# INTERCORRELATIONS OF THE
# COOPERSMITH SELF-ESTEEM INVENTORY,
# TENNESSEE SELF-CONCEPT SCALE,
# SLOSSON INTELLIGENCE TEST, AND
# ROTTER INTERNAL-EXTERNAL LOCUS
# OF CONTROL SCALE

—

## LESLIE ANN COLEY

# INTERCORRELATIONS OF THE COOPERSMITH SELF-ESTEEM INVENTORY, TENNESSEE SELF-CONCEPT SCALE, SLOSSON INTELLIGENCE TEST, AND ROTTER INTERNAL-EXTERNAL LOCUS OF CONTROL SCALE

---

A Thesis

Presented to

the Graduate Council of

Austin Peay State University

.

---

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

in Psychology

---

by

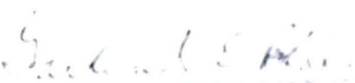Leslie Ann Coley

March, 1983

To the Graduate Council:

    I am submitting herewith a Thesis written by Leslie Ann Coley entitled "Intercorrelations of the Coopersmith Self-Esteem Inventory, Tennessee Self-Concept Scale. Slosson Intelligence Test, and Rotter Internal-External Locus of Control Scale." I recommend that it be accepted in partial fulfillment of the requirement for the degree of Master of Arts, with a major in Psychology.
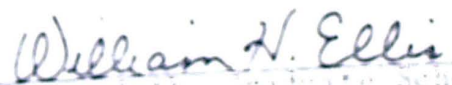
_____
Major Professor

We have read this thesis and recommend its acceptance:

_____
Second Committee Member

_____
Third Committee Member

Accepted for the
Graduate Council:

_____
Dean of the Graduate School

# ACKNOWLEDGEMENTS

.

# TABLE OF CONTENTS

# LIST OF TABLES

# Chapter 1

## INTRODUCTION

Self-esteem is defined by Coopersmith (1981) as a set
of attitudes an individual holds with regard to him- or
herself. These attitudes toward self include perception of
one's ability to cope successfully with the world as well
as expectations of acceptance by others and personal worthiness. The construct of self-esteem is very similar to and
often overlaps with the construct of self-concept. Kimble
and Garmezy (1968) state that self-concept refers to the
self-knowledge one possesses regarding his or her strengths
and weaknesses. An individual's self-concept has been shown
to be extremely influential in his or her behavior and is
also directly related to his or her state of mental health
(Fitts, 1965). Those people who view themselves as undesirable
or worthless tend to portray this belief in their behavior.
Those who have unrealistic self-concepts tend to approach
life in an unrealistic fashion. A knowledge of how an individual perceives him- or herself is very important in promoting
and guiding healthy changes in that person. For this reason
professionals in the fields of education and mental health
are interested in accurate assessment of their clients'
self-esteem and self-concept.

Along with an accurate evaluation of clients' self-
esteem and self-concept, the professional benefits from an

evaluation of the clients' level of intelligence. Intelligence is operationally defined by Weschler (1958) as "The aggregate or global capacity of the individual to act purposefully, to think rationally and to deal effectively with his environment" (p. 7). Weschler recognized that although certain aspects of intelligence can be measured, the scores obtained are not only the totality of one's abilities that defines intelligence but also one's incentive and drive to utilize these abilities. Thus, to assess an individual in the classroom or in the mental health setting, the professional must be able to assess the individual's level of self-esteem, self-concept, intelligence, and motivations and drive.

An attitude which has a major impact on drive and motivation is the individual's locus of control. Locus of control (LOC) is a construct which refers to the degree to which individuals perceive themselves as having control over their environment. If persons believe they have control over their destiny, they will behave accordingly. Therefore, it is important for the professional to be able to evaluate the client's LOC.

These constructs of self-esteem, self-concept, intelligence, and LOC influence one another. Many studies have been conducted in an attempt to understand this influence (Rotter, 1966; Fink, 1962; Behrens and Vernon, 1978; Schnee, 1978; Hersch and Scheibe, 1967). Although results from these studies are inconsistent, general findings show that

self-esteem and LOC (internality) have a significant positive correlation. Research on the relationship between self-esteem and intelligence shows a mild significant or no significant correlation. This is also true for the relationship between intelligence and LOC. Thus, further research is needed to provide insight on the relationships between self-esteem, self-concept, intelligence, and LOC.

