ED 403 008                                          PS 023 241

AUTHOR          Daniel, Larry G.; King, Debra A.
TITLE           Relationships among Various Dimensions of Self-Esteem
                and Academic Achievement in Elementary Students.
PUB DATE        95
NOTE            33p.
PUB TYPE        Reports - Research/Technical (143)

EDRS PRICE      MF01/PC02 Plus Postage.
DESCRIPTORS     *Academic Achievement; Elementary Education;
                *Elementary School Students; Family Environment;
                Group Dynamics; Interpersonal Relationship; Norms;
                Peer Acceptance; Performance Factors; *Personality
                Traits; *Predictor Variables; Self Concept; *Self
                Esteem; Student Attitudes

ABSTRACT
        This study was conducted to determine the degree to
which children's perceived self-esteem is related to their overall
academic achievement as measured by their performance on a
standardized achievement test battery. Specifically, the study sought
to determine the dimensions of perceived self-esteem that would be
most clearly associated with higher levels of student achievement.
The Self-Esteem Index (SEI) was administered to 208 third-, fourth-,
and fifth-grade regular and special education students. Students' SEI
subscale scores (familial acceptance, academic competence, peer
popularity, and personal security) were correlated with their
national percentile scores on four subtests of the Stanford
Achievement Test. The results confirmed the existence of a positive
relationship between self-esteem, as defined in the SEI, and
achievement. Characteristics associated with higher levels of
academic achievement were academic competence, familial acceptance,
and personal security. In contrast, peer popularity was not highly
correlated with academic achievement. Results suggest that schools
should address both self-esteem and academic achievement as integral
parts of the learning experience. (Contains 28 references.)
(Author/AA)

esteem.mss

ED 403 008

# RELATIONSHIPS AMONG VARIOUS DIMENSIONS OF SELF-ESTEEM AND ACADEMIC ACHIEVEMENT IN ELEMENTARY STUDENTS

Larry G. Daniel        Debra A. King

University of Southern Mississippi

Running Head: Self-Esteem and Academic Achievement

2

# ABSTRACT

The purpose of the present study was to determine the degree to which children's perceived self-esteem is related to their academic achievement as measured by their performance on an achievement test battery. The Self-Esteem Index (SEI) was administered to 208 third-, fourth-, and fifth-grade regular and special education students. Students' SEI subscale scores (familial acceptance, academic competence, peer popularity, and personal security) were correlated with their national percentile scores on four subtests of the Stanford Achievement Test. Results indicated a moderate positive correlation between self-esteem and achievement, with the familial acceptance, personal security, and academic competence subscale scores were the best predictors of achievement. The peer popularity subscale scores, by contrast, were not highly correlated with achievement.

# RELATIONSHIPS AMONG VARIOUS DIMENSIONS OF SELF-ESTEEM AND ACADEMIC ACHIEVEMENT IN ELEMENTARY STUDENTS

Self-esteem is a measure of how much or little persons value themselves. This concept reflects a degree of self-respect and is influenced by feedback from others as well as judgements about the kind of individuals people are (Faust, 1980). Although distinctions between terms have been sometimes made (e.g, Beane, 1991), it is generally held that self-esteem is relatively synonymous with the term "self concept" (Brockner, 1988; Brown & Alexander, 1991; Strong & Feder, 1961). Self-esteem has been studied as a psychological construct for most of this century. School personnel generally accept the supposition that if students are self-confident, they are more likely to do well at whatever they attempt. Friedland (1992) summarized this view by stating, "healthy self-esteem is an indispensable quality for all young people today if they are to be successful in their lives" (p. 98).

Self-esteem has been linked with many human behaviors. For example, Beane (1991) stated that a weakened sense of self-esteem is associated with teen pregnancies, drug and alcohol abuse, teen suicide, antisocial behavior, and self-destructive acts. Similarly, Friedland (1992) suggested that students who possess healthy self-esteem are less likely to drop out of school, have a greater tolerance of others, have a greater sense of community, and have

superior academic achievement. Of all behaviors associated with self-esteem,
academic achievement receives the greatest attention from the educational
community. Hence, the notion that those individuals who have enhanced self-
esteem are more likely to achieve academically has made powerful inroads into
educational practice.

