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**ACADEMIC SELF-ESTEEM OF MICHIGAN
HIGH SCHOOL STUDENTS**

by

Dolores J. Howe

**A Dissertation
Submitted to the
Faculty of The Graduate College
in partial fulfillment of the
requirements for the
Degree of Doctor of Education
Department of Educational Leadership**

**Western Michigan University
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ACADEMIC SELF-ESTEEM OF MICHIGAN HIGH SCHOOL STUDENTS

Dolores J. Howe, Ed.D.

Western Michigan University, 1993

In this study, relationships among academic self-esteem, teacher/student relationships, school climate, students' level of involvement in school activities, and size of school were analyzed.

Sixteen lower Michigan high schools were randomly selected, 12 with a population of 200-500 and 4 with a population of 1,500-2,000. One class each of 9th, 10th, 11th, and 12th grades, representing a wide range of ability levels, were chosen from each school, for a total of 64 classrooms containing 1,319 students. Brookover's (1962) Self-Concept of Ability Scale, the author's Academic Self-Esteem Inventory, and the National Association of Secondary School Principals School Climate Survey (Kelley et al., 1986) were administered to 1,319 high school students. Data were also collected on sex, grade level, race, number of school activities in which the student was involved, and size of school.

Findings support the hypotheses that there is a direct relationship between high school students' perceptions of teacher/student relationships and academic self esteem; that there is a direct relationship between students' perceptions of school climate and students' academic self-esteem; that there is a relationship in the number of activities in which students are involved and academic self-esteem; that there is a relationship between number of activities in which students are involved

and students' perceptions of teacher/student relationships; that there is a relationship between number of activities in which students are involved and students' perceptions of school climate; that there is a relationship between the size of the school and students' perceptions of teacher/student relationships; and finally, that there is a relationship between the size of the school and the level of student involvement.

Findings were inconclusive on the hypothesis that there is a relationship between the size of the school and students' academic self-esteem.

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Academic self-esteem of Michigan high school students

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Western Michigan University, 1993

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ACKNOWLEDGMENTS

As I've worked with students of all ages, the relationship between how students feel about themselves as learners and their educational success has become increasingly clear to me, and appears to me to be a reflection of the educational environment in which they find themselves. This belief led me to the following dissertation study, in hopes of validating what I believe to be the most important variables in the education of our youth.

Sincere appreciation goes to my dissertation chairperson, Dr. Charles Warfield, and to the members of my dissertation committee, Drs. Uldis Smidchens and Joe Morris. Their expertise, assistance, and encouragement are greatly appreciated.

Most importantly I owe a special thanks to my children, Kelli, Lisa, and Tony Carpenter, who encouraged me to strive for my educational goals, and who supported and assisted me in every facet of this project. It is to my children that I dedicate this dissertation.

Dolores J. Howe

TABLE OF CONTENTS

ACKNOWLEDGMENTS	ii
LIST OF TABLES	vii
LIST OF FIGURES	ix
CHAPTER	
I. INTRODUCTION	1
Background	1
Statement of the Problem	5
Definitions	7
Need and Significance	7
II. RATIONALE	9
Historical Perspective	9
Self-Concept Versus Self-Esteem	10
Subgroups of Self-Concept	11
Self-Concept and Ability	13
Adolescence	15
Teacher/Student Relationships and Academic Self-Esteem	18
School Climate and Academic Self-Esteem	22
Level of Involvement	23
Size of School	24
Conclusion	25
III. METHODS AND PROCEDURES	27
Research Hypotheses	27

Table of Contents--Continued

CHAPTER	
Population	28
Instruments	31
Brookover's Self-Concept of Ability Scale	32
The Academic Self-Esteem Inventory	33
National Association of Secondary School Principals School Climate Survey	34
Demographic Information	35
Procedures	35
Data Analysis	36
IV. FINDINGS	37
Hypothesis Results	38
Teacher/Student Relationships and Academic Self-Esteem	40
School Climate and Academic Self-Esteem	41
Level of Involvement and Academic Self-Esteem	41
Level of Involvement and Teacher/Student Relationships	47
Level of Involvement and School Climate	49
Size of School	51
Size of School and School Climate	51
Size of School and Academic Self-Esteem	52
Size of School and Teacher/Student Relationships ...	54
Size of School and Level of Involvement	55
V. CONCLUSIONS AND RECOMMENDATIONS	56
Discussion of Hypotheses	56

Table of Contents--Continued

CHAPTER	
Hypothesis 1	56
Hypothesis 2	57
Hypothesis 3	58
Hypothesis 4	59
Hypothesis 5	60
Hypothesis 6	60
Hypothesis 7	61
Hypothesis 8	61
Hypothesis 9	62
Limitations of the Study .	63
Recommendations for Further Research .	63
Summary and Implications .	65
APPENDICES	69
A. Approval Letter From Human Subjects Institutional Review Board	70
B. Letter Giving Permission to Use Self-Concept of Ability Scale	72
C. Original Population	74
D. Correspondence With Principals	76
E. Participating Schools	79
F. Correspondence With Teachers	81
G. Teacher Narrative	83
H. Teacher Report Form .	86
I. Demographics .	88

Table of Contents--Continued

J. NASSP School Climate Survey Teacher/Student Relationships Subtest and Student Activities Subtest	90
K. Self-Concept of Ability Scale	94
L. Academic Self-Esteem Inventory	97
BIBLIOGRAPHY	99

LIST OF TABLES

1. Percentage Breakdown of Students by Race	30
2. Instruments and Involvement Correlation Coefficients	39
3. Mean Scores of Student Activities Subtest of NASSP School Climate Survey and Level of Involvement	42
4. Mean Scores of Student Activities Subtest of NASSP and Level of Involvement Multiple Range Test	43
5. Level of Involvement and Mean Scores of Self-Concept of Ability Scale	44
6. Level of Involvement and Mean Scores of Self-Concept of Ability Scale Multiple Range Test	45
7. Level of Involvement and Mean Scores of Academic Self-Esteem Inventory	45
8. Level of Involvement and Mean Scores of Academic Self-Esteem Inventory Multiple Range Test	46
9. Level of Involvement and Mean Scores of Teacher/Student Relationships Subtest of the NASSP School Climate Survey	47
10. Level of Involvement and Mean Scores of Teacher/Student Relationships Subtest of the NASSP School Climate Survey Multiple Range Test	48
11. Level of Involvement and Mean Scores of the NASSP School Climate	49
12. Level of Involvement and Mean Scores of the NASSP School Climate Inventory Multiple Range Test	50
13. Size of School and Mean Scores of NASSP School Climate Survey	52
14. Size of School and Mean Scores of Academic Self-Esteem Inventory	53
15. Size of School and Mean Scores of the Self-Concept of Ability Scale	53

List of Tables-Continued

16. Size of School and Mean Scores of the Teacher/Student Relationship Subtest of the NASSP School Climate Survey	54
17. Size of School and Means of Level of Involvement	55

LIST OF FIGURES

1. A Hierarchical Model for the Organization of Self-Concept	11
2. Model of Self-Concept	12

CHAPTER I

INTRODUCTION

Background

The major issue that continues to prevail in public schools is how to improve learning. Other responsibilities have been directed toward the public schools in recent years, such as drug and alcohol prevention programs, and AIDS and birth control education. However, the focus of all schools continues to be the same as when they originated, that of assisting students in acquiring the knowledge needed to function in society. As technology has developed, jobs that once were available to adults with little education are becoming scarce. As it is important for students to reach a higher level of education, it is important that schools focus on what they can do to encourage students to learn during their public school years and beyond.

In order to investigate learning and its importance to teachers, one might look at how some authors think learning is engaged. Two of the major behavioral areas described by Bloom (1976) in his taxonomy of learning objectives are the affective domain and the cognitive domain. (The third domain is that of psychomotor.) The affective domain refers to emotions, feelings, values, and attitudes. The cognitive domain deals primarily with intellectual skills, such as problem solving, memory, reasoning, comprehension, recall, and judgment. It has been determined by numerous studies (C. S. Anderson, 1982; Bloom, 1976; Bloom,

Madaus, & Hastings, 1981; Caine & Caine, 1991; Weinstein & Fantini, 1970) that the cognitive domain cannot be separated from the affective domain. As these two are interrelated, educators attempting to improve the cognitive area must be aware of how the affective domain influences the learning process. This study will give further support to the interrelatedness of the cognitive and affective domains (Bronowski, 1978; Dewey, 1956; Tanner & Tanner, 1980).

In working with high school students, this author sensed that the grades students received in classes were not dependent solely on the ability level of the student, the difficulty of the class, the discipline being studied, or the methodology or curriculum used. However, students did poorly in some classes, yet succeeded in others; or a student did well in English 9, yet failed in English 10.

While listening to students' comments about the classes in which they were currently enrolled, this author attempted to lead discussions both in her five formal classes and informally in small groups about why particular classes were "easy," or good classes to take, and other classes were to be avoided. Comments that surfaced concerning the classes that were popular with the students were: "She likes us." "He cares about what we do." "He knows we can learn." Comments regarding disliked classes were: "Nothing I do is good enough for him anyway, so I don't try anymore." "He doesn't like us, or himself." "She doesn't care about students." All of these comments were concerned with the affective domain rather than the cognitive. Only a few students stated that a particular discipline, such as mathematics or English, was just more difficult for them to grasp.

The author then began to examine material on the affective components of learning and, in particular, the classical literature on self-concept, followed by the literature concerning self-concept and its relationship to academic success. In the literature, there appeared to be little consistency concerning the relationship between global self-concept and academic success. Yet, this author continued to believe that some relationship between certain aspects of self-concept and academic success must exist.

The author began to break down the idea of self-concept into components affected by different settings, and labeling these components academic self-esteem, family self-esteem, peer self-esteem, etc. About this time, research using facets of global self-concept and, in particular, academic self-esteem, and examining these facets in relationship to academic success, began to appear in professional journals. Higher correlations were found between academic self-esteem and academic success than between global self-concept and academic success. This information confirmed what the author believed, that general self-concept was too broad of a concept and too far removed from the educational setting to directly affect academic success. Academic self-esteem, however, was directly involved with the classroom and learning situation (Bell & Ward, 1980; Brookover, LePere, Hamachek, Thomas, & Erickson, 1965; Calsyn & Kenny, 1977; Hattie, 1992; Holly, 1987; Mintz & Muller, 1977; Song & Hattie, 1985).

Although a relationship between academic self-esteem and academic success has been determined in the recent literature (Bell & Ward, 1980; Brookover et al., 1965; Calsyn & Kenny, 1977; Hattie,

1992; Holly, 1987; Mintz & Muller, 1977; Song & Hattie, 1985), little work has been done on examining the variables that affect academic self-esteem. The major purpose of this study then is to look at some of the variables that affect how students feel about themselves as learners.

In the literature on self-concept, the term significant other was used repeatedly (Hattie, 1992; Kash & Borich, 1978; LaBeane & Greene, 1969; Rosenberg, 1989; Shrauger & Schoeneman, 1979). A significant other is a person who most intimately administers the "rewards" and "punishments" in a person's life (LaBeane & Greene, 1969, p. 17). Since teachers are the ones who interact most with the students concerning their learning, this author believes that teachers, acting as significant others to students, would have an effect on how the students felt about themselves as learners. This was supported by Calsyn and Kenny (1977); Davidson and Lang (1960); Edeburn and Landry (1974); Gordon and Wood (1963); Kash and Borich (1978); and Marsh, Parker, & Smith (1983), and Hattie (1992). Therefore, one of the variables in this study on academic self-esteem is high school students' perceptions of the teachers' attitudes toward them as learners.

Discussions concerning the climate of a school have become prevalent in educational literature (C. S. Anderson, 1982; Barker & Gump, 1964; Branen, 1972; Edmonds, 1979). Climate is viewed as an important component reflecting the health of educational institutions. The National Association of Secondary School Principals (NASSP) has determined it to be so important that they have spent 7 years developing a school climate instrument with the belief that perceptions of school climate are influencing factors in education (Halderson, Kelley, Keefe, &

Berge, 1989) (see Appendix J).