## Coopersmith Self-Esteem Inventory

Using an interval of five-weeks and a sample of 30 fifth grade students, Coopersmith (1967) reported a test-retest reliability coefficient of .88 for the School Form (Form A) of the Self-Esteem Inventory (SEI). With a different sample of 56 children and three year test-retest interval, a coefficient of .70 resulted. Sputz and Johnston (1973) demonstrated the internal consistency of the SEI using the Kuder-Richardson KR-20 coefficient formula. One hundred students from a fifth, ninth, and twelfth grade participated. Kuder-Richardson correlation coefficients were respectively .81, .86, and .79. Bedeian, Teague, and Zmud (1977) reported the test-retest reliability of the School Short Form (Form B). Using 103 college students, the investigators found the test-retest reliability coefficient to be .80 for males and .82 for females. Coopersmith (1967) found a correlation of .86 between the School Short Form (Form B) and the School Form (Form A). His sample consisted of 121 students. Coopersmith (1981) reported that

the Adult Form (Form C) and Form B correlated .80. Form C is used with individuals aged 16 and above. Three samples totaling 647 high school and college students comprised the testing sample.

Construct validity for the SEI has been confirmed by Kokenes (1974, 1978). Kokenes (1974) factor analyzed data from approximately 1,500 public school students in grades four through eight. Her sample consisted of approximately 7,600 pupils. Factors which emerged were similar to the sources of self-esteem that Coopersmith (1967) stated were measurable using the SEI. Kokenes (1978) again demonstrated the construct validity of the SEI using factor analysis in a sample totaling 7593 pupils in grades four through eight. Simon and Simon (1975) reported a correlation coefficient of .33 (p < .01) between the SEI and SRA Achievement Series. They suggested that this finding provides concurrent validity for the SEI.

Cowen, Altmann, and Pysh (1978) performed a factor analysis on four self-report, self-concept instruments: Bledsoe Self-Concept Scale, Children's Self-Concept Scale, Self-Esteem Inventory, and Purdue Self-Concept Scale. A sample of 175 fourth grade students was tested. Results showed that the instruments correlated significantly with each other.

## Tennessee Self-Concept Scale

The Tennessee Self-Concept Scale (TSCS) constructed by

is widely used. It provides an overall self-esteem score as well as a complex self-concept profile. The clinical and research form provides the following 18 scores: the Self-Criticism score, the Total Positive score, an Identity score, Self-Satisfaction score, Behavior score, Physical Self score, Moral-Ethical Self score, Personal Self score, Family Self score, Social Self score, a Total Variability score, a Distribution score, a Time score, a True-False Ratio score, a Net Conflicts score, Acquiescence Conflict score, Denial Conflict score, and a Total Conflict score. The clinical and research form also provides six empirical scales which were derived by Fitts (1965) via item analysis. These scales include: Defensive Positive Scale, General Maladjustment Scale, Psychotic Scale, Personality Disorder Scale, Neurosis Scale, and a Personality Integration Scale. An empirical measure which provides a number of Deviant Signs score is also presented.

Test-retest reliability of the Total Positive score over a two week period was .92. For the various subscores, the test-retest reliability coefficients ranged between .70 and .90 (Robinson and Shaver, 1973). Congdon (1958) reported a reliability coefficient of .88 for the Total Positive score using a shortened version of the TSCS. Convergent validity has been demonstrated by Wayne (1963) who found a validity coefficient of .68 between the Total Positive score and Izard's Self Rating Positive Affect Scale.

## Slosson Intelligence Test

The Slosson Intelligence Test (SIT) provides an abbreviated form of the Stanford-Binet Intelligence Scale, Form L-M. The SIT is a useful research tool because it is a quick (10-30 minutes to administer), individual intelligence test.

Slosson (1963) tested 139 individuals ranging in age from 4 to 50 years and obtained a test-retest reliability coefficient of .97. By administering the SIT and the Stanford-Binet Intelligence Scale, Form L-M, to 141 subjects, Slosson found a validity coefficient of .92. Armstrong and Jensen (1972) tested a sample of 724 students ages 6 to 14 years with the SIT and the Stanford-Binet Intelligence Scale. They obtained a validity coefficient of .92 (p < .001). Using a sample of 50 college students, Martin and Rudolph (1972) obtained a correlation of .70 (p < .01) between the scores on the SIT and those on the WAIS Full Scale. The WAIS Verbal Scale score was correlated .73 (p < .01) with the SIT scores. The WAIS Performance Scale score and SIT scores were correlated .49 (p < .01).

