 1965, 1967) as well as with other related research (Floyd & Smith, 1972; Payne & Farguhar, 1972; Peck, 1981). The research is strengthened by the finding that, though highly correlated, the construct of adolescents' academic self-concept is significantly different from the construct of adolescents' perception of their academic ability by significant others. The influence of perceived evaluations by significant others on academic self-concept found to be greater for females than for males reflects males' propensity for individuation and females' propensity for affiliation revealed by other research (Katz, 1979; Mackoby & Jacklin, 1974; Rossi, 1979). Although age-related differences among grades 9, 10, 11, 12 have been found by other researchers (Ellis & Davis, 1982; Street, 1981; Young & Ferguson, 1979), no significant differences were found in this research based on grade levels in the influence of perceived evaluations by significant others on adolescents' academic self-concept.

Population Characteristics

Data for this research were selected from a single high school in acceptance of Goodlad's (1984a) premise that averaging data across schools obscures significant differences within schools. The population from which the research sample was chosen is unique for a medium-size (1433 students) public high school (grades 9 through 12) in its homogeneity of family environments and of goal orientation to professional careers. The community surrounding the high school is composed mostly of upper-socioeconomic families and includes a major private university. Many of the students are the second or third generation of their families to attend the high school established in 1926. Involvement in school and church activities is a high priority for families in this school district funded largely by local tax revenues. Most parents have had the advantages of college educations and expect their children to continue education beyond the high school. Because of this community-wide appreciation for education, teachers and administrators are attracted to the school district and remain as long-term employees, adding further stability to the school environment. Students, however, are stressed as well as blessed by this district's dedicated allegiance to academic excellence.

Instrumentation Considerations

The Self-Concept of Academic Ability (SCA) scale and the Perceived Evaluation of Significant Others (PESO) scale were designed by Brookover et al. in 1962 and were used throughout their three-phase, longitudinal study (1962, 1965, 1967). Working from a symbolic interaction orientation, the researchers constructed the instrumentation more for the investigation of reciprocal relationships than for the measurement of cause and effect. Brookover et al. particularly emphasized that the instrument was designed for the study of groups rather than for comparing individuals. Successful use of the instrument has been reported by other researchers (Baken, 1971; Calsyn & Kenny, 1977; Jones & Strowing, 1968; Shavelson & Bolus, 1977; Zarb, 1981).

Limitations

Conclusions drawn from this research should be limited in the following ways:

1. The research findings should be generalized primarily to the population of the specified high school from which the research sample was selected. Other high schools with similar populations and environments, however, could be considered in this generalization.

2. Interpretation of significant relationships between adolescents' academic self-concept and adolescents' perception of the evaluation of their academic ability by significant others (parents, friends, teachers) as well as significant differences in these relationships should be limited to their measurement using the combined SCA and PESO scales (Brookover et al., 1961). Although respondents remained anonymous, consideration should be given to possible distortions inherent in self-reports.

Recommendations

The findings of this research prompt recommendations for future consideration. Applications of the present findings to the specified school community studied as well as suggestions for additional research are presented in the following sections.

Applications for Present Research Findings

Because no significant differences were found by this research in adolescents' academic self-concept development and adolescents' perception of the evaluation of their academic ability by significant others among grade levels, no suggestion for modifying techniques for the enhancement of academic self-concept can be made relative to grade levels. However, the strong correlations found at all grade levels between academic self-concept and perceived

evaluations by significant others warrant the proposal that efforts to enhance adolescents' academic self-concept be directed toward adolescents' significant others. The school community's awareness of the relationship between adolescents' academic self-concept and adolescents' perception of the evaluation of their academic ability might be increased through teachers' in-service training, peer counseling/tutoring, and parent education groups. Such heightened awareness provided through on-going yearly activities could improve the effectiveness of efforts to enhance adolescents' academic self-concept, thereby increasing the level of academic achievement attempted by adolescents.

Suggestions for Additional Research

Consideration for future research surfaced during the course of this investigation. Those considerations involve research design, instrument design, research methods, and additional independent variables.