Although the NASSP developed an instrument that collects data on 10 areas which they determined to be of importance in measuring the school climate, this author, due to the need to place limitations on this study, chose to focus on the subarea of teacher/student relationships and student involvement. Supported by the literature (Barker & Gump, 1964; Downey, 1978; Foster & Martinez, 1985; Marsh & Parker, 1984; Melnick, 1989; Melton & Hargrove, 1987; Rogers, 1987), this author believed that perceptions about opportunities for, and actual participation by, students in school sponsored activities will increase students' perceptions of school climate which will in turn affect the student's overall academic self-esteem. Therefore, other variables that were examined in this study on academic self-esteem are the perceptions of the students of the school climate and their perceptions about student involvement.

It has been determined by some (Barker & Gump, 1964; Downey, 1978; Foster & Martinez, 1985; Melnick, 1989; Melton & Hargrove, 1987; Rogers, 1987) that the size of the school affects the climate of the school due in part to the higher level of participation available to the students in a smaller school setting. The size of the school, therefore, is another variable that was examined in this study.

Statement of the Problem

As previously stated, although researchers have determined that there is a relationship between academic self-esteem and academic success, there have been few studies that examine the variables

affecting academic self-esteem. The purpose of this study is to begin to fill that void.

The questions examined in this study are:

1. Is there a relationship between high school students' perceptions of the teacher/student relationship and academic self-esteem?
2. Is there a relationship between high school students' perceptions of the climate of the school and academic self-esteem?
3. Is there a relationship between the number of activities in which students are involved and academic self-esteem?
4. Is there a relationship between the number of activities in which students are involved and students' perceptions of teacher/student relationships?
5. Is there a relationship between the number of activities in which students are involved and students' perceptions of the school climate?
6. Is there a relationship between the size of the school and high school students' perceptions of the school climate?
7. Is there a relationship between the size of the school and students' academic self-esteems?
8. Is there a relationship between the size of the school and high school students' perceptions of teacher/student relationships?
9. Is there a relationship between the size of the school and the level of students' involvement?

Definitions

Throughout this work, the author has adhered to the following definitions, which have been paraphrased from numerous sources:

Self-concept: The relatively stable overall view a person has of oneself.

Self-esteem: The valuation made by a person concerning self-concept.

Self-confidence: The fluctuating evaluation an individual has that is dependent on a particular situation.

Academic self-concept: The student's concept of his or her ability to perform academic tasks.

Academic self-esteem: The valuation made by a student concerning academic self-concept.

Need and Significance

As the literature has indicated, it is important to remember that the cognitive domain cannot be separated from the affective domain (C. S. Anderson, 1982; Bloom, 1976; Bloom et al., 1981; Bronowski, 1978; Caine & Caine, 1991; Dewey, 1956; Tanner & Tanner, 1980; Weinstein & Fantini, 1970). Learning is not fragmented into cognitive and affective domains, but rather each domain affects the other and they are interrelated.

This study is significant because it examined the affective areas of academic self-esteem, school climate, and students' perceptions of teacher/student relationships, and their relationships to the cognitive

domain of learning, which assumes as the literature has indicated that the affective and cognitive domains are interrelated and significantly impact each other.

CHAPTER II

RATIONALE

The purpose of this chapter is to review the literature concerning the variables of academic self-esteem, teacher/student relationships, and school climate. Before addressing the specific questions stated in Chapter I, the review will address the historical perspective of self-concept and self-esteem, the differentiation between self-concept and self-esteem, and the subgroups of self-concept and self-esteem as they relate to the adolescent. This overview will then be followed by a review of the literature as it relates directly to the nine questions raised in Chapter I.

Historical Perspective

Current studies of self-concept and self-esteem have their foundations in early studies of the concept of self, with Baldwin (cited in Calhoun & Morse, 1973) crediting St. Augustine as the first investigator of "self." The concept of self has been discussed in a wide variety of theoretical perspectives. It has been dominant in many aspects of psychology and has been examined and used as both a dependent variable and an independent variable.

During the early part of the 20th century, literature by James (1890), Cooley (1902), Freud (1920), and Mead (1934) became prevalent in psychological literature. Near the middle of the 1900s, work by

Lecky (1945), Maslow (1954), Allport (1961), Wylie (1962), and Coopersmith (1967) added to the accumulating base of theory on self and self-concept. Current writers on self-concept (Campbell, 1990; Hattie, 1992; Hewitt, 1991; Marsh, 1990; Skaalvik, 1990) continue to base their theories and research on these early writings, particularly those of Cooley (1902), Mead (1934), Coopersmith (1967), and Wylie (1962).

Self-Concept Versus Self-Esteem

Although there have been numerous studies of self, there is still imprecision and variation in definitions concerning the constructs of self-concept and self-esteem. Even when authors have used identical terminology, no assumption can be made that they have defined or operationalized the term in the same manner. Calhoun and Morse (1973) differentiated between self-concept and self-esteem in the following manner: The self-concept is viewed as the way an individual perceives himself or herself and his or her behavior; and self-esteem involves an additional evaluative component, which deals with feelings of personal worth. Robinson-Awana, Kehle, and Jenson (1986) separated the descriptive and nonjudgmental (self-concept) aspect from the evaluative, or the degree of satisfaction with the self (self-esteem). Germaine (1978) stated that because self-concept is just the awareness and information about self, it is meaningless to talk about positive or negative self-concept. However, the satisfaction or dissatisfaction with the self as one knows it, or self-esteem, can have positive or negative connotations.

Subgroups of Self-Concept

More recently, authors (Eccles et al., 1989; Hattie, 1992; Shavelson & Bolus, 1982; Song & Hattie, 1985) have begun to discuss self-concept as having more components and subcomponents, and using domain-specific self-concept measures in their studies.

Shavelson, Hubner, and Stanton (1976) presented the idea of a hierarchical and multifaceted construct.

At the apex of the hierarchy is general self-concept. General self-concept may be divided into two facets: academic and nonacademic self-concepts. In turn, these second-order facets can be subdivided. Academic self-concept may be divided into subject matter areas. Nonacademic self-concepts may be divided into social, emotional, and physical self-concepts, and these may be divided into more specific facets. (Hattie, 1992, p. 77)

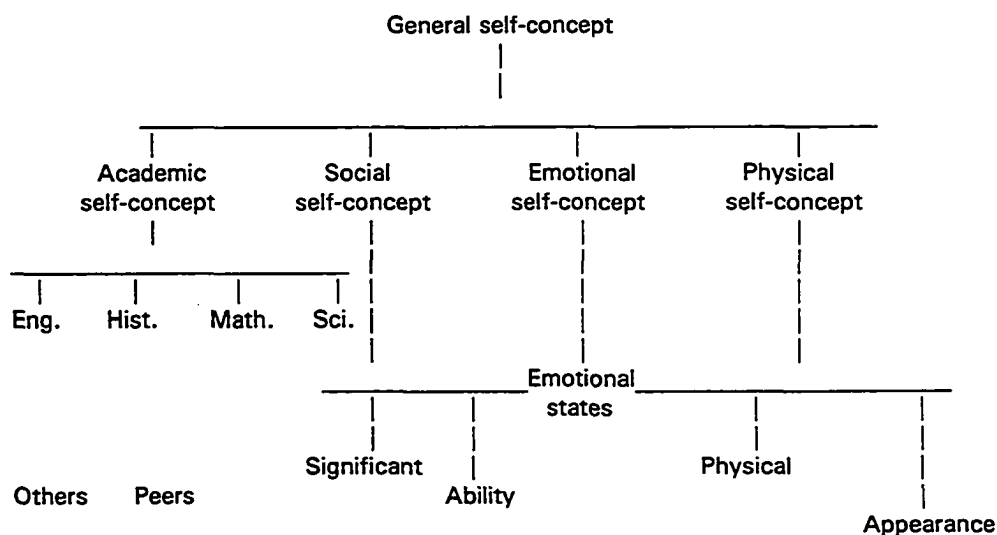


Figure 1. A Hierarchical Model for the Organization of Self-Concept.

Source: Adapted from Self-Concept (p. 77) by J. Hattie, 1992, Hillsdale, NJ: Lawrence Erlbaum.

Although agreeing that self-concept is hierarchical and multifaceted, Song and Hattie (1985) made two modifications to Shavelson's et al. (1976) model. They subdivided academic self-concept into achievement, ability, and classroom self-concepts. On the nonacademic self-concept they made two second-order factors: social self-concept, which is further divided into two factors, family and peer self-concepts; and self-regard or presentation self-concept, which is further divided into two factors, confidence in self and physical self-concept. (In this model the following definitions apply: Ability is the extent to which the individual believes he or she is capable of achieving. Achievement means feelings or perceptions of actual achievement. Classroom refers to confidence in classroom activities.)

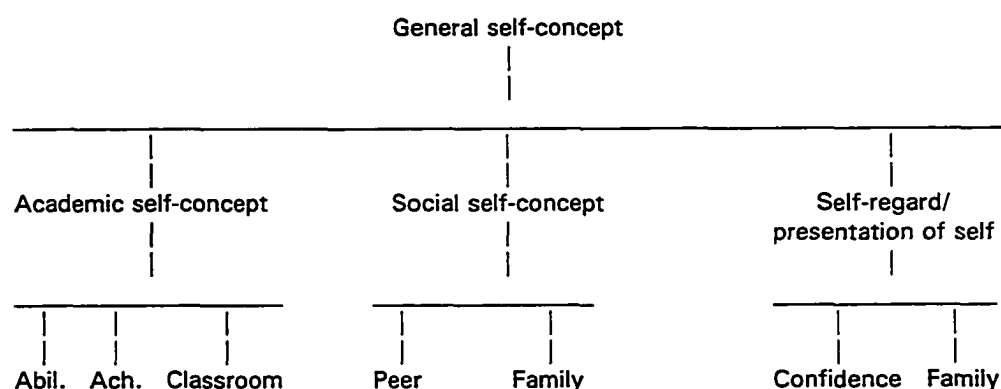


Figure 2. Model of Self-Concept.

Source: From Self-Concept (p. 84) by J. Hattie, 1992, Hillsdale, NJ: Lawrence Erlbaum.

In search of further clarification of self-concept, Calhoun and Morse (1973) differentiated between continual and momentary

self-concept. Continuous self-concept is the broad area which is basically stable and often referred to as global self-concept. The momentary self-concept reflects a person's feelings at a particular moment or during a particular activity, more often termed self-confidence. Although all facets of self-concept are interrelated, changes in one facet of this concept does not necessarily mean a change in another facet or in the global self-concept.

Since self-esteem is a value placed on self-concept by oneself, it has been suggested that self-concept develops earlier than self-esteem, and self-esteem arises out of the ability to estimate one's own strengths and weaknesses. Thus, "self-concept is the logical developmental antecedent of self-esteem" (Calhoun & Morse, 1973, p. 320).

Self-concept tends to remain relatively stable, while self-esteem more readily fluctuates from time to time. A person's self-evaluation will develop and shift as the individual encounters varying experiences. A person's self-concept depends partly on what has previously been learned about oneself in the type of situation at hand; therefore, identity is situationally dependent (Gergen, 1971).

Self-Concept and Ability

Numerous studies (Alvord & Glass, 1974; Beane & Lipka, 1986; Haynes, Hamilton-Lee, & Comer, 1988; Rubin, Dorle, & Sandidge, 1977; Taylor & Michael, 1981) have attempted to find a relationship between students' self-concept and their ability in the classroom. Due to the variety of measures used, the discrepancy of terminology, and the numerous independent variables analyzed, the studies have failed to give

consistent results. Mintz and Muller (1977) stated that they found the results startling when they discovered such a low correlation between the variables of self-concept and achievement. Most earlier attempts at finding correlations between self-concept and academic achievement, like Mintz and Muller's study, have been too encompassing, looking at overall self-concept rather than targeting academic facets.