Research findings have frequently confirmed this notion. Studies clearly
indicate a persistent and significant relationship between self-esteem and
academic achievement (e.g., California Task Force to Promote Self-Esteem
and Personal and Social Responsibility, 1990; Combs & Soper, 1957;
Farquhar, 1968; Faust, 1980; Friedland, 1992; Irvin, 1967; Purkey, 1970;
Tucker, 1985). Hence, some years ago, Purkey (1970) noted: "There is a
significant and positive relationship between a student's concept of himself and
his performance in school. Students who feel good about themselves and their
abilities are the ones most likely to succeed" (p. 14). Moreover, Rich (1982)
asserted that teaching methods that do not incorporate self-esteem as a
component in the learning process will be virtually ineffective. More recently,
Gwin (1990) concluded, based on the findings of various psychological studies,
that an accurate, positive perception of self plays a vital role in individual

students' academic success. Conversely, students with a negative perception of self are more likely to fail.

The correlation between self-esteem and academic achievement was supported through research by Brookover, Thomas, and Patterson (1964). Their investigation included 1000 seventh-grade students in an urban school setting. The purposes of the study were threefold in nature: (a) to determine whether students' concept of their ability in school (i.e., their academic self concept) is related to their academic achievement; (b) to determine if academic self concept is related to students' performance in specific content areas; and (c) to determine if academic self concept is related to perceptions of a "significant other" regarding students' ability. Results indicated the existence of a positive relationship of a moderate degree between students' reported academic self concept (individual ability) and their grade-point averages. Furthermore, perceived academic self concept was found to be positively correlated to students' performance in specific academic areas. Finally, a positive correlation between perception of self and perceived evaluations of individual students by a "significant other" was found. In summary, Brookover et al. (1964) noted that a significant and positive relationship

between students' perception of their academic self concept and their academic achievement does, in fact, exist.

A study by Liu, Kaplan, and Risser (1992) yielded similar results. In this study, an examination of the relationship between academic achievement and self-esteem was conducted using 242 students (grades 7-12). Results of the investigation confirmed that self-esteem both influences and is influenced by academic achievement. Results further confirmed the principles of self-esteem theory that suggest that definitions of self are formed through interactions with others and interpersonal channels.

One of the most recent wide-scale studies investigating the relationship between self-esteem and academic achievement comes for the state of California (California Task Force to Promote Self-Esteem and Personal and Social Responsibility, 1990). This three year study, *Toward a State of Self-Esteem*, yielded results similar to those found in other previous studies, confirming the positive links between self-esteem and academic achievement. Based on these results, recommendations were offered to school districts concerning the role of self-esteem and academic achievement. Friedland (1992) briefly summarized these recommendations as follows:

Every school district in California should adopt the promotion of self-esteem and of personal and social responsibility as a clearly stated goal, integrated into its total curriculum and informing all of its policies and operations. Coursework in self-esteem should be required for credentials and as part of on-going inservice training for all educators. (p. 98)

In recent years, many institutions, foundations, and task forces have been created to study and promote self-esteem. These include, for example, the Center for Self-Esteem, the National Council for Self-Esteem, and the Foundation for Self-Esteem. In addition, an increasing array of media focusing on the development of self-esteem are now available. These include books, audio and video cassettes, compact disks, and various self-help, "how to" programs for use by educators (McMillan, Singh, & Simonetta, 1994). The underlying assumption surrounding this educational push toward enhancing student self-esteem is that academic achievement will increase when paired with an enhanced sense of self-esteem. In other words, a causal relationship between these variables is believed to exist; nevertheless, the studies exploring this relationship have typically employed correlational designs.

One limitation of previous research on self-esteem is the tendency of researchers to regard self-esteem as a unidimensional, or global, construct. In the 1990s, it would seem appropriate to shift the examination of self-esteem and academic achievement to a new arena. A contemporary focus that examines multiple dimensions of self-esteem is needed. In fact, when compared to studies examining the relationship between global self-esteem and academic achievement, which are great in number, a search through the ERIC and PsychLit computerized data bases covering the period 01/82 through 06/94 for studies in which self-esteem is viewed multidimensionally yielded only a limited number of references to studies of this nature (e.g., Howerton, Enger, & Cobb, 1992; Marsh, Parker, & Barnes, 1985; Marsh & Richards, 1986; Muller, Chambliss, & Muller, 1983). One such study conducted by Marsh, Smith, and Barnes (1994), which included 559 fifth-grade students, concluded that self concept cannot be adequately understood if its multidimensionality is not considered in relation to academic achievement as well as other areas of perceived self concept. Similarly, Obiakor et al. (1992), utilizing a population of "special" children, stated that traditional definitions of self have failed to recognize the multidimensional nature of the construct and therefore tend to create difficulties in identifying strengths and weaknesses in the student

population. Furthermore, Obiakor et al. (1992) adds that perceptions of self are area-specific, situation-specific, and must be interpreted through a multidimensional perspective.