1. The cross-sectional research design used in this study allowed the gathering of data at one point in time to consider adolescents' academic self-concept development from grades 9 through 12. The cross-sectional design does not allow the separation of age effects from cohort effects. Whereas longitudinal data would reveal age effects on one

cohort only and would take four years to accomplish, a study similar to the present one but using the longitudinal design would most likely provide overall stronger data regarding the development of academic self-concept during the high-school years.

2. The SCA and PESO combined scales include eight questions on the SCA, five of which are reproduced in parallel form on each of the three subscales (PEP, PEF, PET) composing the PESO. Eliminating from the SCA the three questions not used in the PESO might strengthen the data analysis. Comparing the results of the data gathered from the proposed modified SCA and PESO with the data gathered from the original SCA and PESO would provide useful information for future researchers.

3. Although quantitative studies, such as the present one, elicit confidence from their objectivity, a structured interview design for a qualitative study would have other advantages. From the phenomenological perspective, qualitative research considers the individual holistically as well as subjectively. The inductive approach seeks understanding of patterns in the data gathered rather than collecting data to measure preconceived hypotheses. Through qualitative data, influences affecting adolescents' academic self-concept development not yet considered could surface.

4. Although this research used a selected sample involving students' course enrollment in three levels of academic intensity, no effort was made to investigate similarities or differences among the academic groups. The sample studied did not consist of students continuously tracked in all academic disciplines; however, many students were in more than one less intensive or honors/advanced placement course. The influence of students' course selection on the basis of academic intensity could provide useful data for understanding adolescents' academic self-concept development.

5. No significant differences among students' perceived evaluation by parents, by friends, and by teachers were revealed by this research. Only in perceived evaluation by parents, however, was no significant difference found between males and females. That finding, along with the family oriented environment of the population studied, suggests further research of that population in reference to family influence on adolescents' academic self-concept. Is the level or type of influence on adolescents' academic self-concept different for fathers and mothers? What influence do birth order and siblings have on adolescents' academic self-concept development? Answers to these questions could be of significant value to

today's educators who have come to realize that the best way to help students is through families.

Discussion

Within the framework of symbolic interaction, this research used observational data to investigate the influence of significant others on adolescents' academic self-concept. Whether participating in the classroom or studying at home, adolescents' primarily view themselves in the role of student. Consequently, adolescents' most significant interactions occur with parents, friends, and teachers. According to symbolic interactionists, however, adolescents' behavior is not influenced by the actual behavior of significant others but rather by adolescents' perceptions of the expectations of them held by significant others.

From a symbolic interaction perspective, this research was grounded on the assumption that the functional limits of students' ability are in part set by students' self-concept of ability to achieve in academic tasks relative to others. These functional limits do not pertain to genetic limits on learning but rather to students' perceptions of what is possible and desirable for them to learn. Consistent with symbolic interaction theory, the research results showed high correlation between

adolescents' academic self-concept and adolescents' perception of the evaluation of their academic ability by significant others, consisting of parents, friends, and teachers.

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APPENDICES

APPENDIX A

PROFILE OF THE HIGH SCHOOL
SPECIFIED FOR THIS STUDY

HIGH SCHOOL

Superintendent

Principal

COMMUNITY

Population--approximately 35,000
 Location--suburban area of six square miles
 Economic Status of Residents--high income, business
 and professional leaders; 88 percent of parents hold
 one college degree

SCHOOL

Type--public, four-year college preparatory
 Current Enrollment--1430
 Accreditation--Southern Association of Colleges and
 Schools, Texas Education Agency
 Teaching Faculty--97 (60 hold master's degrees, 7
 Ph.D.)
 Student-Teacher Ratio--15-1
 Student-Counselor Ratio--356-1
 Calendar--two 18-week semester grading periods;
 55-minute class periods, five days a week;
 55-minute laboratory periods, two days a week