More recently, researchers (K. M. Anderson, 1990; Byrne, 1986; Chapman, Lambourne, & Silva, 1990; Hattie, 1992; Marsh, 1990; Song & Hattie, 1985) have recognized the multifaceted aspect of self-concept; and they have found higher correlations between academic self-esteem and academic achievement than were found using self-concept, in general, as the variable.

Causal ordering of academic self-concept and academic achievement is now the unresolved issue concerning self-concept. Calsyn and Kenny (1977) contrasted self-enhancement and skill development models of the relation between self-concept and achievement. According to the self-enhancement model, self-concept is a primary determinant of academic achievement. This model is supported with studies by Marsh (1990) and Shavelson and Bolus (1982). The skills development model posits that academic self-concept is primarily a consequence of academic achievement. Studies by Chapman et al. (1990); Holly (1987); and Midkiff, Burke, Hunt, and Ellison (1986) support this model.

Lecky (cited in LaBeane & Greene, 1969, p. 24) was one of the first investigators to demonstrate that low academic achievement was often due to a child's definition of himself as a nonlearner. The conception of an inability to learn appears to be a type of self-fulfilling

prophecy. Purkey (1970) stated that there is a persistent interaction between the two variables: Self-perceptions influence school achievement and school achievement influences self-perceptions.

Although this study did not examine the causal relationship between academic ability and academic self-esteem, the fact that a relationship exists gives credence to the study of academic self-esteem.

Adolescence

Over the years, self-concept researchers have examined many subgroups of the population; however, adolescence has attracted the largest amount of research (Wylie, 1989). Due to physical spurts of growth at this time, historically this age has been thought of as a time of massive changes in an individual's personality and, in particular, his or her self-concept. Erikson (1968) believed that the adolescent years were filled with turmoil which he labeled Sturm und Drang, meaning storm and stress. His theory, however, was based on clinical studies he had cause to treat and not, therefore, generalizable to the rest of the adolescent population. Most surveys of normal youth do not support the conception of Sturm und Drang. Studies by Dusek and Flaherty (1981) and supported by others (Carlson, 1965; Engel, 1959; and Monge, 1973) discount this theory after these researchers administered both longitudinal and cross sectional studies. Dusek and Flaherty (1981) concluded that the adolescent self-concept, like the continuation of the child self-concept, develops in a basically continuous and stable manner with change occurring slowly and gradually at the individual subject level. Carlson (1965), in a 2-year longitudinal study, found a relatively

high degree of stability in adolescents, independent of age, gender, or intelligence. Engel (1959), also working with students over a 2-year period, found self-concept in adolescence to be stable and independent of gender differences. Monge (1973) examined a 6-year period of adolescence (Grades 6-12) and found that self-concept was essentially constant throughout the 6 years.

Contrary to these findings, and in support of Erikson (1968), in a study involving early adolescents (Simmons & Rosenberg, 1973), it was found that 12- and 13-year-olds exhibited greater instability of the "self-image," or self-concept, and lower self-esteem, as compared to children in the 8 to 11 age group. Interestingly, students who entered junior high school during their 12th or 13th year showed considerably more disturbance in their self-concept than did those who remained in the elementary building.

A study of the differences between real and ideal self-image by Katz and Zigler (1967) also seems to support Erikson's (1968) original theory of adolescent turmoil. In this study of 5th, 8th, and 11th graders, they found that self-image disparity increased with age, with the greatest change occurring between 10 and 13 years of age. However, self-concept is not what is really being examined in this study. What is being examined is the difference between what a student thinks he is and what he wishes he were.

Other studies by Piers and Harris (1964) and Coopersmith (1967) support the belief that once a self-concept is established, it appears relatively resistant to change, even through the adolescent years. Coleman (1974) found that the proportion of disturbed youngsters

remained constant at each age. He stated that there appears to be little evidence to support the idea of increased turmoil at the adolescent level, although there are children at all ages who suffer from negative self-esteem. Coleman (1978) later developed the focal point theory of adolescence which states that developmental issues come into prominence at various ages and are dealt with as they appear. The degree of upset depends on the number of issues faced at a given time. For most adolescents, this maturation process is a relatively smooth transition.

Longitudinal studies more often found continuity of self-concept among the subjects. Researchers were better able to measure change in this type of study, yet found very little. Cross sectional studies by age found greater change in the self-concept. The difference in research design may account for some of the variation in these studies. Perhaps other factors, or the type of instrument used, is more important than the factor of age. In Simmons and Rosenberg's (1973) study, the child's environment appears to have a stronger effect than age-maturation on self-image, as the self-concepts of the students who remained in the elementary were more stable than of those who entered junior high. In Coleman's (1974) study of real and ideal self-image, he found that future identity conflicts increased with age, but not necessarily self-concept.

This author believes that the preceding literature review shows that adolescence may be a period of change, but that self-concepts remain relatively stable during this time. Self-esteem, the valuation made by a person concerning his or her self-concept and, in particular, the subcomponent of academic self-esteem, is also still alterable.

Academic self-esteems in adolescents are not solely dependent on biological or psychological factors, but may be more accurately portrayed as a complex interaction between environmental, biological, and psychological factors. The two environmental factors focused on in this paper are teacher/student relationships and school climate.

Teacher/Student Relationships and Academic Self-Esteem

One school of thought on the issue of how a person's attitude about himself develops is that of symbolic interactionism. This theory asserts that "one's self-concept is a reflection of one's perception about how one appears to others" (Shrauger & Schoeneman, 1979, p. 549). Cooley, (cited in Burns, 1979) generally credited as the first interactionist, introduced the concept of the "looking glass self" (p. 161) to describe the self as perceived through the reflections in the eyes of others. Burns went on to say:

A basic tenet of both cognitive psychology and phenomenology is that behavior is the result of the individual's perception of the situation, not as it actually exists but rather as it appears to him at the moment of behavior. Perception is other than what is physically out there. Yet what is perceived is "reality" to the perceiver, the only reality by which he can guide his behavior. (p. 32)

Shrauger and Schoeneman (1979) examined a number of studies comparing perceived other-evaluations and actual other-evaluations. They found that approximately half the studies reviewed showed no significant correlations between self-perceptions and others' actual evaluations (p. 552). However, these same studies showed modest to strong correlations between individuals' perceptions of themselves and the way they assume others perceive them, supporting Burns's (1979)

theory that perception is reality to the perceiver.

In examining the looking glass self, Mead (1934) stated that the looking glass includes more than individuals, reflecting also one's whole sociocultural environment. More recently, Kinch (1963) has developed four components basic to the symbolic interactionist self theory: one's self-concept, one's perception of others' attitudes and responses, the actual attitudes and responses of others, and one's behavior.

Self-perceptions, then, are largely influenced by one's environment and particularly by persons perceived as significant others. There are many ways that a person can become significant; however, Hattie (1992) stated that people do not become significant merely because they have specific roles or power. A significant other refers to those persons who are important or who have significance to the individual because he senses their ability to affect his life in some way. A significant other is a person who most intimately administers the "rewards" and "punishments" in a person's life (LaBeane & Green, 1969, p. 17). Rosenberg (1989) stated that for persons to become significant, the perceiver must value their opinion and consider them credible. Shrauger and Schoeneman (1979) added consistency of feedback, if the opinion was favorable, candidness of the evaluator, perceived motive, and the number of evaluators as other moderators that would affect another person's effect on an individual.

Kash and Borich (1978) stated that a significant other does not necessarily have to choose to be one, rather he becomes one by virtue of his position. "One is chosen and denied the option of declining the honor" (p. 13).

Environmental factors, such as where and with whom time is spent, change significantly during a person's life. The theory that people's self-concepts are strongly affected by the significant others to whom they interact has not generally been questioned. What has provided some material for debate is: Who are the significant others at various times in a person's life? In the developmental years, the home and the parents dominate the child's life; but as the child reaches pre-adolescence and adolescence, much of this time is spent in school and with extracurricular activities with teachers and peers. Misty (cited in Thomas, 1973) indicated that "the school is second only to the home in determining an individual's attitudes of self acceptance and self rejection" (p. 6).

A significant other is a person who most intimately administers the "rewards" and "punishments" in a person's life (LaBeane & Greene, 1969, p. 17). Therefore, although teachers are one of many significant others to a student, they are foremost in the academic self-esteem of a student, as it is the teacher who most intimately administers rewards and punishments to a student in that area of self-esteem. Not only is it the teacher who marks the report card at the end of each marking period, but it is also the teacher who gives daily feedback concerning the student's participation in the class.

A study by Brookover et al. (1965) attempted to increase the academic self-esteem of students by incorporating high school counselors and outside "experts" in the feedback process. Results of this study showed that this feedback made no significant difference in the attitudes of the students. Perhaps this was because Brookover et al.

were attempting to incorporate significant others rather than implementing those who are natural to the educational setting, such as the classroom teacher.

As stated earlier, what a person believes about himself is partly a function of his interpretation of how others see him. He infers how others see him from their behavior toward him (LaBeane & Greene, 1969, p. 10). Davidson and Lang (1960) found that the more positive the children's perception of the teacher's feelings toward them, the better their achievement. Other studies as reported by Silvernail (1985) discovered that students' perceptions of their teachers' feelings toward them were highly correlated with self-perception. Students who felt they were liked and respected by their teachers had higher self-esteem, while those who believed they were disliked by their teachers were more dissatisfied with themselves. If an individual finds the relationship satisfying, then he or she will tend to behave in such a way as to meet the expectations of the other (Kelman, 1961).

Thomas (1973), in his review of research in self-concept and education, stated that the exact relationship between teacher perception of a child and that child's self-concept remains confused. What Thomas has failed to take into account is that the teacher's perception of the child is not necessarily the student's perception of how that teacher feels. There is little correlation between what the teacher states he or she feels toward his students and the perception of the student.

The above literature review concerning the affects others have on an individual's self-esteem suggests the need to further examine the

relationship between students' perceptions of teacher/student relationships and academic self-esteem.

School Climate and Academic Self-Esteem

Although of major importance as a significant other, the teacher is only one aspect of the total school environment, which serves two main functions in the self-concept process: that of reflection and interpretation. "Teachers who are not valued by students for themselves or their functions can still have an impact on the self-concept of a pupil through their impact on the pupil's environment (Kash & Borich, 1978, p. 44). Beane, Lipka, and Ludewig (1980) described two types of environments commonly found in high schools. The humanistic environment uses democratic procedures, with students as participants in decision making, and demonstrates personalness and interaction among the members of the school community. The custodial environment demonstrates maintenance of order with autocratic procedures, student stereotyping by teachers, punitive sanctions, and impersonalness.

Barker and Gump (1964) stated that the whole school enters into the education process, not just the individual and the teacher, and that "classroom behavior settings comprise about 20% of all school settings" (p. 198). To look at how the schools affect students, one must look at all the components with which students have immediate and continuous contact which make up the school environment, or climate.

Tagiuri (1968) stated that there are four dimensions of an environment. The ecology is made up of the physical and material aspects of the school, while the milieu is the social dimensions concerned with

the presence of persons and groups. The culture of an environment is the belief systems, values, cognitive structures, and meaning of the institution. Finally, there is the social system, which is concerned with the patterned relationships of persons and groups. Classrooms are nested within this total school setting and have climates that are directly or indirectly influenced by the wider school climate (C. S. Anderson, 1982), which affects both the cognitive and affective behaviors of the students.

Although the ecological variables, such as course offerings, size of library, number of staff per student, etc., have been frequently investigated due to ease in measurement, there has been low or inconsistent relationships with student outcomes (C. S. Anderson, 1982). It may be that ecological variables do not operate directly on student outcomes, but rather through the mediating effect of school climate.

The current review of literature concerning school settings appears to be focusing on the climate of the building, rather than the ecological factors as it has previously done. Therefore, this study examined the relationship between students' perceptions of the school climate and academic self-esteem.

