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ABSTRACT

Results of this validation study of a slightly modified version of the Coppersmith Self-Esteem Inventory substantiate its use with seventh graders to assess Goal I (concerning self-understanding and appreciation of self-worth) of the Educational Quality Assessment Program in Pennsylvania. Appendixes include the definition and rationale for Goal I, copies of the self-Esteem Inventory and the Self-Concept as a Learner Scale, and an expanded bibliography. (MS)

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A VALIDITY STUDY OF THE
SELF-ESTEEM INVENTORY

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This study was undertaken as part of a continuing effort by the Pennsylvania Department of Education to assess quality education in that state. The Bureau of Educational Research has been working cooperatively with the Bureau of Educational Quality Assessment in the development and validation of instruments applicable to the measurement of the Ten Goals of Quality Education established by the Pennsylvania Department of Education. The instrumentation effort, of which this study was a part, involved measures of the Ten Goals at the seventh grade level.

A slight modification of Coopersmith "Self-Esteem Inventory" (Campbell, et. al., 1968) was used to assess Goal I in the Quality Assessment Program. The supposition of Goal I is "Quality Education should help every child acquire the greatest possible understanding of himself and an appreciation of his worthiness as a member of society" (Campbell, et.al., 1968). A more complete definition and the rationale for Goal I appears in Appendix A.

It was the purpose of this specific study to determine the relevance of utilizing the Coopersmith Self-Esteem Inventory to assess Goal I for seventh graders in the state of Pennsylvania. One procedure for ascertaining the validity of a measure is to determine to what extent it measures the

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construct under question (Cronback and Meehl, 1955). It is then the specific task of this study to determine what factors are related to self-esteem and to utilize a technique which will provide an indication as to whether the Self-Esteem Inventory is measuring the construct.

A significant phenomenon to be considered when investigating self-esteem is how the individual perceives himself as a success or failure. One of the indices of success or failure, which has received much attention in the self-esteem or self-concept literature, is school achievement. A plethora of studies have found a significant positive relationship between the self-concept or self-esteem and various measures of scholastic achievement. Brookover (1967) found significant positive correlations between the self-concept of ability and grade-point averages. Williams and Cole (1968) found significant correlations between the self-concept and mathematical and reading achievement. Also, Landis (1970) found high positive correlations between the four factors of Waejten's Self-Concept as a Learner Scale and a standardized achievement battery.

The Self-Esteem Inventory (Coopersmith, 1967), specifically, has been found to relate to scholastic achievement. Campbell (1967) found a significant correlation between self-esteem and achievement. Furthermore, the Bureau of Education Quality Assessment, Pennsylvania Department of Education (Campbell, et.al., 1968) determined moderate correlations between the Inventory and achievement measures.

Today, the assertion that self-esteem and achievement are positively correlated is a rather well accepted construct. A significant variable contributing to this relationship is the individual's frame of reference. Coopersmith (1967) states:

It is from a person's actions and relative position within (his) frame of reference that he comes to believe that he is a success or failure, and not in the far broader and more abstract context of general sociocultural standard. Since all capacities and performances are viewed from such personal context, we must know, for example, conditions and standards within a given classroom, group of professionals, or a family before making any conclusions about any individual's feelings of worthiness.

An important aspect of the individual's frame of reference, then, becomes the classroom environment in which he operates. Students who achieve well in school are reinforced for this behavior by the teacher and should exhibit a substantial self-esteem. Whereas those individuals who do not achieve well do not receive this type of reinforcement and would tend to show a lower self-esteem.

Although Coopersmith (1967) would not completely agree with general statements regarding self-appraisals, he does state:

....that general statements have relevance to the extent that common dimensions and standards are employed in different frames of reference and to the extent that the terms employed (such as acceptance and respect) have similar connotations and importance.

It is felt that common dimensions and standards are employed across high achievers and a different set of common dimensions and standards are employed with low achievers. It is these methods which may tend to produce the positive correlation between achievement and "self" measures.

Another factor which should be considered is the influence of ability grouping upon self-esteem. Consideration of the effect of ability grouping is due to the necessity of sampling two intact homogeneous groups for this study. Several studies have been undertaken to determine the extent to which grouping patterns effect self-esteem.

Borg (1966) investigated academic and personality variables as they relate to ability and random grouping for children ranked as superior, average and low. He found that random grouping favored concepts of self-acceptance, of self-feelings, of belonging and reduction in anti-social tendencies for all ranks. Combs (1952) found that after the third year of ability grouping a child seldom breaks rank. He incorporates the teacher's judgment of his current status and begins to behave as expected. A further indication of the effect of ability grouping discovered by Luchins and Luchins (1948) points out that not only are children aware of differences when several ability groups are established, but they strongly desire to be in the highest group.

As can be seen from the review of literature, achievement is highly related to self-esteem. Along with achievement the factor of ability grouping operating in this study could also effect the self-esteem. It was concluded that if this revision of the Self-Esteem Inventory measures self-esteem, it should discriminate between high and low achievers.

To provide additional evidence as to whether the Inventory measures the construct of self-esteem, it was felt that it should correlate to another measure of the self-concept. The instrument selected was the Self-Concept as a Learner Scale. The Self-Concept as a Learner Scale was designed to measure the self-concept in a learning or classroom situation.

In this study, it was hypothesized that for seventh graders:

- (1) there would be a significant difference ($p < .05$) between high and low achievers on the Self-Esteem Inventory with high achievers reporting higher scores, and
- (2) there would be a significant positive correlation ($p < .05$) between the total score and similar factors of the Self-Esteem Inventory and the Self-Concept as a Learner Scale.