CLASS OF 1987

Class Size--340 students
 Distribution of Grades--percentage of final grades for
 334 juniors at end of year
 A, A+ (7.00-8.50): 15% C, C+ (3.00-4.99): 36%
 B, B+ (5.00, 6.99): 48% D, F (below 3.00): 1%
 National Merit Scholarship Qualifying Test
 Number of Semifinalists - 5
 Number of Commended Students - 12

CLASS OF 1986

College Board SAT Mean Scores (taken by 97% of class)

Verbal - 468

Math - 504

ACT Mean Score (taken by 60% of class)

Composite - 21.7

Advanced Placement--In May, 1986 a total of 191 students took 317 AP examinations in eight different subject areas. There were 236 examinations with scores of three or higher.

National Merit Scholarship Qualifying Test

Number of Semifinalists - 8

Number of Commended Students -10

Number of Scholars - 6

College Attendance

Attending college - 96%

Number of graduates - 342

Number attending 4-year colleges - 309

Number attending 2-year colleges - 20

Number attending out-of-state colleges - 150

GRADUATION REQUIREMENTS (for current seniors)

22 Carnegie units of credit (16 of which must be for academic courses), including 4 years of English, 2 years of algebra, 1 year of geometry (combination of plane and solid), 2 years of one foreign language, 2 years of laboratory science, 1 year of American history, 1 year of world history, 1 semester of government, 1 semester of economics

RANK-IN-CLASS

Grades made in all courses taken from freshman through senior years are counted for rank-in-class.

GRADING

Letter Grade	Numeric Value	Grade Points	
		Regular	MW/Honors/AP
A+	95 - 100	8	9
A	90 - 94	7	8
B+	85 - 89	6	7
B	80 - 84	5	6
C+	75 - 79	4	4
C	70 - 74	3	3
D	60 - 69	2	2
E	50 - 59	1	1
F	below 50	0	0

Grades 70 or above are passing.
All grades below 70 are failing.

COURSE SYMBOLS

Pre-1986-87

mw--major works, involves intensified, accelerated study

AP--Advanced Placement

C --less intensive study than regular courses

Beginning 1986-87

H: honors classes, involves intensified, accelerated study

H AP: Advanced Placement

*: Special Education classes

GRADING SYMBOLS

I - Incomplete

W - Withdrew failing

C- - Special credit, non-college preparatory grade
(not available after 1984-85)

CURRICULUM

Honors and AP, as well as regular college-preparatory courses, are available in English, biology, chemistry, physics, French, Spanish, Latin (Honors only), US history and mathematics.

Less intensive courses are available in English, mathematics and science.

Other academic course offerings are 3 years of German, 1 year of world history, 1 year of world geography, 1 semester of world area studies, 1 semester of psychology, 1 semester of humanities, 1 semester of supervised research in science, 1 semester of advanced social studies problems, 1 semester of comprehensive logic, 1 year of computer math.

Other electives include art, audio-visual training, library science, business math, marketing/distributive education, business/consumer law, accounting, homemaking, speech, theater arts, speed writing, journalism, woodworking, mechanical drawing, typing, reading, band, chorus, orchestra, personal business management, physical education/athletics.

APPENDIX B

TOTAL POPULATION AND SAMPLE SIZE

Population and Sample Size

Group	Grade				Total
	9	10	11	12	
a_N	296	343	401	342	1382
Males	167	175	217	178	737
% of a_N	.53	.51	.54	.52	.53
Females	129	168	184	164	645
% of a_N	.47	.49	.46	.48	.47
b_N	167	182	196	182	727
Males	88	93	105	94	380
Females	79	89	91	88	347
Correlated Language Arts					
c_N	8	18	18	11	55
% of a_N/b_N	.05	.10	.09	.06	.08
Males	5	13	12	7	37
% of a_N/b_N	.05	.14	.11	.07	.10
Females	3	5	6	4	18
% of a_N/b_N	.04	.05	.04	.04	.05

Note: Samples are in exact proportion to population including the proportion of males and females.
 a_N = population total. b_N = sample total.
 c_N = sample total of English class level of academic intensity.