Self-esteem can be perceived as consisting of several components that represent a sampling of human beliefs and experiences relative to self-identity. These beliefs and experiences include such things as peer associations, family relationships, personal security, anxiety, perceptions of one's academic competence, "undesirable or bad" behaviors, physical appearance and attributes, and happiness and satisfaction (Brown & Alexander, 1991; Piers, 1984). Research to determine which of these specific dimensions of self-esteem are associated with greater academic achievement is needed.

## Purposes of the Study

In general, the purpose of the present study was to determine the degree to which children's perceived self-esteem is related to their overall academic achievement as measured by their performance on a standardized achievement test battery. Specifically, the study sought to determine the dimensions of perceived self-esteem that would be most clearly associated with higher levels of student achievement.

## Methodology

Subjects

Subjects utilized for the purposes of the present study were third-, fourth-, and fifth-grade regular and special education students ($\underline{n}$ = 208) from three public schools in Mississippi. The schools were from two separate districts with similar student demographics representing a small, middle-class, suburban population. The selection criteria entailed inclusion of all students receiving special education services (both gifted and learning disabled) with the remainder of the population being randomly selected from general education students. Teachers were given a list of those students who were eligible to participate in the study. Permission to collect data in the two districts was granted from the Board of Education or the local superintendent of the districts. Data were collected during the 1993-1994 school year.

Instrumentation

Self-Esteem Index (SEI). The SEI was used to determine the perceived self-esteem of students included in the present study and was administered by a member of the research team conducting this investigation. The SEI is a norm-referenced, self-report instrument consisting of 80 items designed to elicit children's perceptions of their personal behaviors and characteristics (Brown & Alexander, 1991). It is a measure of self-esteem designed for

individuals of school age. The instrument is deemed appropriate for ages 8-0 through 18-11 years and a 30 minute testing session is generally sufficient for administration. It is a paper-and-pencil inventory that can be given individually or in groups. A modified Likert-type scale is used to classify each item as "Always True," "Usually True," "Usually False," or "Always False."

The SEI is divided into four 20-item scales: (a) the Perception of Familial Acceptance Scale, which measures self-esteem at home and within the family unit; (b) the Perception of Academic Competence Scale, which measures self-esteem in academic and intellectual endeavors; (c) the Perception of Peer Popularity Scale, which measures self-esteem in social situations and interpersonal relationships with peers; and (d) the Perception of Personal Security Scale, which measures self-esteem based on an individual's feelings about his or her physical and psychological well-being. Items representing each scale are interspersed throughout the instrument; therefore, individual scales cannot easily be given independently of each other. Scores are obtained for each scale and for the total test (Brown & Alexander, 1991).

Stanford Achievement Test (SAT). National percentile scores on four subtests of the SAT were used to determine performance scores of students

involved in the present study. The SAT is a norm-referenced achievement test battery that attempts to measure learning outcomes of established curricula in schools using the instrument. The test covers curriculum related items most commonly found in schools throughout the United States. With eight levels available, the test is appropriate for all school age children. Performance is described by percentile ranks, stanines, scaled scores, normal curve, equivalents, grade equivalents, and ability/achievement comparisons (Kramer & Conoley, 1992). National percentile scores were collected for the students from the administration of the SAT conducted at the end of the 1993-1994 academic school year. The four subtests utilized to determine academic performance were reading, math, language, and spelling.

## Findings

Usable data were available for 188 subjects, including 66 (35.1%) third, 57 (30.3%) fourth, and 65 (34.6%) fifth graders. One hundred-seven were male (56.9%) and 81 female (43.1%). Eighty-four (44.7%) were regular education students, 23 (12.2%) were identified as gifted, and 81 (43.1%) were identified as special needs students, with learning disabled being the most prominent category of exception. Descriptive statistics for each of the variables included in the canonical correlation analysis, as well as alpha

reliability estimates computed for the SEI subscales, are presented in Table 1.

Intercorrelations among these variables are presented in Table 2.

<u>INSERT</u> <u>TABLES</u> <u>1</u> <u>AND</u> <u>2</u> <u>ABOUT</u> <u>HERE</u>

Inspection of the bivariate correlations (Table 2), indicates that the

variables in the dependent variable set (i.e., the SAT subtest scores) are very

highly intercorrelated, with coefficients ranging from .79 to .87. By contrast,

variables in the predictor set (i.e., the SEI subscale scores) are only

moderately intercorrelated, with coefficients ranging from .26 to .57. Cross-

set bivariate correlations are low to moderate, ranging in value from .09 to

.46. Interestingly, all of the $r$ values in the Table 2 are positive, indicating

that (a) achievement in one academic area is positively correlated with

achievement in other academic areas, (b) perceptions of self-esteem in one area

are positively correlated with perceptions of self-esteem in other areas, and (c)

achievement in general is positively correlated with self-esteem.