Level of Involvement

Kleinert (1969) and Melnick (1989) agreed that extracurricular activities have a very positive effect on the outcomes of schooling. In one study, students in small schools participated in an average of 7.6 different activities, while students in the larger schools averaged about 2.2 activities (Melnick, 1989).

Marginal students are more often the ones affected by the small school, according to Barker and Gump (1964). Individuals in underpopulated settings are pressed into service due to the lack of participants. In small schools, marginal students experience the same involvement as higher ability students. In larger schools, marginal students are not pressed into service and drift into the noninvolvement of the lower ability student.

Since the literature is sparse concerning the relationship between a student's level of involvement and the variables of academic self-esteem, teacher/student relationships, and school climate, these areas were examined in this study.

Size of School

Social systems and the interaction of their members differ due to the size of the group involved. Allport (1955) stated "as a group becomes smaller, its identity seems to become increasingly dependent on maintaining each one of its members" (p. 29). In a larger group there is a higher proportion of noncontributors. Barker and Gump (1964) built on Allport's theory in their study of eastern Kansas schools. Although they found the expected increased differentiation of activities in the larger schools, there was clear evidence of greater participation in school activities by the students in the smaller schools. As these students were more involved with school activities, they were also more involved with the teachers who usually advised and supervised the nonclassroom activities. Repeated contacts between the same teacher and the student led to closer social bonds. Barker and Gump (1964) found that the

differences in teacher/student interaction were so great that they pointed to a different way of student life between the small and large schools. In the larger schools it is more difficult to ensure student participation and the acquiring of a genuine sense of attachment and contribution to group goals.

Although Allport (1955) examined size of groups and interaction among members, and Barker and Gump (1964) examined size of school and its effects on students, no current studies were located. Addressing size of school and its relationship to school climate, academic self-esteem, teacher/student relationships, and level of student involvement will help to fill this void.

Conclusion

From the previously cited literature, this author concludes that differences in adolescent self-esteem may be dependent upon situational factors, and not just biological or psychological factors. Significant others have been shown in the literature to be a major component of developing self-esteem.

Recently writers have divided overall self-concept into facets. Because academic self-esteem is a facet of overall self-concept, this author believes that environmental factors and significant others in the academic setting will affect academic self-esteem. One situational factor that could be linked to academic self-esteem is that of school climate; therefore, this author examined the relationship between academic self-esteem and school climate. One of the persons shown in the literature to be a significant other to adolescents is the classroom

teacher. Therefore, this author examined the relationship between academic self-esteem and teacher/student relationships.

In the literature on school climate, there is evidence that the size of the school influences the school climate. Part of this difference is attributed to the higher level of student involvement possible in the smaller school setting. This author not only looked at the relationships between academic self-esteem and school climate, and academic self-esteem and teacher/student relationships, but also how these relationships differed according to the size of the school.

CHAPTER III

METHODS AND PROCEDURES

The purpose of this study was to determine relationships among academic self-esteem of high school students, students' perceptions of how teachers view them, students' perceptions of the school climate, students' perceptions of available school activities, and to establish relationships among these measures. A second purpose of the study was to analyze the above measures by students' level of involvement in school activities and the size of the high school.

Research Hypotheses

The review of literature in Chapter II surrounding the questions in Chapter I has led to the construction of the following hypotheses:

Hypothesis 1: There is a direct relationship between high school students' perceptions of teacher/student relationships and academic self-esteem.

Hypothesis 2: There is a direct relationship between students' perceptions of the school climate and academic self-esteem.

Hypothesis 3: There is a relationship in the number of activities in which students are involved and academic self-esteem.

Hypothesis 4: There is a relationship between the number of activities in which students are involved and students' perceptions of teacher/student relationships.

Hypothesis 5: There is a relationship between the number of activities in which students are involved and students' perceptions of the school climate.

Hypothesis 6: There is a relationship between the size of the school and high school students' perceptions of the school climate.

Hypothesis 7: There is a relationship between the size of the school and students' academic self-esteem.

Hypothesis 8: There is a relationship between the size of the school and high school students' perceptions of teacher/student relationships.

Hypothesis 9: There is a relationship between the size of the school and level of student involvement.

Population

The subjects in this study were students from 16 high schools in lower Michigan (see Appendix E). Twelve of the high schools had a population of 200-500 students and are referred to as small schools in this study. The other four schools housed between 1,500 and 2,000 students and are referred to as large schools. The schools used in the study were drawn from a pool of schools that fit the size and location requirement. Initial contact with the randomly chosen school was by an introductory letter which explained the study, the school's part in the study, and the offer of further explanation if more information was needed (see Appendix D). As most schools in Michigan are in the process of school improvement projects under the direction of the State Board of Education, data collected from the schools were offered to

them in exchange for their cooperation in this project.

Using 4 large schools and 12 small schools does reflect the original pool of schools, as 38 schools fit the requirements of a large school in the original pool, and 107 fit those of the small school. In this study 25% of the schools used were large; and in the original pool, 26% of the schools were large. Likewise, 23% of the students in the study attended a large school. Thus, although the number of students were not equal in this study, the sample does reflect the population of the chosen area.

Once the schools were identified, the administrator or contact person was asked to identify four classrooms, one from each grade level, 9 through 12. These classrooms had to represent the entire span of abilities, and not be a class limited to a certain population, such as a basic skills class or an advanced placement class. Each class had approximately 25 students. To help assure this criterion was met, each teacher who participated filled out a sheet stating their name, grade level and subject of the participating class, and the number of students in that class who received each academic grade at the last marking period (see Appendix H).

As data were collected from 64 classrooms, by 62 different teachers, an exact script for collecting the data was enclosed to increase the standardization of procedures (see Appendix G).

From the 16 schools, 1,319 students participated in the study, 1,023 attending a small school and 296 attending a large school. There were 345 freshmen, 296 sophomores, 345 juniors, and 330 seniors. Of these students, 723 were female and 586 were male. The racial

make-up of the study was 1,114 Whites, 62 Blacks, 59 Hispanics, 29 of mixed race, 19 American Indian, and 11 Asian Americans.

In order to determine generalizability of the study, comparisons were made on population ratios between the races in the selected sample and other populations based on information from the Michigan Department of Education. The original population included high schools with student populations of 200-500 and 1,500-2,000 in lower Michigan excluding the thumb area of the state and the Detroit Public School system (see Appendix C). As Table 1 shows, comparisons were made among the selected sample, the original population, all Michigan high schools regardless of size and location excluding Detroit Public Schools, and finally, all Michigan high schools including Detroit Public Schools.

Table 1
Percentage Breakdown of Students by Race

Race	Original population	Selected sample	Michigan high schools minus Detroit	All Michigan high schs.
American Indian	1.44	.68	1.13	.99
Asian	.83	1.89	1.43	1.28
Blacks	4.70	14.35	8.00	14.97
Hispanics	4.47	3.28	2.08	1.96
Whites	84.46	79.80	87.35	74.59
Others	2.20	N/A	N/A	N/A

These data showed only a 1% difference in percentages among the American Indian and Asians in all four groups and less than a 3% difference in percentages among the Hispanics in all four groups. Although the percentage of the sample of Blacks differs almost 10% from the original population and over 6% from all Michigan high schools excluding Detroit Public Schools, there is only 0.62% difference between the selected sample and the percentage of all Michigan high schools including Detroit Public Schools. This study would appear, then, to be generalizable to the population of all Michigan high schools.

Instruments

Hattie (1992) stated that of the 128 studies he examined, the most often used tests were Coopersmith's Self-Esteem Inventory (Coopersmith, 1967), Brookover's Self-Concept of Ability Scale (Brookover, 1962), and Piers-Harris Children's Self-Concept Scale (Piers & Harris, 1964). Neither Coopersmith's nor Piers and Harris's were designed for the population or focus of this study. Piers and Harris's was developed for elementary students and Coopersmith's inventory looked at antecedents of self-esteem, focusing on variables in the home. Therefore, Brookover's (1962) Self-Concept of Ability Scale was used in this study as a measure of academic self-esteem as well as a comparison instrument to the Academic Self-Esteem Inventory designed for this study by the author.

Brookover's Self-Concept of Ability Scale

Brookover's (1992) Self-Concept of Ability Scale (see Appendix K) is widely used and appears to be highly regarded as an instrument for measuring self-concept of high school students by investigators in the field.

Although this instrument uses the term self-concept in its title, the description of the instrument more closely resembles the term self-esteem as used by this author and defined in the literature (Germaine, 1978; Robinson-Awana et al., 1986). Brookover et al. (1965) stated that "self-concept of academic ability may vary from time to time with the individual's perception of what significant others think he or she is able to learn [and that this is] not constant over time" (p. 203). Although both self-concept and self-esteem are related to significant others, self-esteem fluctuates more with the specific environment, as shown earlier in the literature review.

Brookover's (1962) Self-Concept of Ability Scale is an eight-question instrument using the Guttman summated rating scale method of response, with reversed order scoring: A = 5, B = 4, etc. Total scores range from 8 to 40, with 40 being the highest degree of self-concept.

Data were made available by the author concerning internal reliability and predictive validity, stating that the Hoyt coefficient of reliability for the secondary level self-concept scale was .82 and .84 for males and females, respectively, and had a correlation at about .5 with mean school grades (Brookover, 1962).

The Academic Self-Esteem Inventory

The Academic Self-Esteem Inventory (see Appendix L) is a 10-question binary choice item survey, designed by the author, which measures the correctness of information as it pertains to the test taker. This instrument was designed to measure only students' attitudes about themselves as learners, with no questions dealing with facts such as actual grades, academic grades in comparison to others, or reference to career choice as were included in Brookover's (1962) Self-Concept of Ability Scale.

In developing this instrument, the author first listed behaviors which she believed would be exhibited by high school students with low academic self-esteem and with high academic self-esteem. To verify her list and the terminology used, the author asked 25 high school students to do the same activity.

After reworking the items to represent positive and negative statements, the author presented the statements/questions to her dissertation seminar class and instructor. After giving this group the definition of academic self-esteem as used in the literature and this dissertation, they were asked to choose the statements and questions that they thought directly measured the construct of academic self-esteem. The items that were determined by this group to measure the construct as defined in this study then became the Academic Self-Esteem Inventory.

A Pearson product-moment correlation coefficient was used to compare the scores of the Self-Concept of Ability Scale (see Appendix K) and the Academic Self-Esteem Inventory (see Appendix L). A

correlation of $+.39$ was determined, which states that approximately 15% of the variance of the Academic Self-Esteem Inventory can be associated with the variance in the Self-Concept of Ability Scale. This shows that there was some linear relationship between the measures on the two tests, but not much.

National Association of Secondary School
Principals School Climate Survey

The National Association of Secondary School Principals (NASSP) School Climate Survey (Kelley et al., 1986, see Appendix J) is a set of 58 questions, with Likert scale responses. This survey collects data on 10 subscales, with this study focusing on two of these subscales: Teacher-Student Relationships (TSR) and Student Activities (SA). The TSR measures the student's perceptions of the quality of the interpersonal and professional relationships between teachers and students. The SA subscale measures a student's perceptions about opportunities for involvement in school sponsored activities. The average internal consistency measure of this survey is $.81$, with scale range from $.67$ to $.92$. The reliability of the TSR is $.87$ and the SA is $.72$ (Halderson, et al., 1989). The scores on the total instrument were used as well as the scores of two of the subscales: those from the Teacher/Student Relationships (TSR) subtest and the Student Activities (SA) subtest. The Teacher/Student Relationships subtest measured students' perceptions of the relationships between the teachers and the students, and the Student Activities subtest measured the students' perceptions of opportunities available for student participation.

This inventory was chosen as it was written specifically for the population involved in this study, with acceptable reliability and validity measures.