Population and Sample Size (continued)

Group	Grade				Total
	9	10	11	12	
Regular English					
C _n	122	142	139	136	539
% of a _N /b _N	.73	.78	.71	.75	.74
Males	63	71	82	73	289
% of a _N /b _N	.72	.76	.78	.78	.76
Females	59	71	57	63	250
% of a _N /b _N	.75	.80	.63	.72	.72
Honors/Advanced Placement English					
C _n	37	22	39	35	133
% of a _N /b _N	.22	.12	.20	.19	.18
Males	20	9	11	14	54
% of a _N /b _N	.23	.10	.11	.15	.14
Females	17	13	28	21	79
% of a _N /b _N	.211	.15	.31	.24	.23

Note: Samples are in exact proportion to population including the proportion of males and females.
 a_N = population total. b_N = sample total.
 C_n = sample total of English class level of academic intensity.

APPENDIX C

THE QUESTIONNAIRE

GUIDELINES FOR STUDENT PARTICIPATION
IN THIS SURVEY

The completion of this questionnaire is part of a research project to investigate how students view their academic ability.

Although the researcher would appreciate getting responses from all students, response to this questionnaire is to be on a totally voluntary basis. If you do not wish to participate, please feel free to decline.

So that students who are willing to take part in this survey will be encouraged to respond to the questionnaire with total honesty, it is important that students' names do not appear on the completed response sheet.

INSTRUCTIONS FOR COMPLETING
THE QUESTIONNAIRE

Please:

- make no marks on this booklet which contains the questionnaire items for response;
- use the Scantron response sheet which you have been given to record your responses;
- begin your responses on response line 1 on your Scantron response sheet; leave response lines 27 through 50 unmarked;
- read and follow the additional directions for completing the Scantron response sheet listed in a box labeled IMPORTANT at the top right-hand corner of your Scantron response sheet.

PLEASE GO TO NEXT PAGE

SELF-CONCEPT OF ACADEMIC ABILITY AND
PERCEIVED EVALUATIONS OF SIGNIFICANT OTHERS
QUESTIONNAIRE

Although it is important that students' responses to this questionnaire be anonymous, the researcher is interested in determining three basic descriptions of each respondent. Therefore, please answer the following questions pertaining to your sex, grade-level, and English class identification.

1. Sex
 - A. male
 - B. female
2. Grade level
 - A. 9th grade
 - B. 10th grade
 - C. 11th grade
 - D. 12th grade
3. English class identification
 - A. CLA (Correlated Language Arts)
 - B. regular
 - C. honors or advanced placement

Choose the response which best answers each question.

4. How do you rate yourself in school ability compared with your close friends?
 - A. I am the best
 - B. I am above average
 - C. I am average
 - D. I am below average
 - E. I am the poorest
5. How do you rate yourself in school ability compared with those in your class at high school?
 - A. I am among the best
 - B. I am above average
 - C. I am average
 - D. I am below average
 - E. I am the poorest

PLEASE SEE OTHER SIDE

6. Considering the grades you make, where do you think you rank in your class at high school?
- A. among the best
 - B. above average
 - C. average
 - D. below average
 - E. among the poorest
7. Do you think you have the ability to complete college?
- A. yes, definitely
 - B. yes, probably
 - C. not sure either way
 - D. probably not
 - E. no
8. Where do you think you would rank in your class in college?
- A. among the best
 - B. above average
 - C. average
 - D. below average
 - E. among the poorest
9. In order to become a doctor, lawyer, or university professor, work beyond four years of college is necessary. How likely do you think it is that you could complete such advanced work?
- A. very likely
 - B. somewhat likely
 - C. not sure either way
 - D. unlikely
 - E. most unlikely
10. Forget for a moment how others grade your work. In your own opinion, how good do you think your work is?
- A. my work is excellent
 - B. my work is good
 - C. my work is average
 - D. my work is below average
 - E. my work is much below average
11. What kind of grades do you think you are capable of getting?
- A. mostly 90's
 - B. mostly 80's
 - C. mostly 70's
 - D. mostly 60's
 - E. below 60

Please answer the following questions as you think your PARENTS would answer them. If you are not living with your parents, answer for the family with whom you are living.