Canonical correlation analysis creates synthetic composites of the

variables in each of the two variable sets and then computes the bivariate

correlation between these two synthetic variables across the sample. These

synthetic variables are the result of weighting the variables in a given set and

then summing the weighted variables. For a given analysis, the number of canonical roots, or functions, is equal to the number of variables in the smaller of the two sets. In the present study, the predictor and dependent variable sets each contained four variables; hence, the analysis yielded four roots which are reported along with their associated eigenvalues in Table 3. Root 1 ($R_c^2 = .304$, $\underline{p} < .005$) indicates that using the best set of weights for variables across the two sets, the predictor variables share approximately 30% of their variance with the dependent variables. Using the second best set of statistical weights, the second canonical root ($R_c^2 = .031$, not statistically significant) accounts for only about 3% of the variance across the variable sets. Using the third and fourth best sets of statistical weights, Roots 3 and 4 account for a negligible 1% and 0.2% of the variance, respectively.

One advantage of using canonical correlation analysis is that the analysis yields a variety of meaningful coefficients in addition to the canonical R. Two of the more frequently interpreted coefficients are canonical function coefficients and canonical structure coefficients. Function and structure coefficients for the predictor and dependent variables across the four canonical roots are shown in Table 4. One traditional use of these two sets of coefficients is in determining the contribution of a given variable in a set to the

variate composite. However, the two sets of coefficients are not necessarily equally appropriate for this purpose.

INSERT TABLES 3 AND 4 ABOUT HERE

Function coefficients are used in weighting the original variables for the purpose of deriving the variate composites used in computing the canonical correlation. Although the magnitude of these coefficients can sometimes be useful in determining which variables within a set contribute most highly to the canonical results, these weights are prone to instability when the variables within a set are highly intercorrelated (Daniel, 1990), as was the case in the present study. Canonical structure coefficients express the degree of correlation between the synthetic canonical variate and any one of the original variables. Structure coefficients tend to be much less susceptible to instability because of multicollinearity within a variable set. Hence, structure coefficients are generally considered as more reliable indicators of variable contribution and thus will be interpreted in the present case.

Of the four functions resulting from the present analysis, only Function I expresses a result of noteworthy proportion ($R_c^2 = .304$, $p < .005$). Therefore, only Function I will be interpreted. Analysis of the structure

coefficients across the predictor variable set for the first canonical function indicates that the three of the four SEI subscales (academic competence, familial acceptance, and personal security) are highly related to their canonical variate (structure coefficients = -.86, -.82, and -.70, respectively). The peer popularity subscale was only negligibly related to the predictor canonical variate (structure coefficient = -.23).

The structure coefficients for the dependent variables indicate that all four of the SAT subtest scores contribute to their canonical variate. Listed in descending order of the absolute magnitude of their structure coefficients, these variables are the language subtest score (-.98), the reading subtest score (-.94), the spelling subtest score (-.89), and the math subtest score (-.84).

## Discussion

The purposes of the present study were to determine the degree to which children's perceived self-esteem is related to their overall academic achievement and to determine the dimensions of perceived self-esteem that would be most clearly associated with higher levels of student achievement. In general, the findings of this investigation substantiated earlier studies that point to a persistent and significant positive relationship between self-esteem and academic achievement. This strong relationship suggests that school personnel

in general and teachers specifically would be wise to view self-esteem as an important factor in the learning process and as an integral part of the curriculum. Simply stated, teachers should strive to become a "significant other" in the lives of their students. Moreover, since attitudes and opinions of teachers regarding their students have a significant influence on these students' success in school, teacher attitudes and opinions should be regarded as important aspects of the learning process. With this in mind, viewing students in essentially positive ways and maintaining favorable expectations of them could result in enhanced academic achievement. This places the teacher in a central position to foster positive self-esteem and encourage realistic perceptions of self.

Despite the foregoing implications for the classroom, it should be noted that the present study did not produce causal findings. Even though the presence of a significant relationship between self-esteem and academic achievement was established, the present study did not ascertain that self-esteem determines academic achievement or, conversely, that academic achievement molds self-esteem. The foregoing analysis did, however, lend support to a correlation between the two. Additional research to explore the cause and effect relationship between self-esteem and academic achievement is

needed. One suggestion for a possible follow-up study to investigate this causal relationship between self-esteem and academic achievement would involve the use of a treatment group who was taken through an established program to enhance self-esteem. After determining the level of academic achievement acquired by this group, comparisons could then be made with members of a separate control group who did not receive self-esteem training. A study of this nature would assist in identifying the extent to which cause and effect relationships between self-esteem and academic achievement exist.