Demographic information

The demographic section of the NASSP survey provided data on the student's grade level, sex, race, and level of involvement in extracurricular activities. Class demographic information was also collected by the questionnaire sheet each participating teacher was asked to fill out, which included information on the number of students participating, academic grade span in that class, grade level, and subject of class (see Appendix H). No information was collected on individual grades, as this study deals only with students' perceptions of their abilities and not on actual grades received.

Each school was identified with a school number and each student with an individual number for matching of responses from the three instruments. No names of students or schools are used in the dissertation, except for a listing of the participating schools in Appendix E.

Students from small schools and large schools were determined by the school number identification on their answer sheet.

Procedures

The contact person distributed the material for collecting data to four high school teachers, one from each grade level. The class sizes ranged from 16 to 31, with the average class size being 24. The academic grades as reported on the teacher questionnaires showed that

the overall population of the classes were a mix of 312 A's, 446 B's, 308 C's, 152 D's, and 101 E's.

After the inventories and the teacher questionnaire were completed, a student from each class sealed all the materials in the self-addressed stamped envelope and returned it to the office for mailing. The entire time required to gather the information from each class ranged from 30 to 60 minutes.

Data Analysis

The collected data was analyzed by the researcher using the Statistical Package for the Social Sciences (SPSS, Norusis, 1988).

A Pearson product-moment correlation coefficient was used to compare the scores of the Self-Concept of Ability Scale, the Academic Self-Esteem Inventory, the School Climate Survey and its subtests of Teacher/Student Relationships and Student Activities, and the level of involvement.

An analysis of variance (ANOVA) was used to compare the means of the scores collected on school climate, teacher/student relationships, student activities, level of involvement of students, the Academic Self-Esteem Inventory, and the Self-Concept of Ability Scale.

The Least Significance Multiple Range test was used to determine significant differences on all ANOVAs.

A t test was used to analyze the means of the different size schools on the School Climate Survey, the Academic Self-Esteem Inventory, the Self-Concept of Ability Scale, the Teacher/Student Relationships subtest and the level of involvement of the students.

CHAPTER IV

FINDINGS

The purpose of this study was to determine relationships among academic self-esteem of high school students, students' perceptions of teacher/student relationships, and students' perceptions of the school climate. A second purpose of the study was to analyze the above measures by students' level of involvement in school activities and the size of the school.

Data for this study on academic self-esteem of high school students were collected by three surveys: the National Association of Secondary School Principals (NASSP) School Climate Survey (Kelley et al., 1986, see Appendix J), the Self-Concept of Ability Scale (Brookover, 1962, see Appendix K), and the Academic Self-Esteem Inventory (see Appendix L). Demographic information on grade level, sex, race, and level of involvement in school activities was collected on the survey answer sheet (see Appendix I). School codes and student codes were recorded on the completed answer sheets by the author. Computations on the collected data were carried out by the researcher on Western Michigan University's VAX computer system using the Statistical Package for the Social Sciences (SPSS, Norusis, 1988).

Hypothesis Results

An analysis of variance (ANOVA) was used to compare the means of the scores collected on school climate, teacher/student relationships, student activities, the level of involvement of students, the Academic Self-Esteem Inventory, and the Self-Concept of Ability Scale. An alpha of .05 was used to test each of the hypotheses.

A Pearson product-moment correlation coefficient was used to compare the scores of the following five instruments: Self-Concept of Ability Scale (see Appendix K), Academic Self-Esteem Inventory (see Appendix L), Teacher/Student Relationships subtest (see Appendix J), School Climate Survey (see Appendix J), and Student Activities subtest (see Appendix J), and the level of involvement in school activities of the students. The results are reported in Table 2.

All correlations rejected the nulls at a .05 alpha level as $p = .000$ for all. The size of all groups was 1,319 students. This shows that there is some kind of a relationship between all of the variables; however, some are slight.

The strongest correlation at .75 was between the scores of the School Climate Survey and the scores of the Teacher/Student Relationships subtest which showed 56% shared variance. The scores of the School Climate Survey and the scores of the Student Activities subtest had a correlation of .57, with a shared variance of 33%.

Table 2
Instruments and Involvement Correlation Coefficients

Instrument	Self-Concept of Ability	Academic Self-Esteem	Teacher/Student Relationships	School Climate	Student Activities
Academic Self-Esteem	.385				
Teacher/Student Relationships	.161	.245			
School Climate	.209	.270	.753		
Student Activities	.162	.170	.328	.572	
Level of involvement	.285	.163	.114	.156	.194

Teacher/Student Relationships and Academic Self-Esteem

Hypothesis 1: There is a direct relationship between high school students' perceptions of teacher/student relationships and academic self-esteem.

A Pearson product-moment correlation coefficient was used to compare the scores of the Teacher/Student Relationships subtest of the NASSP School Climate Survey (see Appendix J) and the Academic Self-Esteem Inventory (see Appendix L). A coefficient of .25 was determined to be significant at the .05 alpha level of significance as shown in Table 5. This shows that only 6% of the variance of the Teacher/Student Relationships score can be associated with the score on the Academic Self-Esteem Inventory.

Likewise, a Pearson product-moment correlation coefficient was used to compare the scores of the Teacher/Student Relationships subtest of the NASSP School Climate Survey (see Appendix J) and the Self-Concept of Ability Scale (see Appendix K), resulting in a coefficient of .16 which is significant at the .05 alpha level of significance as shown in Table 2. This shows that only 2% of the variance of the Teacher/ Student Relationships score can be associated with the Self-Concept of Ability Scale.

Therefore, findings from both instruments support Hypothesis 1 that there is a linear relationship between high school students' perceptions of teacher/student relationships and academic self-esteem, although it is a slight relationship. There was a higher correlation using

the Academic Self-Esteem Inventory, rather than the Self-Concept of Ability Scale.

School Climate and Academic Self-Esteem

Hypothesis 2: There is a direct relationship between students' perceptions of the school climate and academic self-esteem.

A Pearson product-moment correlation coefficient was used to compare the scores of the NASSP School Climate Survey (see Appendix J) and the Academic Self-Esteem Inventory (see Appendix L). The coefficient of .27 was found to be significant at the .05 alpha level as shown in Table 2.

A coefficient of .21 was found to be significant at the .05 alpha level when a Pearson product-moment correlation coefficient was used to compare the NASSP School Climate Survey (see Appendix J) and the Self-Concept of Ability Scale (see Appendix K) as shown in Table 2.

Findings using both the Academic Self-Esteem Inventory and the Self-Concept of Ability Scale support Hypothesis 2 that there is a linear relationship between students' perceptions of the school climate and academic self-esteem. There is a higher correlation between the School Climate Survey and the Academic Self-Esteem Inventory than between the School Climate Survey and the Self-Concept of Ability Scale, but that difference is slight.

Level of Involvement and Academic Self-Esteem

Hypothesis 3: There is a relationship in the number of activities in which students are involved and academic self-esteem.

The students' scores on the Student Activities subtest of the NASSP School Climate Survey (see Appendix J) and their level of involvement as stated on the information sheet (see Appendix I) were shown by ANOVA to have an almost direct relationship using a .05 alpha level, with the exception of students involved in six or more activities. This direct relationship shows that as the mean of the students' perceptions of involvement increases, the mean of the level of involvement also increases. These findings are summarized in Table 3.

Table 3
Mean Scores of Student Activities Subtest of NASSP
School Climate Survey and Level of Involvement^a

No. of activities	Mean	<u>SD</u>	Size	Exact <u>P</u>
0	12.81	4.42	238	.000*
1	13.09	4.49	416	
2	14.52	3.64	219	
3	14.42	4.17	197	
4	15.26	3.53	117	
6+	15.07	4.17	72	
5	15.42	4.69	59	

^aLevel of involvement measured by number of activities.

* $p < .05$.

The Least Significant Difference Multiple Range Test, depicted in Table 4, showed that the mean of the scores of students involved in 2

or more activities was significantly different from the mean of the students involved in no activities or only one activity.

Table 4
Mean Scores of Student Activities Subtest of NASSP
and Level of Involvement Multiple Range Test^a

Mean	No. of activities	Number of activities						
		0	1	2	3	4	5	6+
12.81	0							
13.09	1							
14.42	3	*	*					
14.52	2	*	*					
15.07	6+	*	*					
15.26	4	*	*					
15.42	5	*	*					

^aLevel of involvement measured by number of activities.

*Denotes a significant difference.

An ANOVA was used to compare the means of the scores on the Self-Concept of Ability Scale (see Appendix K) with the student's level of involvement (see Appendix I). A linear relationship was found between the two variables, meaning that the more activities in which students were involved, the higher the mean on the Self-Concept of Ability Scale. By inspecting the means, a direct relationship was found as shown by Table 5.

Table 5
Level of Involvement and Mean Scores of
Self-Concept of Ability Scale^a

No. of activities	Mean	<u>SD</u>	Size	Exact <u>P</u>
0	27.98	4.80	238	.000*
1	28.92	5.02	416	
2	29.70	5.12	219	
3	29.99	5.13	197	
4	31.88	4.19	117	
5	32.61	4.12	59	
6+	33.19	4.67	72	

^aLevel of involvement measured by number of activities.

* $p < .05$.

The Least Significant Difference Multiple Range Test showed that the means of the scores of those students involved in four or more activities differed significantly from the means of the scores of those students involved in three or less activities as shown in Table 6.

Similarly, an ANOVA was used to compare the means of the scores on the Academic Self-Esteem Inventory (see Appendix L) with the student's level of involvement (see Appendix I). A relationship was found between the two variables at the .000 alpha level. The order of the means showed a direct relationship with two exceptions, as shown in Table 7.

Table 6
Level of Involvement and Mean Scores of Self-Concept
of Ability Scale Multiple Range Test

Mean	No. of activities	Number of activities						
		0	1	2	3	4	5	6+
27.98	0							
28.92	1	*						
29.70	2	*						
29.99	3	*	*					
31.88	4	*	*	*	*			
32.61	5	*	*	*	*			
33.19	6+	*	*	*	*			

*Denotes a significant difference.

Table 7
Level of Involvement and Mean Scores of
Academic Self-Esteem Inventory

No. of activities	Mean	<u>SD</u>	Size	Exact <u>P</u>
0	7.91	2.06	238	.000*
1	8.25	2.31	416	
3	8.57	1.85	197	
2	8.61	2.20	219	
4	8.89	1.55	117	
6+	9.06	1.57	72	
5	9.15	2.23	59	

* $p < .05$.

The Least Significant Difference Multiple Range Test showed that there were differences between the means of the scores on the Academic Self-Esteem Inventory by those students involved in two or more activities and the means of the scores of those students involved in one or zero activities. This is shown in Table 8.

Table 8
Level of Involvement and Mean Scores of Academic
Self-Esteem Inventory Multiple Range Test^a

Mean	No. of activities	Number of activities						
		0	1	3	2	4	6+	5
7.91	0							
8.25	1							
8.57	3	*						
8.61	2	*	*					
8.89	4	*	*					
9.06	6+	*	*					
9.15	5	*	*					

^aLevel of involvement measured by number of activities.

*Denotes a significant difference.

Both of these findings support Hypothesis 3 that there is a relationship between the number of activities in which students are involved and academic self-esteem with those students who are more involved having a higher score on the Academic Self-Esteem Inventory.

Level of Involvement and Teacher/Student Relationships

Hypothesis 4: There is a relationship between the number of activities in which students are involved and the students' perceptions of teacher/student relationships.

An ANOVA was used to compare the means of the scores of the Teacher/Student Relationships subtest of the NASSP School Climate Survey (see Appendix J) with the students' level of involvement (see Appendix I). The means of the scores on the subtest increased as the level of involvement increased (except for those students involved in six or more activities) showing a direct relationship with one exception, as depicted in Table 9.

Table 9
Level of Involvement and Mean Scores of Teacher/Student
Relationships Subtest of the NASSP
School Climate Survey^a

No. of activities	Mean	<u>SD</u>	Size	Exact <u>P</u>
0	34.12	9.33	238	.001 *
1	34.99	8.17	416	
2	35.53	8.17	219	
3	36.29	8.43	197	
6+	36.36	9.70	72	
4	37.69	8.35	117	
5	37.83	7.90	59	

^aLevel of involvement measured by number of activities.