12. How do you think your PARENTS would rate your school ability compared with other students your age?
 - A. among the best
 - B. above average
 - C. average
 - D. below average
 - E. among the poorest
13. Where do you think your PARENTS, considering the grades you make, would say you would rank in your class in high school?
 - A. among the best
 - B. above average
 - C. average
 - D. below average
 - E. among the poorest
14. Do you think that your PARENTS would say you have the ability to complete college?
 - A. yes, definitely
 - B. yes, probably
 - C. not sure either way
 - D. probably not
 - E. definitely not
15. In order to become a doctor, lawyer, or university professor, work beyond four years of college is necessary. How likely do you think your PARENTS would say it is that you could complete such advanced work?
 - A. very likely
 - B. somewhat likely
 - C. not sure either way
 - D. somewhat unlikely
 - E. very unlikely
16. What kind of grades do you think your PARENTS would say you are capable of getting in general?
 - A. mostly 90's
 - B. mostly 80's
 - C. mostly 70's
 - D. mostly 60's
 - E. below 60

PLEASE SEE OTHER SIDE

Think about your closest friend at school. Now answer the following questions as you think this FRIEND would answer them.

17. How do you think this FRIEND would rate your school ability compared with other students your age?
 - A. among the best
 - B. above average
 - C. average
 - D. below average
 - E. among the poorest
18. Where do you think this FRIEND, considering the grades you make, would say you would rank in your class in high school?
 - A. among the best
 - B. above average
 - C. average
 - D. below average
 - E. among the poorest
19. Do you think that this FRIEND would say you have the ability to complete college?
 - A. yes, definitely
 - B. yes, probably
 - C. not sure either way
 - D. probably not
 - E. definitely not
20. In order to become a doctor, lawyer, or university professor, work beyond four years of college is necessary. How likely do you think this FRIEND would say it is that you could complete such advanced work?
 - A. very likely
 - B. somewhat likely
 - C. not sure either way
 - D. somewhat unlikely
 - E. very unlikely
21. What kind of grades do you think this FRIEND would say you are capable of getting in general?
 - A. mostly 90's
 - B. mostly 80's
 - C. mostly 70's
 - D. mostly 60's
 - E. below 60

PLEASE GO TO NEXT PAGE

:
Think about your favorite teacher -- the one you like best; the one you feel is most concerned about your school work. Now answer the following questions as you think this TEACHER would answer them.

22. How do you think this TEACHER would rate your school ability compared with other students your age?
- A. among the best
 - B. above average
 - C. average
 - D. below average
 - E. among the poorest
23. Where do you think this TEACHER, considering the grades you make, would say you would rank in your class in high school?
- A. among the best
 - B. above average
 - C. average
 - D. below average
 - E. among the poorest
24. Do you think that this TEACHER would say you have the ability to complete college?
- A. yes, definitely
 - B. yes, probably
 - C. not sure either way
 - D. probably not
 - E. definitely not
25. In order to become a doctor, lawyer, or university professor, work beyond four years of college is necessary. How likely do you think this TEACHER would say it is that you could complete such advanced work?
- A. very likely
 - B. somewhat likely
 - C. not sure either way
 - D. somewhat unlikely
 - E. very unlikely
26. What kind of grades do you think this TEACHER would say you are capable of getting in general?
- A. mostly 90's
 - B. mostly 80's
 - C. mostly 70's
 - D. mostly 60's
 - E. below 60

THANK YOU FOR YOUR ASSISTANCE IN COMPLETING THIS SURVEY

APPENDIX D

INSTITUTIONAL APPROVAL FOR ADMINISTRATION
OF THE QUESTIONNAIRE

To: Mrs. Betty Guest Date: August 25, 1986
From: Winston C. Power, Jr. Subject: Dissertation
 Research

Your request to survey students in a project connected with your dissertaiton has been carefully considered. Mr. Lawrence and I reviewed your plan and I am pleased to approve it with the following modification. I suggest we utilize the Friday advisory period if possible to conduct this survey. That should be more than enough time to solicit the response you seek and would not cut into any instructional time. However, if Dr. Gibson and you feel this is not appropriate, I would be willing to allow you the discretion of using your plan as proposed.