A specific purpose of the present study was to determine dimensions of perceived self-esteem that would be most clearly associated with higher levels of student achievement. Through the use of the SEI, four dimensions of self-esteem were investigated: academic competence, familial acceptance, personal security, and peer popularity. Analysis of the canonical structure coefficients identified that the first predictor variable canonical variate was best identified by the academic competence subscale scores (structure coefficient = -.86). These findings suggest that of the four dimensions of the SEI, students' perceived academic competence is most closely associated with academic achievement. This relationship provides evidence to support the widely-held idea that if students *believe* they are academically competent, they will be

more likely to experience academic success. In contrast, students who experience few opportunities to succeed in school will be placed at greater risk of academic failure. This self-fulfilling prophecy has as its central premise the notion that when students believe they can achieve, they are more likely to do so; when students believe they cannot achieve, then this belief influences their performance negatively. One additional observation regarding the correlation between perceived academic competence and academic achievement is the significant role that the teacher plays in establishing a sense of academic competence in children. The unavoidable conclusion is that the teacher's attitudes and opinions, expressed through direct communication as well as nonverbal cues such as tone of voice, touch, facial expression, or postures can influence a child cognitively. The question becomes not *whether* the teacher will influence the self-esteem of his or her students but *how*. This brings to light the importance of the quality of the teacher's performance in the school environment. Furthermore, teachers must consistently utilize effective instructional methodologies that support academic success for children.

A second dimension of students' perceived self-esteem, familial acceptance, was also found to be highly associated with the first predictor variable canonical variate (structure coefficient = -.82), indicating its strong

relationship with students' academic performance across the subtests of the SAT. This relationship emphasizes the powerful influence of family on a student's academic performance. As a child's first and most significant teacher, the family provides the rudder that ultimately steers the child toward academic success or failure. Moreover, parental influence substantially affects a child's perception of self.

In the last 30 years, the composition of the family has undergone dramatic changes. Evidence of these changes is recognized in the increased number of latchkey children of school age, dual-career families, single parent families, stepfamilies, and soaring divorce rates. Consequently, all of these conditions affect the fabric of the family and the development of the school-age learners within it.

Recommendations for educational practice regarding familial acceptance and academic achievement would include a vigorous attempt to incorporate parents into the school setting. Educating children requires a joint effort that must actively include parents. Additionally, schools can act as a catalyst for providing training that emphasizes effective parenting skills. Training in effective parenting would help to achieve the first goal articulated through *The National Education Goals Report* (1992) which stated that by the year 2000,

all children will be ready for school. An additional recommendation would include initiating a comprehensive program in each district or individual school targeting parental involvement and focusing on enhancing the home environment.

The first predictor variable canonical variate was identified by a third dimension of perceived self-esteem, personal security (structure coefficient = -.70). Subscale scores for this component of self-esteem were correlated with higher levels of academic achievement. These findings support the commonly-held belief that a child's safety needs must be met before academic achievement can occur. Abraham Maslow (1954) identified the need to address physiological and security requirements before attending to higher-order needs such as esteem and academic achievement. The need to be psychologically and physically secure in the learning environment is a basic educational premise. A supportive atmosphere encourages children to achieve academically and fosters a positive feeling of self. Establishing a learning environment that is characterized by a considerate, understanding, tolerant teacher enhances the personal security necessary for a child to achieve academically. In a world that is sometimes quite hostile, the classroom must

be a haven that encompasses students with a sense of respect, warmth, support, and acceptance. Only then can learning take place.

The fourth dimension of perceived self-esteem addressed in the present study, peer popularity, by contrast, was not highly correlated to the first predictor variable canonical variate, suggesting that students' feelings about their acceptance among peers are not related to their academic achievement (structure coefficient = -.23). This interesting finding suggests that when students conceptualize academic achievement, they do so in an individual way disassociated from peer influence. Even though students are concerned about their academic achievement and want to "save face" among fellow classmates, it appears that academic achievement is, in fact, viewed by students as an individual act. Brown and Alexander (1991) substantiated this view with the following observation: "The peer group, it should be noted, may be a subgroup that does not adhere to the values of the community at large (i.e., a gang, clique, or non mainstream group)" (p. 21). This would seem to imply that prudent educators would strive to create an environment that stresses personal meaning in the learning process and ties cognitive endeavors to relevant, individualized content. At the same time, use of background experiences or schema to enhance learning is also suggested.

In summary, the present study confirms the existence of a positive relationship between self-esteem and academic achievement. Dimensions of perceived self-esteem as defined in the SEI that were associated with higher levels of academic achievement were academic competence, familial acceptance, and personal security. In contrast, peer popularity was not highly correlated with academic achievement. Results suggest that schools should address both self-esteem and academic achievement as integral parts of the learning experience.