A number of studies (Fink, 1962; Williams and Cole, 1968) have consistently reported significant positive relationships between self-esteem or self-concept and academic achievement. Simon and Simon (1975) found a correlation coefficient of .333 (p < .01) between SEI scores and SRA Achievement Series scores in a sample of 87 fifth grade students. Simon and Simon (1975) also reported a correlation

coefficient of .299 (p < .01) between SEI scores and Lorge-Thorndike Verbal IQ scores for the total sample. The scores on those tests correlated .318 (p < .05) for males. For females, the correlation was .292 (p < .10). The correlation coefficient between SEI scores and Lorge-Thorndike Nonverbal IQ scores was .232 (p < .05) for the total sample. For males, a correlation of .276 (p < .10) resulted, and for females .204 (p > .10). These results indicate a mild positive relationship between self-esteem and IQ. Rubin, Dorle, and Sandidge (1977) reported a correlation coefficient of .31 (p < .01) between SEI scores and WISC Full Scale scores for 530 subjects. The subjects' SEI scores and Stanford Achievement subtest scores correlation coefficients ranged from .22 to .34 (p < .01). Subjects were randomly selected from 1,559 participants in the Educational Follow-up Study (EFS). All subjects had been administered the WISC at the age of seven years. The SEI and Stanford Achievement tests were administered during the summer of their twelfth year.

Two hundred seventy-one fourth and sixth grade pupils were administered a Self-Concept Scale, California Test of Mental Maturity, California Achievement Tests, and Taylor Manifest Anxiety Scale (Bledsoe, 1964). Correlation coefficients between the Self-Concept Scale scores and the California Test of Mental Maturity (total IQ) ranged from .278 to .421 (p < .01) for the boys. The girls' correlations were not significant.

Behrens and Vernon (1978) tested 292 seventh grade students using the Canadian Cognitive Abilities Test which is a revision of the Lorge-Thorndike Intelligence Test, an achievement test, and a personality test which measures aggression, positive and negative self-concept. The researchers reported that the total IQ scores correlated negatively with all three measures of aggression and with negative self-esteem. The correlation coefficients were -.25 (p < .01) for boys and -.27 (p < .01) for girls. There was also a weak positive correlation between self-concept and total IQ for girls .23 (p < .01). Positive self-esteem scores provided no significant correlations throughout the study.

Schnee (1978) administered the Coppersmith Self-Esteem Inventory (SEI), Otis-Lennon Mental Abilities Test, and Stanford Achievement Tests to 318 eighth grade math students and 478 fifth grade students. Results showed that IQ did not correlate with self-esteem for the fifth or eighth graders. However, self-esteem correlated positively, .45 (p < .01), with reading achievement.

## Rotter Internal-External Locus of Control Scale

Rotter (1966) defines internal-external locus of control (LOC) in the following fashion:

> ...an event regarded by some persons as a reward or reinforcement may be differently perceived and reacted to by others. One of the determinants of this reaction is the degree to which the individual perceives that the reward follows from, or is contingent upon, his own behavior or attributes

versus the degree to which he feels the reward is
controlled by forces outside of himself and may
occur independently of his own actions...A perception
of causal relationship need not be all or none but
can vary in degree. When a reinforcement is perceived
by the subject as following some action of his own
but not being entirely contingent upon his action,
then, in our culture, it is typically perceived as
the result of luck, chance, fate, as under the
control of powerful others, or as unpredictable
because of the great complexity of the forces
surrounding him. When the event is interpreted
in this way by an individual, we have labeled this
a belief in external control. If the person perceives
that the event is contingent upon his own behavior
or his own relatively permanent characteristics, we
have termed this a belief in internal control. (p. 1)

Rotter's Internal-External Locus of Control Scale is

the most widely used LOC scale (Robinson and Shaver, 1973).

Rotter (1966) reported an internal consistency coefficient

of .70 for a sample of 400 college students using the Kuder-

Richardson formula. He also reported a one month-interval

test-retest reliability for 60 college students combined

as .72 (the coefficient for males was .60; for females .83).