*p < .05.

The Least Significant Difference Multiple Range Test showed that the means of students' scores who were involved in four or five activities were significantly different from the means of those students involved in no activities, or only one or two activities. This is shown in Table 10.

Table 10

Level of Involvement and Mean Scores of Teacher/Student Relationships Subtest of the NASSP School Climate Survey Multiple Range Test

Mean	No. of activities	Number of activities						
		0	1	2	3	6+	4	5
34.12	0							
34.99	1							
35.53	2							
36.29	3							
36.36	6+							
37.69	4	*	*	*				
37.83	5	*	*					

*Denotes a significant difference.

The findings support Hypothesis 4 that there is a relationship between the number of activities in which students are involved and students' perceptions of teacher/student relationships. If the mean of the group involved in 6+ activities was removed, there would be a direct relationship between the number of activities in which students

are involved and students' perceptions of teacher/student relationships. As the number of activities students are involved in increases, the mean on the Teacher/Student Relationship subtest of the NASSP School Climate Survey increases.

Level of Involvement and School Climate

Hypothesis 5: There is a relationship between the number of activities in which students are involved and students' perceptions of the school climate.

An ANOVA was used to compare the students' level of involvement and their scores on the School Climate Survey (see Appendix J). A relationship was determined at the .000 alpha level as shown in Table 11.

Table 11
Level of Involvement and Mean Scores of the
NASSP School Climate Survey

No. of activities	Mean	<u>SD</u>	Size	Exact <u>P</u>
0	161.14	33.28	238	.000*
1	164.00	31.04	416	
2	171.24	30.59	219	
6+	171.76	39.77	72	
3	173.90	29.88	197	
4	176.95	29.91	117	
5	177.46	32.51	59	

*p < .05.

Upon further examination with the Least Significant Difference Multiple Range Test, groups whose means were significantly different on the School Climate Survey were those involved in two or more activities and those involved in zero or one activity as shown in Table 12.

Table 12

Level of Involvement and Mean Scores of the NASSP
School Climate Survey Multiple Range Test

Mean	No. of activities	Number of activities						
		0	1	2	6+	3	4	5
161.14	0							
164.00	1							
171.24	2	*	*					
171.76	6+	*	*					
173.90	3	*	*					
176.95	4	*	*					
177.46	5	*	*					

*Denotes a significant difference.

The findings support Hypothesis 5 that there is a relationship between the number of activities in which students are involved and students' perceptions of the school climate with those students who are involved in more school activities having a higher score on the NASSP School Climate Survey. If the mean of the group involved in 6+ activities was removed, there would be a direct relationship between the

number of activities in which students are involved and students' perceptions of teacher/student relationships. As the number of activities students are involved in increases, the mean on the School Climate Survey increases.

Size of School

All students who attended a school of 200-500 were placed in Group 1, and all those attending a school of 1,500-2,000 were placed in Group 2. A t test compared the means of the scores of the two groups to determine significance on the School Climate Survey, the Academic Self-Esteem Inventory, the Self-Concept of Ability Scale, the Teacher/Student Relationships subtest, and the level of involvement of the students.

Size of School and School Climate

Hypothesis 6: There is a relationship between the size of the school and high school students' perceptions of the school climate.

The mean of the scores from the students in small schools on the NASSP School Climate Survey (see Appendix J) were compared with the mean of the scores from the students in the large schools. A relationship was found on a t test between the two variables at the .05 alpha level showing that the mean of the scores of the small schools on the NASSP School Climate Survey was significantly higher than the mean of the scores of the large schools as shown in Table 13.

Therefore, the data support Hypothesis 6, that there is a relationship between the size of the school and high school students'

Table 13
Size of School and Mean Scores of the NASSP
School Climate Survey

	Mean	<u>SD</u>	Size	Exact <u>P</u>
Small schools	170.76	31.71	1,023	.000*
Large schools	160.00	29.58	296	

* $p < .05$.

perceptions of the school climate. The mean of the scores of the students from small schools was significantly higher than the mean of the scores of the students from large schools on the School Climate Survey.

Size of School and Academic Self-Esteem

Hypothesis 7: There is a relationship between the size of the school and students' academic self-esteem.

The mean of the students' scores from the small schools on the Academic Self-Esteem Inventory (see Appendix L) and the mean of the students' scores from the large school were compared using the t test. No relationship was found between the two variables at the .05 alpha level, as shown in Table 14.

The mean of the students' scores from the small schools on the Self-Concept of Ability Scale (see Appendix K) and the mean of the students' scores from the large school were compared using the t test. A relationship was found between the two variables at the .05 alpha level showing that the mean of the scores of the large school was

Table 14
Size of School and Mean Scores of Academic
Self-Esteem Inventory

	Mean	<u>SD</u>	Size	Exact <u>P</u>
Small schools	8.45	2.09	1,023	.798
Large schools	8.41	2.18	296	

*p < .05.

significantly higher than the mean of the scores of the small school on the Self-Concept of Ability Scale, as shown in Table 15.

Table 15
Size of School and Mean Scores of the
Self-Concept of Ability Scale

	Mean	<u>SD</u>	Size	Exact <u>P</u>
Small school	29.45	5.20	1,023	.001 *
Large school	30.60	4.64	296	

*p < .05.

Therefore, the two inventories, the Self-Concept of Ability Scale and the Academic Self-Esteem Inventory, gave conflicting results when used as a variable with the size of the school. However, as stated at the beginning of this chapter, only 15% of the variance of the Academic

Self-Esteem Inventory can be associated with the variance in the Self-Concept of Ability Scale.

Size of School and Teacher/Student Relationships

Hypothesis 8: There is a relationship between the size of the school and high school students' perceptions of teacher/student relationships.

The means of the students' scores from the small schools and the large schools were found to differ significantly by a t test at the .05 alpha level on the Teacher/Student Relationships subtest of the NASSP School Climate Survey (see Appendix J), as shown in Table 16. The mean of the scores of the students from the small schools was higher than the mean of the scores of the students from the large schools.

Table 16
Size of School and Mean Scores of the Teacher/Student
Relationship Subtest of the NASSP
School Climate Survey

	Mean	<u>SD</u>	Size	Exact <u>P</u>
Small school	35.83	8.70	1,023	.030*
Large school	34.60	8.05	296	

* $p < .05$.

This finding supports Hypothesis 8, that there is a relationship between the size of the school and high school students' perceptions of teacher/student relationships.

Size of School and Level of Involvement

Hypothesis 9: There is a relationship between the size of the school and level of student involvement

The means of the student scores from the small schools and the large schools were found to differ significantly by a t test at the .05 alpha level on the level of involvement (see Appendix I) as shown in Table 17.

Table 17
Size of School and Means of Level of Involvement

	Mean	<u>SD</u>	Size	Exact <u>P</u>
Small school	2.17	1.71	1,023	.000*
Large school	1.47	1.50	296	

* $p < .05$.

These data support Hypothesis 9, that there is a relationship between the size of the school and the level of involvement. The students who attended the small schools were more involved in extracurricular activities than the students who attended the large schools.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

In this study academic self-esteem of high school students, students' perceptions of teacher/student relationships, students' perceptions of the school climate, and the relationships among these measures have been studied. Also studied were the variables of students' levels of involvement in high school activities and the size of the high school.

Discussion of Hypotheses

Hypothesis 1

Hypothesis 1: There is a direct relationship between high school students' perceptions of teacher/student relationships and academic self-esteem.

The findings were in support of this hypothesis as measured by Brookover's (1962) Self-Concept of Ability Scale (see Appendix K) and the author's Academic Self-Esteem Inventory (see Appendix L), in correlation with the Teacher/Student Relationships subtest of the National Association of Secondary School Principals (NASSP) School Climate Survey (Kelley et al., 1986, see Appendix J). The students who had a more positive perception of the teacher/student relationships also had a higher academic self-esteem. These findings support the work of Cooley (1902), Davidson and Lang (1960), Kelman (1961), and Silvernail (1985). All of these researchers support the theory of symbolic

interactionism, which "asserts that one's self-concept is a reflection of one's perception about how one appears to others" (Shrauger & Schoeneman, 1979, p. 549). LaBeane & Greene (1969) stated that the significant other theories emphasize that the person's most important motivations are acquired from his sociocultural situation which is represented by the persons with whom he has significant interpersonal relations (p. 17). Since the teachers are the ones who interact most often with students about grades and ability, it would follow that if students perceived that the teachers had positive feelings about them in the educational setting, then the students' academic self-esteems would also be positive.

Sample statements from the Teacher/Student Relationships subtest (see Appendix J) to which the students were asked to react were: "Teachers praise students more often than they scold them"; "Teachers are patient when a student has trouble learning"; and "Teachers treat each student as an individual." This study shows that students who felt teachers responded to them positively, according to the above statements, had higher academic self-esteems.

Hypothesis 2

Hypothesis 2: There is a direct relationship between students' perceptions of the school climate and academic self-esteem.

This hypothesis was supported by the results of both Brookover's (1962) Self-Concept of Ability Scale and the author's Academic Self-Esteem Inventory. The importance of the total school climate has been addressed in the literature by Barker and Gump (1964), Kash and Borich

(1978), Beane et al. (1980), Tagiuri (1968), and C. S. Anderson (1982). Tagiuri (1968) listed four dimensions of an environment: the ecology, the milieu, the culture, and the social system. All of these were addressed in the NASSP School Climate Survey (see Appendix J), with some of the areas addressed being security and maintenance, administration, student academic orientation, student behavioral values, instructional management, and student-peer relationships.

This hypothesis builds on Hypothesis 1, in that teacher/student relationships are but one factor that make up the school climate. The interaction of the students with the teachers has been shown to be important, but Mead (1934) stated that Cooley's (1902) looking glass self-theory includes more than individuals; it reflects one's whole socio-cultural environment. Kash and Borich (1978) stated that "teachers who are not valued by students for themselves or their functions can still have an impact on the self-concept of a pupil through their impact on the pupil's environment" (p. 44).

Hypothesis 3

Hypothesis 3: There is a relationship in the number of activities in which students are involved and academic self-esteem.

The findings were in support of this hypothesis as measured by both Brookover's (1962) Self-Concept of Ability Scale (see Appendix K) and the author's Academic Self-Esteem Inventory (see Appendix L).

In the Self-Concept of Ability Scale, the more activities in which students were involved, the higher the means on the scale, giving a direct relationship between the two variables.

In the Academic Self-Esteem Inventory, the means of those students who were involved in 3 or 6+ activities were not in order of increasing means, thus there was not a direct relationship. There were, however, significant differences denoted for students involved in 0 or 1 activity from those involved in 2 or more activities.

These results concur with findings in studies by Kleinert (1969), Leonardson (1986), Brennan (1985), Melnick (1989), and Rosenberg (1989), that level of involvement in extracurricular activities has a positive effect on the outcomes of schooling. If students are involved in the school, there is more likelihood that the students will develop ownership in the institution and the facet of the institution dealing with academics.

Brennan (1985) found that peer group formation and the variety of experiences that accompany extracurricular activities, proved significant in explaining the relationship between participation and self-esteem.

Hypothesis 4

Hypothesis 4: There is a relationship between the number of activities in which students are involved and students' perceptions of teacher/student relationships.

The findings were in support of this hypothesis as measured by the Teacher/Student Relationships subtest of the NASSP School Climate Survey (Kelley et al., 1986, see Appendix J). A direct relationship was found for those involved in 0-5 activities and the means of the scores on the subtest.

Hypothesis 5

Hypothesis 5: There is a relationship between the number of activities in which students are involved and students' perceptions of the school climate.