References

Beane, J.A. (1991). Sorting out the self-esteem controversy. Educational Leadership, 49(1), 25-30.

Brockner, J. (1988). Self-esteem at work: Research, theory, and practice. Lexington, MA: Lexington Books.

Brookover, W.B., Patterson, A., & Thomas, S. (1962). Self concept of ability and school achievement. U.S. Office of Education, Cooperative Research Project No. 845. East Lansing: Office of Research and Publications, Michigan State University.

Brown, L., & Alexander, J. (1991). Self-esteem index examiner's manual. Austin: PRO-ED.

California Task Force to Promote Self-Esteem and Personal and Social Responsibility.(1990). Toward a state of self-esteem. Sacramento: State of California.

Combs, A.W., & Soper, D.W. (1957). The self, its derivate terms, and research. The Journal of Individual Psychology, 13, 222-226.

Daniel, L.G. (1990, January). Use of structure coefficients in multivariate educational research: A heuristic example. Paper presented at the

annual meeting of the Southwest Educational Research Association, Austin, TX. (ERIC Document Reproduction Service No. 315 452)

Farquhar, W.W. (1968). A comprehensive study of the motivational factors underlying achievement of eleventh-grade high-school students. U.S. Office of Education (Cooperative Research Report No. 846). East Lansing: Michigan State University.

Faust, V. (1980). Self-esteem in the classroom. San Diego: Thomas Paine.

Friedland, S. (1992). Building student self-esteem for school improvement. NASSP Bulletin, 72(540), 96-102.

Gwin, J. (1990). Self-esteem vs academic excellence: Are the two on a collision course? Crisis, 97(10), 16-20.

Howerton, D.L., Enger, J.M., Cobbs, C.H. (1992, November). Paper presented at the annual meeting of the Mid-South Educational Research Association, Knoxville, TN. (ERIC Document Reproduction Service No. ED 354 254)

Irwin, F.S. (1967). Sentence completion responses and scholastic success or failure. Journal of Counseling Psychology, 14, 269-271.

Kramer, J.J., & Conoley, J.C. (Eds.).(1992). The eleventh mental measurements yearbook. Lincoln, NE: The University of Nebraska Press.

Liu, X., & Kaplan, B. (1992). Decomposing the reciprocal relationship between academic achievement and general self-esteem. Youth and Society, 24(2), 123-148.

Marsh, H.W., Parker, J., & Barnes. (1985). Multidimensional adolescent self-concept: Their relationship to age, sex, and academic measures. American Educational Research Journal, 22(3), 422-444.

Marsh, H.W., & Richards, G. (1986, April). The outward bound bridging course for low-achieving high school males: Effect on academic achievement and multidimensional self concepts. Sydney, Australia: University of Sydney. (ERIC Document Reproduction Service No. ED 280 887)

Marsh, H.W., Smith, I.D., & Barnes, J. (1984, March). Multidimensional concepts: Relationships with inferred self concepts and academic achievement. Sydney, Australia: University of Sydney. (ERIC Document Reproduction Service No. ED 242 786)

Muller, D., Chambliss, J., & Muller, A. (1983, March). Making self-concept a revelant education concern. Paper presented at the Annual

Conference of the Association for Supervision and Curriculum Development, Houston, TX.

Maslow, A.H. (1954). Motivation and personality. New York: Harper & Row.

McMillan, J.H., Singh, J., & Simonetta, L.G. (1994). The tyranny of self-oriented self-esteem. Educational Horizons, 72(3), 141-145.

National Education Report Goals. (1992). Building a nation of learners. Washington, DC: U.S. Government Printing Office.

Obiakor, F.E., Steinmiller, G., Harris, K.G., & Lumpkins, B. (1992, October). Self-concept of young "special" children: What special educators should know. Paper presented at the Annual Fall Conference of the Council for Exceptional Children (CEC), Hot Springs, AR.

Piers, E.V. (1984). Piers-Harris Children's Self Concept Scale - Revised Manual 1984. Los Angeles: Western Psychological Services.

Purkey, W.W. (1970). Self concept and school achievement. Englewood Cliffs, NJ: Prentiss-Hall, Inc.

Rich, H.L. (1982). Disturbed students: Characteristics and educational strategies. Austin, TX: PRO-ED.

Strong, D., & Feder, D. (1961). Measurement of the self concept: A critique of the literature. Journal of Counseling Psychology, 8, 170.

Tucker, M.D. (1985). Academic achievement, physical fitness performance, and behavior ratings of sixth grade pupils with varying chronological ages. Unpublished doctoral dissertation, University of Nebraska, Lincoln.