After a two month interval, a combined reliability coeffi-

cient of .55 was obtained for 117 college students (males

.49; females .61). Rotter suggested that this decrease in

the reliability coefficient may be partially due to dif-

ferences in test administration (individual as compared to

group). Cone (1971) found correlation coefficients ranging

between $-.29$ and .70 ($p \leq .025$) for five separate test

samples when he compared Edward's Social Desirability Scale

and Rotter's I-E Locus of Control Scale.

The empirical relationship between self-esteem and

internality has been explored by several researchers (Platt,

Eisenman, and Darbes, 1970; Ryckman and Sherman, 1973). The results of these studies have been inconsistent in that some show no significant correlations, whereas others show a small but significant correlation between the two measures. Fish and Karabenick (1971) used the Janis and Field Feelings of Inadequacy Scale and Rotter's I-E LOC Scale to test the relationship between LOC and self-esteem. The sample used was 285 college-aged men. The correlation coefficient obtained was -.28 (p < .001). Martin (1976) tested 254 (135 American Indians, 119 whites) fourth grade students, 290 (149 American Indians, 141 whites) eighth grade students, and 219 (111 American Indians, 108 whites) twelfth grade students using the Coopersmith SEI and the Nowicki-Strickland Locus of Control Scale (NSLCS). The results showed that internality was positively related to self-esteem for both American Indians and white children in that the correlation coefficients ranged from -.32 to -.56 (p < .01).

Several studies have demonstrated significant positive correlations between internality and academic achievement (Gordon, 1977; Coleman, Campbell, Hobson, McPartland, Mood, Weinfeld, and York, 1966). Rotter (1966) reported that correlations between intelligence and internality are either low or not significant. Houtz, Denmark, Rosenfield, and Tetenbaum (1980) showed significant relationships between higher ideational fluency, internality, and a positive self-esteem for 35 fourth, 29 fifth, and 18 sixth grade children,

all of whom were intellectually gifted. Ten divergent thinking tasks were presented to the subjects along with three personality measures (Rydell-Rosen Tolerance on Ambiguity Scale, the Bailer-Cromwell Children's LOC Scale, and the Coopersmith SEI). Significant fluency effects were obtained for problem solving ($F(1,66)=7.97$, $p < .01$), tolerance of ambiguity ($F(1,62)=9.09$, $p < .01$), locus of control ($F(1,66)=8.40$, $p < .01$), and self-esteem ($F(1,62)= 7.30$, $p < .01$). Higher fluency students were also found to be higher achievers.

Hersch and Scheibe (1967) reported correlations which range from -.07 to .17 between three different measures of intelligence with the Rotter I-E LOC Scale. None of the correlations were significant.

At the present time research indicates that although internality is related to academic achievement, it is not related to intelligence (Hersch and Scheibe, 1967; Rotter, 1966). Several studies (Fink, 1962; Williams and Cole, 1968) indicate that academic achievement is linked to self-esteem. Research on the relationship between self-esteem and intelligence indicates a significant but small correlation or no significant correlation (Simon and Simon, 1975; Rubin, Dorle, and Sandidge, 1977; Schnee, 1978).

The present study was undertaken to expand the research in the area, and to determine the relationship between self-esteem, self-concept, intelligence, and locus of control.

A secondary purpose for this study was to assess the correlation between the Coopersmith SEI and the TSCS.

# Chapter 2

## METHOD

### Subjects

The sample consisted of 50 students (43 White and 7 African-Americans) enrolled in two undergraduate psychology courses during the Summer Quarter, 1982, at Austin Peay State University, Clarksville, Tennessee. Eleven male students and 39 female students participated in the study. The subjects ranged in age from 18 to 43 years. The mean age was 28 (27.72) years.

### Description of the Instruments

The Coopersmith Self-Esteem Inventory SEI was developed by Stanley Coopersmith (1981) as a revision of the original Coopersmith SEI (1967). The Adult Form (Form C) consists of 25 items adapted from the School Short Form (Form B). The items are short statements to which the respondent answers "like me" or "unlike me." The SEI can be individually or group administered and requires no time limit.

The Tennessee Self-Concept Scale (TSCS) was devised by William Fitts (1965) to fill a need for a self-concept scale which is well standardized, widely applicable, simple for the subject to complete, and multi-dimensional in its description of the self-concept. The TSCS is comprised of 100 self-descriptive statements to which the subject responds in terms of the extent to which the statement is true or false.