The findings were in support of this hypothesis as measured by the NASSP School Climate Survey (Kelley et al., 1986, see Appendix J). A direct relationship was found for those involved in 0-5 activities and the means of the scores on the subtest. Only the mean for those students involved in 6 or more activities was out of line with the increasing means on the School Climate Survey.

Hypothesis 4 showed that level of involvement was directly related to teacher/student relationships, and a correlation was found of .75 between the scores on the Teacher/Student Relationships subtest and the scores on the NASSP School Climate Survey. Thus, a relationship would be expected between involvement and school climate.

Hypothesis 6

Hypothesis 6: There is a relationship between the size of the school and high school students' perceptions of the school climate.

The findings were in support of this hypothesis as measured by the NASSP School Climate Survey (Kelley et al., 1986, see Appendix J). The mean of the students who attended a school with a population of 200 to 500 was significantly higher than the mean of those students who attended a school with a population of 1,500 to 2,000 students.

Beane et al. (1980) described two types of high school environments: humanistic and custodial, with the humanistic producing more positive feelings. Since the humanistic requires involvement and interaction by all members, this may be more possible with smaller numbers of individuals in the organization. The custodial is represented by autocratic processes and impersonalness, which may in part result from dealing with larger populations.

Hypothesis 7

Hypothesis 7: There is a relationship between the size of the school and students' academic self-esteem.

The findings of the Academic Self-Esteem Inventory (see Appendix L) did not support this hypothesis. No differences were found between the means of the students attending different size schools.

The findings of Brookover's Self-Concept of Ability Scale (see Appendix K) did support this hypothesis. The means of the scores between the two schools were significantly different, but with the means of the scores of the larger schools higher than those of the smaller schools, which does not support the literature of Barker and Gump (1964) or Allport (1955).

Hypothesis 8

Hypothesis 8: There is a relationship between the size of the school and high school students' perceptions of teacher/student relationships.

The findings were supported by the results of the Teacher/Student Relationships subtest of the NASSP School Climate Survey (see Appendix J). The means of the students' scores were significantly higher for the smaller schools than for the larger schools.

These findings support the study of small schools versus large schools by Barker and Gump (1964). Students were more involved with extracurricular activities in the smaller schools, as shown in Hypothesis 9, and these repeated contacts between teacher and student may lead to closer social bonds.

Hypothesis 9

There is a relationship between the size of the school and the level of student involvement.

The findings were supported by the comparison of the number of activities in which a student was involved by the size of the school. Those students who attended small schools averaged 2.2 activities, while those who attended large schools averaged 1.5 activities, supporting the study by Melnick (1989) that students who attend small schools are more involved in extracurricular activities. Downey (1978) stated that the primary dimension (between large and small schools) was an activity factor, with students from smaller schools tending to be more involved in a variety of activities. These differences, as explained by Barker and Gump (1964) and Nelson (1973), were the result of greater opportunity and a need for individual participation in smaller social (ecological) systems. Melnick (1989) found a much wider variance than was found in this study, with students involved in an average of 7.6

activities in the small school, while those in large schools were involved in only 2.2 activities (p. 13). This difference in results between Melnick's study and this study could be attributed to the fact that these data were collected on activity involvement within the confines of the answer key and asked students to record their involvement in 6 or more activities in the category of 6, thus there was no chance for a student to record more than 6 activities.

Limitations of the Study

The original plan for this study was to gather information from 10 large schools and 10 small schools. However, due to the additional steps required in a large school district to approve research studies, most large school districts did not have time to move through the process of acceptance. Since these data were being collected in the spring, many had already reached their limit of studies allowed for that school year. Therefore, the author was able to enlist the cooperation of only four large schools.

The timing of the study's initiation needs to be considered if this study is repeated. The request for the involvement of schools must be made in September or October to allow the larger school districts time for the approval process.

Recommendations for Further Research

Replication of this study is recommended, but with a larger number of schools with a population of 1,500 to 2,000. The differences in numbers, 1,023 students from schools with a population of 200-500

compared with 296 students from schools with a population of 1,500-2,000 may have affected the results of some of the tests. An additional group of students from schools with populations of 750 to 1,200 would also provide further information.

Replication of this study is also recommended at the middle school/junior high level using the same instruments to gather information at a different age level and school structure. As there are different educational philosophies between junior high schools and middle schools, it would be important to include schools of both types and use educational philosophy as a controlled variable.

A causal relationship was not determined concerning the level of involvement in activities and how students responded to academic self-esteem inventories, perception of teacher/student relationships, and school climate. It would seem worthwhile for high schools to provide a variety of extracurricular activities and to encourage students to participate in them, in an attempt to improve these affective areas, which might in turn improve the cognitive areas. A longitudinal study could be done with high school students before they were involved in extracurricular activities, and a year after initial involvement to help determine causality.

The size of the school was not found to relate directly to the academic self-esteem of the students, although there was a relationship found between the size of the school and both the perceptions of teacher/student relationships and school climate. Within the group of schools with populations of 200 to 500, there were schools which were found to differ on the means of both the Teacher/Student Relationships

subtest and the School Climate Survey. Another variable which could be addressed in further studies is that of the leadership style of the principal, which might help to account for the differences in academic self-esteem in schools of the same general size.

Since size was not a determining factor in academic self-esteem in this study, it would have been helpful to know if the larger schools were subdivided into smaller units, such as team teaching or pods, where students were assigned to only a few teachers or a smaller geographical area of the building, thus giving the students the feel of a smaller school within the larger school.

Summary and Implications

After the review of the literature, the survey of selected high school students in Michigan, and the analysis of the data collected concerning the relationships between school climate, teacher/student relationships, and academic self-esteem, this author feels strongly that the affective domain is a vital component in our educational system.

The data collected demonstrates that there is a direct relationship between high school students' perceptions of teacher/student relationships and academic self-esteem. It is important that teachers are aware of the effects they have on their students. In this study, the students' perceptions of how the teachers felt about the students was the variable, not how teachers stated they felt about students. Within the college setting, as teachers prepare for their careers, they are taught how they should relate to the student. In asking teachers how they feel about students, what is often quoted are those textbook answers

learned earlier. But what has been shown to be important is how students perceive the teachers feel about them. The cliché of actions speak louder than words is relevant here. The students' perceptions are based on what they see and hear on a daily basis from the teacher. If teachers are encouraging, positive, and supportive of the student, then students will feel that teachers care, which has been shown to have a positive relationship with how students feel about themselves as learners. If on the other hand, teachers are rigid, negative, and uncaring, the students are more likely to have lower academic self-esteem as shown by this study.

The hypothesis which looked at the relationships between students' perceptions of the school climate and academic self-esteem was also supported by this study. Climate is more than the interaction between student and teacher in the classroom setting. Areas looked at in the NASSP School Climate Survey also included the security and maintenance of the building, the interaction of students with administrators and guidance counselors, the relationships between the community and the school, and how the school's rules and time are managed. All of these areas, along with the total personnel of the school system, establishes the climate of the school. It is important, therefore, that all of these areas are evaluated on a regular basis with the input of the students, because this study has shown that high school students' perceptions of the school climate does have a positive relationship with how they feel about themselves as learners.

It was shown in this study that there is a positive relationship between the number of extracurricular activities in which the students

are involved and their academic self-esteem. Students who are involved in school activities have more of a chance to interact with school personnel on a less formal basis than the student who merely attends classes and then leaves the building. This hypothesis is connected to a previous hypothesis in that teachers who remain after school for coaching, and as class and club advisors, are most likely the teachers who have a positive relationship with the students and enjoy being with them, which will raise students' feelings about themselves.

Other hypotheses also speak to the number of activities in which a student is involved, and this study shows that the students who are involved in extracurricular activities have a more positive perception of teacher/student relationships and the school climate. It was shown earlier that these two areas have a positive relationship with academic self-esteem; therefore, it would follow that improving one area would impact the other areas. Although a causal relationship was not examined between these variables, the fact that those involved in extracurricular activities demonstrated a higher academic self-esteem would suggest that providing a wide range of extracurricular opportunities and encouraging the student with low academic self-esteem to participate might be a step toward improving some students' academic self-esteem.

Data supported the fact that the size of the school has a positive relationship with the high school students' perceptions of school climate, teacher/student relationships, and the level of involvement in extracurricular activities, with the students from the smaller schools showing the strongest relationships. Those who are currently involved with school restructuring and/or consolidation efforts need to take this information

into account as changes are being proposed for school demographics.

In this summary, the author has attempted to point out the interrelatedness of these nine hypotheses and, in particular, students' perceptions of teacher/student relationships, school climate, and academic self-esteem. As schools continue to evaluate their success in meeting students' needs, it is important that they examine closely the affective areas of their educational system. To concentrate solely on the curriculum, or the number of classes a student should have to graduate, is to miss this vital component of student learning. Continual research and educator awareness is needed regarding the affective domain and the cognitive domain of learning, in order to enable students to reach their full learning capabilities. At the present time, many students are limited by their self-evaluations of their ability. Since self-esteem is not fixed, and can be altered by significant others and the school climate in general, educators need to evaluate their learning environments and make conscious improvements in these areas, as the cognitive domain and the affective domain cannot be separated.

APPENDICES

Appendix A
Approval Letter From Human Subjects
Institutional Review Board

Human Subjects Institutional Review Board



Kalamazoo, Michigan 49008-3899

WESTERN MICHIGAN UNIVERSITY

Date: April 7, 1992

To: Dolores J. Howe

From: Mary Anne Bunda, Chair *Mary Anne Bunda*

Re: HSIRB Project Number: 92-03-27

This letter will serve as confirmation that your research protocol, "Academic self esteem and its relationship to students' perceptions of how teachers view them as learners" has been approved under the exempt category of review by the HSIRB. The conditions and duration of this approval are specified in the Policies of Western Michigan University. You may now begin to implement the research as described in the approval application.

You must seek reapproval for any changes in this design. You must also seek reapproval if the project extends beyond the termination date.

The Board wishes you success in the pursuit of your research goals.

xc: Warfield, EDLD

Approval Termination: April 7, 1993

Appendix B
Letter Giving Permission to Use
Self-Concept of Ability Scale

MICHIGAN STATE UNIVERSITY

INTERDEPARTMENTAL GRADUATE PROGRAMS IN URBAN STUDIES
URBAN AFFAIRS PROGRAMS
130 WEST OWEN HALL

EAST LANSING • MICHIGAN • 48824-1109
PHONE: 517/353-9506
FAX: 517/355-1772

February 6, 1992

Ms. Dee Howe
324 Third Street
Lawton, MI 49065

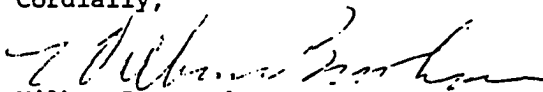
Dear Ms. Howe:

You have our permission to use our Self-Concept of Academic Ability Scale in your dissertation research. You should not, however, confuse this with general self-esteem measures which you seem to do in your letter.

A recent paper discussing the scale and its use is enclosed. It contains copies of the secondary school and elementary school level scales.