Table 1
Descriptive Statistics
($\underline{n}$ = 188)

| VARIABLE | MEAN | STD DEV | MINIMUM | MAXIMUM | ALPHA ESTIMATE |
|----------|------|---------|---------|---------|----------------|
| SAT94RD | 55.367 | 30.457 | 1 | 99 | |
| SAT94MAT | 65.702 | 29.921 | 1 | 99 | |
| SAT94LAN | 63.543 | 30.419 | 1 | 99 | |
| SAT94SP | 57.037 | 31.696 | 1 | 99 | |
| SEIFAM | 63.168 | 10.215 | 26.00 | 80.00 | .8762 |
| SEIACAD | 59.335 | 10.013 | 30.00 | 79.00 | .8462 |
| SEIPEER | 58.266 | 8.730 | 27.00 | 77.00 | .8090 |
| SEISECUR | 58.851 | 9.472 | 30.00 | 80.00 | .8131 |

Note: Variable descriptions are as follows: SAT94RD, SAT total reading subscale percentile rank score; SAT94MAT, SAT total math subscale percentile rank; SAT94LAN, SAT total language subscale percentile rank score; SAT94SP, SAT total spelling subscale percentile rank score; SEIFAM, SEI familial acceptance subscale score; SEIACAD, SEI academic competence subscale score; SEIPER, SEI personal security subscale score.

Self-Esteem and Academic Achievement–p. 28

Table 2

- - - - - P E A R S O N   C O R R E L A T I O N   C O E F F I C I E N T S - - - - -

|           | SAT94RD | SAT94MAT | SAT94LAN | SAT94SP | SEIFAM | SEIACAD | SEIPEER | SEISECUR |
|-----------|---------|----------|----------|---------|--------|---------|---------|----------|
| **SAT94RD** | 1.0000 ( 0) P= . | .7935 ( 188) P= .000 | .8660 ( 188) P= .000 | .8379 ( 188) P= .000 | .4327 ( 188) P= .000 | .4543 ( 188) P= .000 | .1722 ( 188) P= .009 | .3730 ( 188) P= .000 |
| **SAT94MAT** | .7935 ( 188) P= .000 | 1.0000 ( 0) P= . | .8066 ( 188) P= .000 | .7536 ( 188) P= .000 | .3953 ( 188) P= .000 | .3918 ( 188) P= .000 | .1349 ( 188) P= .033 | .3353 ( 188) P= .000 |
| **SAT94LAN** | .8660 ( 188) P= .000 | .8066 ( 188) P= .000 | 1.0000 ( 0) P= . | .8203 ( 188) P= .000 | .4360 ( 188) P= .000 | .4556 ( 188) P= .000 | .0934 ( 188) P= .101 | .3808 ( 188) P= .000 |
| **SAT94SP** | .8379 ( 188) P= .000 | .7536 ( 188) P= .000 | .8203 ( 188) P= .000 | 1.0000 ( 0) P= . | .4141 ( 188) P= .000 | .4377 ( 188) P= .000 | .1321 ( 188) P= .035 | .3162 ( 188) P= .000 |
| **SEIFAM** | .4327 ( 188) P= .000 | .3953 ( 188) P= .000 | .4360 ( 188) P= .000 | .4141 ( 188) P= .000 | 1.0000 ( 0) P= . | .5742 ( 188) P= .000 | .4534 ( 188) P= .000 | .5381 ( 188) P= .000 |
| **SEIACAD** | .4543 ( 188) P= .000 | .3918 ( 188) P= .000 | .4556 ( 188) P= .000 | .4377 ( 188) P= .000 | .5742 ( 188) P= .000 | 1.0000 ( 0) P= . | .2615 ( 188) P= .000 | .3708 ( 188) P= .000 |
| **SEIPEER** | .1722 ( 188) P= .009 | .1349 ( 188) P= .033 | .0934 ( 188) P= .101 | .1321 ( 188) P= .035 | .4534 ( 188) P= .000 | .2615 ( 188) P= .000 | 1.0000 ( 0) P= . | .2962 ( 188) P= .000 |
| **SEISECUR** | .3730 ( 188) P= .000 | .3353 ( 188) P= .000 | .3808 ( 188) P= .000 | .3162 ( 188) P= .000 | .5381 ( 188) P= .000 | .3708 ( 188) P= .000 | .2962 ( 188) P= .000 | 1.0000 ( 0) P= . |

(COEFFICIENT / (CASES) / 1-TAILED SIG)    " . " IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED

Table 3
Eigenvalues and Canonical Correlations

| Root No. | Eigenvalue | Pct. | Cum. Pct. | Canon. Cor. | Squared Cor. |
|---|---|---|---|---|---|
| 1 | .43676 | 90.99209 | 90.99209 | .55135 | .30399 |
| 2 | .03167 | 6.59687 | 97.58895 | .17519 | .03069 |
| 3 | .00982 | 2.04648 | 99.63544 | .09863 | .00973 |
| 4 | .00175 | .36456 | 100.00000 | .04180 | .00175 |

Table 4
Canonical Function and Structure Coefficients

Standardized canonical function coefficients for DEPENDENT variables

| Variable | Function No. 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| SAT94RD | -.28856 | -1.74117 | .97996 | -1.09607 |
| SAT94MAT | -.03329 | -.32806 | .36739 | 1.73881 |
| SAT94LAN | -.57966 | 2.05596 | .53145 | -.51459 |
| SAT94SP | -.14905 | -.10760 | -1.96596 | .08036 |

Structure coefficients for DEPENDENT variables

| Variable | Function No. 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| SAT94RD | -.94187 | -.31109 | .08457 | -.09459 |
| SAT94MAT | -.84216 | -.13247 | .09213 | .51452 |
| SAT94LAN | -.97869 | .19514 | .06371 | .00462 |
| SAT94SP | -.89143 | -.12707 | -.43206 | .05025 |

Standardized canonical function coefficients for PREDICTOR variables

| Variable | Can. Var. 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| SEIFAM | -.41739 | .31116 | -.53720 | 1.21889 |
| SEIACAD | -.54782 | -.11457 | -.43245 | -1.00187 |
| SEIPEER | .19884 | -1.10115 | .10764 | -.03565 |
| SEISECUR | -.33249 | .14070 | 1.12258 | -.18780 |

Structure coefficients for PREDICTOR variables

| Variable | Can. Var. 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| SEIFAM | -.82069 | -.17821 | -.13268 | .52640 |
| SEIACAD | -.85875 | -.17172 | -.29655 | -.38093 |
| SEIPEER | -.23216 | -.94836 | .08346 | .19938 |
| SEISECUR | -.70129 | -.06050 | .70507 | .08604 |

# REPRODUCTION RELEASE
(Specific Document)

## I. DOCUMENT IDENTIFICATION:

Title:
RELATIONSHIPS AMONG VARIOUS DIMENSIONS OF SELF-ESTEEM AND ACADEMIC
ACHIEVEMENT IN ELEMENTARY STUDENTS.

Author(s): Dr. Debra Ann King, Dr. Larry G. Daniel

Corporate Source:  Dr. King - Learning Solutions
Dr. Daniel - University of Southern Mississippi

Publication Date:
1995

## II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic/optical media, and sold through the ERIC Document Reproduction Service (EDRS) or other ERIC vendors. Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following two options and sign at the bottom of the page.

The sample sticker shown below will be affixed to all **Level 1** documents

[X]

**Check here**
**For Level 1 Release:**
Permitting reproduction in microfiche (4" x 6" film) or other ERIC archival media (e.g., electronic or optical) *and* paper copy.

PERMISSION TO REPRODUCE AND
DISSEMINATE THIS MATERIAL
HAS BEEN GRANTED BY

*Sample*

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

Level 1

The sample sticker shown below will be affixed to all **Level 2** documents

PERMISSION TO REPRODUCE AND
DISSEMINATE THIS
MATERIAL IN OTHER THAN PAPER
COPY HAS BEEN GRANTED BY

*Sample*

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

Level 2

[ ]

**Check here**
**For Level 2 Release:**
Permitting reproduction in microfiche (4" x 6" film) or other ERIC archival media (e.g., electronic or optical), but *not* in paper copy.

Documents will be processed as indicated provided reproduction quality permits. If permission
to reproduce is granted, but neither box is checked, documents will be processed at **Level 1**.

*"I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic/optical media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries."*

Sign
here→
please

Signature:

Printed Name/Position/Title:
Debra Ann King/Educational Consultant

Organization/Address:
Learning Solutions
88 Quail Hollow
Hattiesburg, MS 39402

Telephone:
(601) 264-7345

FAX:

E-Mail Address:
KingRJ@AOL.COM

Date:
11-5-96

PS 023241

(over)

## III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:

Address:

Price:

## IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:

Address:

## V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

Karen E. Smith
Acquisitions Coordinator
ERIC/EECE
805 W. Pennsylvania Ave.
Urbana, IL 61801-4897

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

**ERIC Processing and Reference Facility**
1100 West Street, 2d Floor
Laurel, Maryland 20707-3598

Telephone: 301-497-4080
Toll Free: 800-799-3742
FAX: 301-953-0263
e-mail: ericfac@inet.ed.gov
WWW: http://ericfac.piccard.csc.com

ERIC  6/96)