Statements are rated as follows: 1 (completely false), 2 (mostly false), 3 (partly false and partly true), 4 (mostly true), and 5 (completely true). The TSCS is self-administering for individuals or groups and can be used with individuals 12 years or older who have achieved a sixth grade reading level. The TSCS is applicable to the whole range of psychological adjustment from well adjusted, healthy people to those who evidence psychotic thoughts and behavior. The clinical and research form was utilized in this study. There is no required time limit although most subjects complete the TSCS in 10 to 20 minutes.

The Slosson Intelligence Test (SIT) was developed by Richard Slosson (1963). The SIT is an individual screening device for both children and adults used to evaluate a person's mental ability. It provides a ratio IQ score. The SIT has a higher ceiling for adults and a lower basal for children than the Stanford-Binet, Form L-M. It employs a "10 consecutive" failures or passes system to provide the ceiling or base. The SIT can be used for all age groups. Time required to give the SIT varies from 10-15 minutes for mentally retarded individuals to 30-40 minutes for shy, reflective or intellectually gifted individuals. The test is not timed. The SIT is an oral test; the examinees are not allowed to use pencil and paper during the test. The introductory remarks are standardized as are the test questions. The SIT is scored as the examiner gives the test.

The Rotter Internal-External Locus of Control Scale was developed by Julian Rotter (1966). The LOC Scale is a self-report inventory which provides a measure of locus of control. Rotter's I-E LOC Scale is comprised of 23 question pairs plus six filler questions. Internal statements are paired with external statements, and a forced-choice format is used. One point is given for each external statement selected. Scores range from zero (most internal) to 23 (most external).

## Administration and Scoring

Appointments for administration of the SIT were made with the first 50 students who volunteered to participate in the study. Thirty-two of the subjects took the three self-inventories (SEI, TSCS, and Rotter's LOC Scale) in a group during one class period. The other 18 subjects completed the self-inventories at the time they took the SIT. The researcher read the self-report inventory instructions to the subject as he or she read them silently.

The researcher hand-scored all tests. All information was organized so that the following variables were available for each subject: sex, race, age, SIT score, SEI score, TSCS score, and LOC score. The data were computer analyzed using the Pearson product-moment correlation technique.

# Chapter 3

## RESULTS

The Pearson product-moment correlation technique was employed to determine the correlation coefficients of the SEI, TSCS, SIT, and LOC Scale. The Total Positive score of the TSCS was utilized to determine its correlation with the SEI, SIT, and LOC Scale. The means and standard deviations for the subjects' age, SEI, TSCS, SIT, and LOC Scale scores are shown in Table 1.

Significant correlations were found between the following variables: race and SIT scores ($p < .0005$); age and LOC scores ($p < .05$); SIT scores and LOC scores ($p < .05$); LOC scores and TSCS scores ($p < .05$); LOC scores and SEI scores ($p < .001$); and SEI scores and TSCS scores ($p < .0001$). There was no significant correlation for the variable of sex. All correlations are shown in Table 2.

Table 1

Means and Standard Deviations of Research Instruments

| Variable | Mean | Standard Deviation |
|----------|------|--------------------|
| SEI scores | 82.96 | 18.186 |
| TSCS scores | 359.46 | 29.759 |
| SIT scores | 115 | 12.544 |
| LOC scores | 7.22 | 4.526 |

Table 2

Correlations

| Variables | Sex | Race | Age | SIT | LOC | SEI | TSCS | Educatio |
|-----------|-----|------|-----|-----|-----|-----|------|----------|
| Sex | 1.00 | .064 | .224 | .223 | −.047 | .137 | .098 | −.14 |
| Race | .064 | 1.00 | −.008 | −.473+ | .159 | −.053 | .098 | .00 |
| Age | .224 | −.008 | 1.00 | .249 | −.302* | .113 | .243 | .18 |
| SIT | .223 | −.473+ | .248 | 1.00 | −.337* | .173 | .214 | .19 |
| LOC | −.047 | .159 | −.302* | −.337* | 1.00 | −.445** | −.629++ | −.0 |
| SEI | .137 | −.053 | .113 | .172 | −.445** | 1.00 | .640++ | .1 |
| TSCS | .099 | .098 | .243 | .214 | −.629++ | .640++ | 1.00 | .1 |

```
 *  p <  .05
**  p <  .001
 +  p <  .0005
++  p <  .0001
```

# DISCUSSION

Results from this study show there is a significant correlation between **self-esteem** and locus of control. The correlation coefficient -.455 (p < .001) indicates that self-esteem negatively correlates with externality. In as much as the findings of Fish and Karabenick (1971) suggest that individuals with higher self-esteem tend to be more internally oriented, the **research** findings presented here support their results. Ryckman and Sherman (1973) reported a small but significant correlation between higher self-esteem and internal orientation. They found no significant difference between the sexes.