Good luck on your study. I will be looking forward to its outcome.

cc: Dr. Gibson
 Mr. Lawrence

To: Betty Guest Date: September 8, 1986
From: Jim Gibson Subject: Dissertation Research

Your plan to gather data from students at Highland Park High School for your dissertation is approved. Please coordinate your data collection through Carolyn Brown, English Department Chairman.

JG:as

APPENDIX E

PROCEDURES FOR ADMINISTERING THE QUESTIONNAIRE

PROCEDURES FOR ADMINISTERING THE QUESTIONNAIRE

Please review the following general guidelines before administering the Self-Concept of Academic Ability/ Perceived Evaluations of Significant Others (SCA/PESO) questionnaire.

1. The SCA/PESO questionnaire will be administered to all students in all English classes on November 21, 1986. Please do not schedule an examination for that day.
2. Administration should take place during the first 15 minutes of each class period.
3. Allow non-participation to any student so requesting.
4. Have all students remain seated quietly at their desks until all completed questionnaires have been collected.
5. Use normal test proctoring procedures to prevent student interaction during the administration of the questionnaire.
6. Avoid observing students' responses so that students may be assured of complete anonymity.

Specific Administration Procedure

To assure standardized administration, please use the following specific instructions.

Read Aloud

You have been requested to complete anonymously a brief survey. I will now distribute to each of you a questionnaire booklet and a Scan-Tron for your responses. Please make no marks on the questionnaire booklet at any time and no marks on the Scan-Tron form until further instructions are given.

Distribute questionnaire booklets and Scan-Tron forms.

Read Aloud

Please read silently as I read aloud the instructions given on the cover sheet of your questionnaire booklet.

Read aloud from the cover sheet of the questionnaire booklet the Guidelines for Student Participation in the Survey and Instructions for Completing the Questionnaire.

Read Aloud

Are there any questions regarding the instructions for completing this survey?

Answer any questions.

Read Aloud

Find the instructions printed in the box labeled "Important" at the top right-hand corner of your Scan-Tron form. Please read those instructions.
(pause) Are there any questions?

Answer any questions.

Read Aloud

Please turn to the first page following the cover sheet of your questionnaire booklet. Note that the first three questions request descriptions of the respondent. These questions should be answered on the corresponding Scan-Tron lines 1, 2, and 3. Continue responding to all additional questions by marking your response on the Scan-Tron line corresponding to the number of the question in your questionnaire booklet.
Are there any questions?

Answer any questions.

Read Aloud

When you have completed the survey, please raise your hand; and I will collect your questionnaire booklet and Scan-Tron form. You may begin now.

The estimated time for students to complete this questionnaire is from 5 to 10 minutes.

Thank you for your assistance in this research project, the results of which I hope will be useful in helping all of our students become more confident and more successful learners.

APPENDIX F

NUMBER OF REPONSES RECEIVED IN
RELATION TO TOTAL POPULATION

Questionnaire Responses

Group	Grade				Total
	9	10	11	12	
Correlated Language Arts					
a _N	15	35	34	19	103
b _n	15	30	25	15	85
% pf a _N	1.00	.86	.74	.79	.83
Regular English					
a _N	217	266	285	257	1025
b _n	198	254	270	233	955
% pf a _N	.91	.95	.95	.91	.93
Honors/Advanced Placement English					
a _N	64	42	82	66	254
b _n	61	42	80	64	247
% of a _N	.95	1.00	.98	.97	.97

Note: Total school population, not including 51 students enrolled in special education = 1382. $a_{\underline{N}}$ = population. $b_{\underline{n}}$ = questionnaire responses.