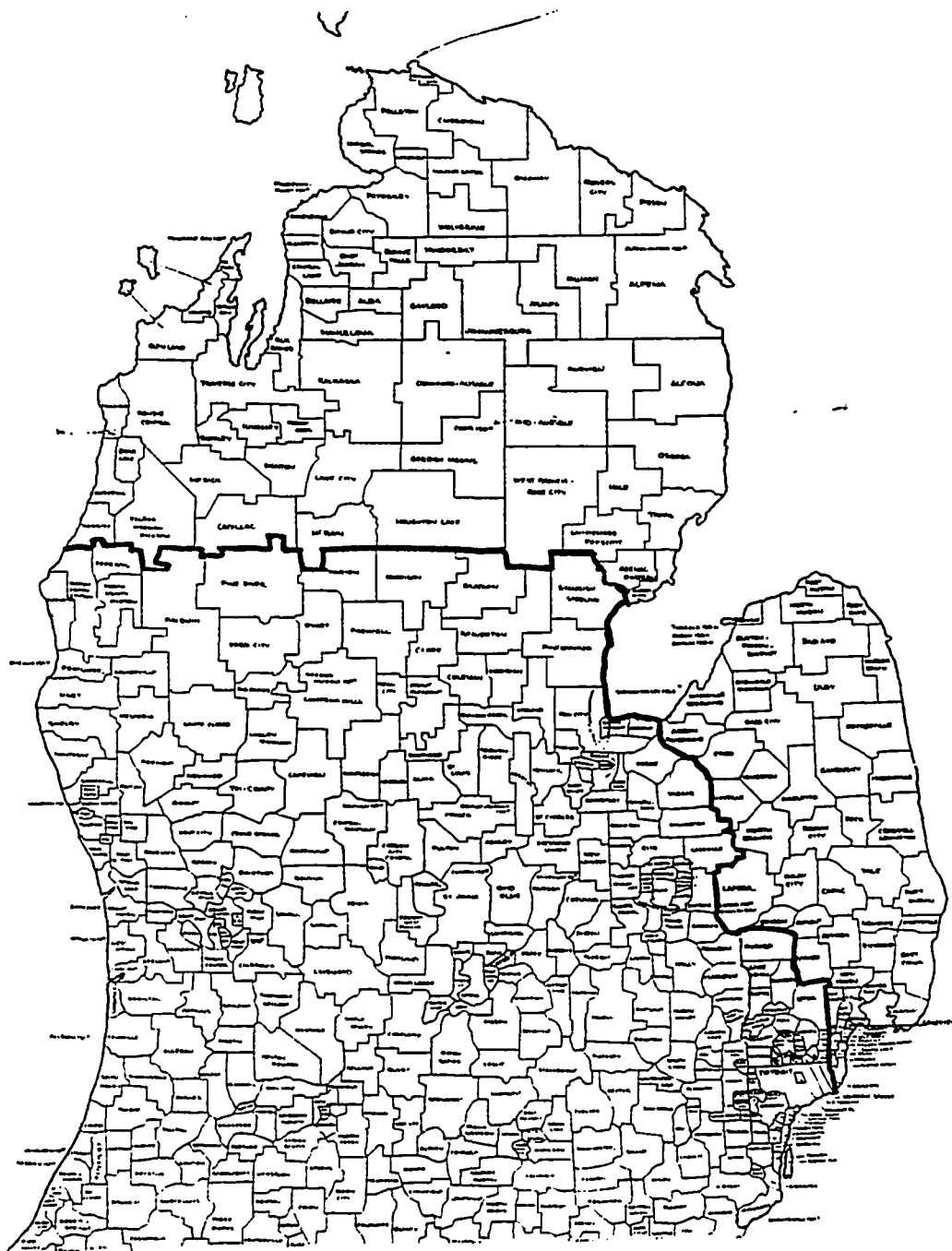
If you use the scale, I would appreciate a report of your research findings.

Cordially,


Wilbur B. Brookover
Professor Emeritus

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Appendix C
Original Population



Appendix D
Correspondence With Principals

Data Collection

Three instruments, along with a biographical questionnaire, will be administered to students at each of the 40 high schools. One instrument will measure the student's academic self esteem; how the student views himself as a learner. Another instrument will measure the student's perception of the teachers' attitudes toward the learner, and the third will measure the student's perception of the overall school climate. No teacher or student names will be collected. The questionnaire will gather information on such items as the student's gender, grade level, involvement in extracurricular activities, and grade point.

The contact person will administer, or delegate the administration of, the instruments and the questionnaire to the students. In the small schools, the instruments will be administered to all English classes, 9 through 11, and to all sections of a required senior class. In a small school the scheduling of the different ability levels of mathematics and science classes affect the academic make-up of the English classes, and it cannot be assured that any one English class will give a random distribution of ability levels. In the large schools, this will be less of a problem, as there is more flexibility in scheduling. Therefore, in the large schools the contact person will be asked to administer the instruments to three English classes at each grade level, as well as three sections of a required senior class. Collecting the data from a similar number of classes will help to equalize the number of subjects from which data is gathered in the small and large schools. The entire time required to gather the information from each class will be approximately 30 to 45 minutes.

Response sheet:

_____ Yes, I am interested in allowing you to collect data in my building for this dissertation project.

_____ I need more information. Please call me at the following time:

_____.

If any of the information is incorrect on the above label, please correct below:

If you would like further correspondence directed to another person, please list that person's title, name, address, and phone number below:

Comments:

(Signature)

Appendix E
Participating Schools

Participating Schools

Camden High School
4971 Montgomery Road
Camden, MI 49232

Churchill High School
8900 Newburgh
Livonia, MI 48150

Decatur High School
110 Cedar Street
Decatur, MI 49045

Eastern High School
220 N. Pennsylvania
Lansing, MI 48912

Everett High School
3900 Stabler Street
Lansing, MI 48910

Goodrich High School
8029 S. Gale
Goodrich, MI 48438

Grant High School
331 E. State Street
Grant, MI 49327

Hesperia High School
96 South Division
Hesperia, MI 49421

Hudson High School
771 N. Maple Grove Ave.
Hudson, MI 49247

Lawton High School
880 Second Street
Lawton, MI 49065

Morenci High School
500 Page Street
Morenci, MI 49256

New Buffalo High School
222 S. Whittaker Street
New Buffalo, MI 49112

Pewamo-Westphalia High School
Rt. 1
Pewamo, MI 48873

Romulus High School
9650 S. Wayne Road
Romulus, MI 48174

Shelby High School
S. Oceana Drive
Shelby, MI 49455

St. Louis High School
201 E. Saginaw
St. Louis, MI 48880

Appendix F
Correspondence With Teachers

880 Second Street
Lawton, MI 49065
April 2, 1992

Dear Teachers:

Thank you for agreeing to administer the enclosed surveys to your students. I know this means an interruption in your class time, but I hope that the importance of this study will make your efforts worthwhile. In addition to being a part of my dissertation entitled "Academic Self-Esteem and Its Relationship to Students' Perceptions of How Teachers View Them as Learners," the information collected will be returned to your school administrator for use in your own school improvement plan.

Enclosed in this packet you will find the script that is to be read to the students and enough material to survey a class of 25 students. While the students are taking the School Climate portion of the inventory, would you please take a moment to fill out the enclosed information sheet on your class. This is to insure that this class represents an across the board ability level. After you have completed the surveys with your students, please place all materials in the stamped, self-addressed envelope, and place in the mail.

Again, thank you for your involvement in this project. If you have any questions, please contact me in the evenings, collect, at 616-624-1826.

Sincerely,

Dolores J. Howe

Appendix G
Teacher Narrative

Script that will be read to the high school students:

The purpose of these surveys is to provide some important information about how you students feel about your school, your teachers, and yourselves. Well thought out and honest answers will be the most helpful as we look at the information you provide for us. We will not be collecting any names or student numbers on these surveys.

Taking part in this survey is optional. If you do not wish to participate in this survey, please put your materials on the corner of your desk, and I will pick those up later. If you are not participating, please read quietly while the rest of the class completes the survey.

Each of you should have four items: a green and white scorable answer sheet, a No. 2 pencil, a blue School Climate Survey, and an Academic Self-Esteem Inventory.

On the answer sheet, you will be asked for some background information about yourself. Please give accurate and honest responses to all items.

Please follow along with me as I review the directions and explain the information needed on the answer sheet.

Do not write on the survey booklet or the inventory sheets. All responses must be made on the answer sheet. These answer sheets will be machine scored.

Be sure to use the No. 2 pencil to mark your answer sheet.

On the answer sheet, find Side 1, and then the section titled "Background Information." This section has a number of boxes and numbers with specific titles.

Do not write anything in the boxes labeled individual ID number or school code.

In the box labeled grade, please darken the circle for your grade in school (9, 10, 11, 12).

In the fourth box labeled role, please darken the number of activities that you are involved in this year in high school. For example, if you play basketball, run track, and are involved in the school newspaper, you would darken the number 3. As the numbers only go up to number 6, if you are involved in 6 or more, please darken the number 6.

Do not write anything in the fifth box.

In the sixth box, please mark your sex (1 = female; 2 = male).

In the seventh box, darken the circle that describes your racial or ethnic heritage. Darken #1 if you are American Indian, #2 if you are Asian

American, #3 if you are Black, #4 if you are Hispanic, or #5 if you are White. Use #6 only if you do not identify yourself with any of these five racial or ethnic groups.

Still looking at Side 1 of the answer sheet, find the section marked Satisfaction Survey. In this section you will mark the answers for the Academic Self-Esteem Inventory, the white sheets. Notice that the first eight questions only have five responses, so you will not use the last column on the answer sheet.

Now, look at the third page of the inventory and you will see that the responses for these questions are "yes" or "no." On the answer sheet you will mark 1 for "yes" and 2 for "no" on Questions 9 through 18. You may begin working on these 18 questions. When you are finished, please wait quietly until the entire class is finished.

(Give time for all to finish.)

Now, turn your answer sheet over to Side 2. This is where you will mark your answers to questions in the blue School Climate Survey. The instructions on the Survey tell you to answer how MOST people would answer the question. Please do NOT answer them in this way. It is important that you answer them the way YOU feel. Please read each statement carefully and darken the circle that corresponds to the answer that most closely reflects YOUR feelings.

(Give time for all to finish.)

Please take a minute to look back over your answer sheet to be sure that you have answered all 60 questions on Side 2 and the 18 questions on Side 1. Also, please be sure that you have filled in the "Background Information" correctly.

Thank you for your time in completing this survey.

Appendix H
Teacher Report Form

School _____

Teacher's Name _____

Subject _____

Grade level _____

Number of students in each ability level as of last report card:

A's _____

B's _____

C's _____

D's _____

E's _____

Please enclose this filled out sheet with finished surveys and all test materials.

Thanks,

Appendix I

Demographics

Demographics

Please mark your answers on the separate answer sheet. Use only a No. 2 pencil. Before you begin the survey, you will be asked to fill in the following information on the answer sheet about yourself and your school:

1. Individual I.D. Number. Your I.D. number at school (students) or Social Security number (teachers, parents, and community members).
2. School Code. (This number will be given to you.)
3. Grade. (if you are a student.) 6 = 6th grade; 7 = 7th grade; 8 = 8th grade; 9 = 9th grade; 10 = 10th grade; 11 = 11th grade; 12 = 12th grade
4. Role. 1 = Student; 2 = Teacher; 3 = School Staff other than Teacher or Administrator; 4 = School Administrator; 5 = Parent; 6 = Community Member other than Parent.
5. Class Code. (This number will be given to you if used.)
6. Sex. 1 = Female; 2 = Male.
7. Race. 1 = American Indian; 2 = Asian American; 3 = Black; 4 = Hispanic; 5 = White; 6 = Other.
8. Number of Activities Involved in.

Source: From School Climate Survey, Form A (p. 1) by E. A. Kelley, J. A. Glover, J. W. Keefe, C. Halderson, C. Sorenson, & C. Speth, 1986, Reston, VA: National Association of Secondary School Principals.

Appendix J
NASSP School Climate Survey Teacher/Student
Relationships Subtest and Student
Activities Subtest

PLEASE NOTE

**Copyrighted materials in this document have
not been filmed at the request of the author.
They are available for consultation, however,
in the author's university library.**

**91-93
95-96**

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Appendix K
Self-Concept of Ability Scale

Appendix L
Academic Self-Esteem Inventory

Academic Self Esteem Inventory

Please mark the answer on the answer sheet that most closely describes you. 1=YES 2=NO

- 9. I think I'm smart.
- 10. I usually try to finish what I start.
- 11. I don't have good ideas to add to class discussions.
- 12. I'm proud of the schoolwork I do.
- 13. I consider myself a dumb person.
- 14. I'm satisfied with my work in most classes.
- 15. My ideas are not very worthwhile.
- 16. I am not capable of earning good grades.
- 17. I've thought of dropping out of school.
- 18. I like to try out new ideas.

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