The SEI scores correlate significantly with the TSCS scores (.640, p < .0001), which suggests what the tests measure similar traits, thus providing construct as well as convergent validity. Wayne (1963) reported a validity coefficient of .68 between the TSCS Total Positive score and Izard's Self Rating Positive Affect Scale, demonstrating that when used to provide an overall self-esteem score the TSCS correlates significantly with other self-report inventories of self-esteem and self-concept.

There was a significant correlation between the LOC scores and the TSCS scores, which suggests that men and women with positive self-concepts tend to be more internally

oriented. This result is consistent with the significant correlation between the SEI and the TSCS.

There was no significant difference between LOC scores for Blacks (African-Americans) and Whites. This result is not consistent with findings obtained by Lefcourt and Ladwig (1965) and Rotter (1966).

The SIT scores were significantly correlated with race in that SIT scores were significantly lower for African-Americans. This finding is consistent with current research (Reynolds and Gutkin, 1981; Hays and Smith, 1980; Sattler, 1974).

The SIT scores were also significantly correlated with the LOC scores. Those subjects who scored higher on the SIT tended to have a more internal locus of control. This finding contrasts with the results of Hersch and Scheibe (1967), who found no significant correlation between IQ and LOC. It is possible that the college students tested who are more internally oriented persevered more on the SIT. During the administration of the SIT, the researcher noted that some students devoted more time and thought to the problems, particularly the arithmetic problems, than did other students. The perseverance shown by some subjects may be indicative of an internal locus of control, since the subjects seemed to think and some actually verbalized the idea that they would come up with the correct answer if they worked on it. Such an attitude could conceivably have a significant effect on the subject's SIT score.

The SIT scores did not correlate significantly with the SEI scores, thus indicating that IQ did not correlate with self-esteem. This finding corroborates the results of Schnee (1978). Nor were the SIT scores correlated with the TSCS scores, indicating that IQ does not correlate with self-concept.

There was a significant correlation between the subjects' age and the LOC scores. It follows that the older subjects were more likely to be internally oriented.

The present research found that a higher self-esteem indicates, and is consistent with, a more positive self-concept. With higher self-esteem and a more positive self-concept the individual tends to be more internally oriented. An internal orientation was positively correlated with age as well as IQ. In both instances, the correlation was small but significant.

# REFERENCES

Armstrong, R. J., & Jensen, J. A. The validity of an abbreviated form of the Stanford-Binet Intelligence Scale, Form L-M. _Educational and Psychological Measurement_, 1972, 32, 463-467.

Bedeian, A. G., Teague, R. J., & Zmud, R. W. Test-retest reliability and internal consistency of short-form of Coopersmith's Self-Esteem Inventory. _Psychological Reports_, 1977, 41, 1041-1042.

Behrens, L. T., & Vernon, P. E. Personality correlates of over-achievement and under-achievement. _British Journal of Educational Psychology_, 1978, 48, 290-297.

Bledsoe, J. C. Self concepts of children and their intelligence, achievement, interests, and anxiety. _Journal of Individual Psychology_, 1964, 55-58.

Coleman, J. S., Campbell, E. Q., Hobson, C. J., McPartland, J., Mood, A. M., Weinfeld, F. D., & York, R. L. _Equality of educational opportunity_. Report from Office of Education. Washington, D. C.: U. S. Government Printing Office, 1966.

Cone, J. D. Locus of control and social desirability. _Journal of Consulting and Clinical Psychology_, 1971, 36(3), 449.

Congdon, C. S. _Self theory and chlorpromazine treatment_. Unpublished doctoral dissertation, Vanderbilt University, 1958.

Coopersmith, S. The antecedents of self-esteem. San Francisco: W. H. Freeman & Co., 1967.

Coopersmith, S. Self-Esteem Inventories (Manual), Palo Alto, Ca.: Consulting Psychologists Press, Inc., 1981.

Cowan, R., Altmann, H., & Pysh, F. A validity study of selected self-concept instruments. Measurement and Evaluation in Guidance, 1978, 10(4), 211-221.

Fink, M. B. Self-concept as it relates to academic under-achievement. California Journal of Educational Research, 1962, 13, 57-62.

Fish, B., & Karabenick, S. A. Relationship between self-esteem and locus of control. Psychological Reports, 1971, 29, 784.

Fitts, W. Tennessee Self Concept Scale (Manual), Nashville, Tn.: Counseling Recordings and Tests, 1965.

Gordon, D. A. Children's beliefs in internal-external control and self-esteem as related to academic achievement. Journal of Personality Assessment, 1977, 41, 4, 383-386.

Hays, J. R., & Smith, A. L. Comparison of WISC-R and culture fair intelligence test scores for three ethnic groups of juvenile delinquents. Psychological Reports, 1980, 46, 931-934.

Hersch, P. D., & Scheibe, K. E. Reliability and validity of internal-external control as a personality dimension. Journal of Consulting Psychology, 1967, 31(6), 609-613.

Houtz, J. C., Denmark, R., Rosenfield, S., & Tetenbaum, T. J. Problem solving and personality characteristics related to differing levels of intelligence and ideational fluency. Contemporary Educational Psychology, 1980, 5, 118-123.

Kimble, G. A., & Garmezy, N. Principles of general psychology. New York: The Ronald Press Co., 1968.

Kokenes, B. Grade level differences in factors of self-esteem. Developmental Psychology, 1974, 10(6), 954-958.

Kokenes, B. A factor analytic study of the Coopersmith Self-Esteem Inventory. Adolescence, 1978, 13(49), 149-155.

Lefcourt, H. M., & Ladwig, G. W. The American Negro: A problem in expectancies. Journal of Personality and Social Psychology, 1965, 1, 377-380.

Martin, J. C. Locus of control and self-esteem in Indian and White students. Washington, D. C.: Bureau of Indian Affairs (Department of the Interior), 1976. (ERIC Document Reproduction Service No. ED 170 082).

Martin, J. D., & Rudolph, L. Correlates of the Weschsler Adult Intelligence Scale, the Slosson Intelligence Test, ACT scores and grade point averages. Educational and Psychological Measurement, 1972, 32, 459-462.

Platt, J. J., Elsenman, R., & Darbes, A. Self-esteem and internal-external control: A validation study. Psychological Reports, 1970, 26, 162.

Reynolds, C. R. & Gutkin, T. B. A multivariate comparison of the intellectual performance of Black and White children matched on four demographic variables. *Personality and Individual Differences*, 1981, 2(3), 175-180.

Robinson, J. P., & Shaver, P. R. *Measures of social psychological attitudes* (rev. ed.). Ann Arbor, Michigan: Institute for Social Research, University of Michigan, 1973. (Survey Research Center ISR Code No. 2928).

Rotter, J. Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs*, 1966, 80, (1, Whole No. 609).

Rubin, R. A., Dorle, J., & Sandidge, S. Self-esteem and school performance. *Psychology in the Schools*, 1977, 14(4), 503-507.

Ryckman, R. M., & Sherman, M. F. Relationship between self-esteem and internal-external control of men and women. *Psychological Reports*, 1973, 32, 1106.

Sattler, J. M. *Assessment of children's intelligence and special abilities* (2nd ed.). Boston: Allyn & Bacon, 1974.

Schnee, R. G. *Relationships between self-esteem, achievement, and I.Q. measures of elementary and secondary students.* Washington, D. C.: National Institute of Education, 1978. (ERIC Document Reproduction Service No. ED 152 845).

Simon, W. E., & Simon, M. G. Self-esteem, intelligence and standardized academic achievement. *Psychology in the Schools*, 1975, 12, 97-100.

Slosson, R. L.  Slosson Intelligence Test for children and adults, (Manual).  East Aurora, New York:  Slosson Educational Publications, 1963.

Sputz, K. C., & Johnston, J. O.  Internal consistency of the Coopersmith Self-Esteem Inventory.  Educational and Psychological Measurement, 1973, 33, 875-876.

Wayne, S. R.  The relationship of self-esteem to indices of perceived and behavioral hostility.  Unpublished doctoral dissertation, Vanderbilt University, 1963.

Weschsler, D.  The measurement and appraisal of adult intelligence (4th ed.).  Baltimore:  Williams & Williams, 1958.

Williams, R. L., & Cole, B.  Self-concept and school adjustment.  Personnel and Guidance Journal, 1968, 46, 478-481.