SAMPLE

The sample consisted of 62 seventh grade students from two intact homogeneously grouped classes. Thirty-one students were in the high achievement group and thirty-one were in the low achievement group. The subjects were determined to be high or low achievers according to the school's grouping procedure. The procedure emphasized mathematical and verbal achievement on a standardized test battery, as well as teachers' ratings.

It was recognized that the subjects should have been randomly selected from ability groups within the school. However, due to administrative constraints, this was impossible.

Instrumentation

Two instruments which measure self-esteem and self-concept were administered in the same testing period. The first was the modification of the Self-Esteem Inventory, which will be utilized in the Pennsylvania Student Questionnaire in the seventh grade. The second instrument was Waejten's Self-Concept as a Learner Scale, which was designed to measure the individual's perception of himself in a learning situation. Both instruments were administered to all subjects in the same testing period. The testing occurred in the late fall of 1970.

The Self-Esteem Inventory, based on the factor analytic work of the Bureau of Educational Quality Assessment, has a general factor which supports the use of a total score. Their work identified four factors within the Inventory. The factors are entitled: Control of the Environment (Factor 1), Self-Confidence in Personal Attributes (Factor 2), Achieving in School (Factor 3)

and Relating to Others (Factor 4). The measure includes 53 statements to which the subject is to respond that the item either describes himself (Like Me) or not (Unlike Me). The scores may range from a high of 53 to a low of 0.

The total score of the Waejten Scale measures the self-concept in a learning or classroom environment. It is delineated into four theoretically derived factors entitled; Motivation (Factor 1), Task Orientation (Factor 2), Intellectual Ability (Factor 3) and Class Membership (Factor 4). This instrument employs a five-point Likert scale with a score of five for an item judged completely true, to one if judged completely false. The fifty item measure has a possible range from 250 for all completely true responds to 50 for all completely false.

In both instruments the items are judged in terms of the way a positive self-esteem would be indicated. Both measures also include negative items on which the scoring procedure for positive items is reversed.

The achievement measure used by the school district in the fall was the Stanford Achievement Test Battery. The mathematics and verbal subtests were used for grouping purposes.

Statistical Analysis

A t-test (Li, 1968) was used to test the hypothesis that there was a significant difference between homogeneously grouped high and low achievers on the Self-Esteem Inventory. The t-scores were calculated between the four factors and total score of the Inventory.

A zero-order Pearson Product-Moment Correlation Coefficient was computed to determine the relationship between the Self-Esteem Inventory (SEI) and the Self-Concept as a Learn Scale (SCAL). Correlation coefficients

were also calculated between the third factors of both tests which emphasize school achievement and the fourth factors which emphasize peer group relationships. Correlations were not computed between the other factors because they do not attempt to measure similar aspects of the self-concept and for the purposes of this study these relationships would not be of significant value.

Results

Results of the t-tests provide evidence to support the first hypothesis that there is a difference between homogeneously grouped high and low achievers on the Self-Esteem Inventory. Significant differences at the .01 level were attained between high and low achievers on the Inventory total score as well as the first three factors - Control of the Environment, Self-Confidence in Personal Attribute and Achieving in School. The fourth factor, Relating to Others did not reach significance at the .05 level, however, it did reach the .10 level. The results are reported in Table 1.

TABLE 1

Means, Standard Deviations, and
t-Scores for High and Low Achievers

Sample (N=31 High, N=31 Low)

| Factor | High Achievers | | Low Achievers | | t |
|--|----------------|--------------------|---------------|--------------------|--------|
| | Mean | Standard Deviation | Mean | Standard Deviation | |
| Control of Environment | 30.48 | 2.69 | 28.43 | 2.93 | 2.87** |
| Self-Confidence in Personal Attributes | 16.68 | 2.18 | 15.17 | 1.98 | 2.85** |
| Achieving in School | 15.65 | 1.66 | 13.03 | 2.09 | 5.45** |
| Relating to Others | 30.16 | 2.91 | 28.67 | 3.14 | 1.94* |
| Total Score | 92.97 | 7.25 | 85.30 | 8.33 | 3.86** |

*p .10

**p .01

Results of the correlations between the Self-Esteem Inventory and the Self-Concept as a Learner Scale provide support for the second hypothesis. Correlation coefficients between the total SEI and SCAL scores, Factors 3 of SEI and SCAL and Factors 4 of SEI and SCAL all reached significance at the .01 level with the coefficient between total scores being the largest. These results appear in Table 2.

TABLE 2

Correlation Coefficients Between the
Self-Esteem Inventory and the Self-Concept as a
Learner Scale Total Scores, Third Factors
and Fourth Factors

Sample (N=62)

| Coopersmith | Waetjen | | |
|---------------------|----------------------|------------------|---------|
| | Intellectual Ability | Class Membership | Total |
| Achieving in School | .6853** | | |
| Relating to Others | | .5853** | |
| Total | | | .7922** |

**p .01

Conclusions

When undertaking a construct validation study, it must be understood that this does not mean we have validated an instrument in the strict sense. However, it can provide evidence not only for the construct under question but also the degree to which an instrument measures the construct of interest. It can provide further information which will allow for making inferences about persons who obtain given test scores.

The results of this study provide strong evidence that the modestly revised version of the Self-Esteem Inventory is measuring the construct of self-esteem in seventh graders. The instrument discriminated between high and low achievers who were grouped homogeneously. This provides additional support to the phenomenon described in the literature of those individuals who achieve well in school view themselves as successful.

Whereas those who do not achieve well, are well aware of this fact, and do not value themselves as highly. Further evidence to support the use of the Inventory with seventh graders is seen by the significant correlations between the Self-Esteem Inventory and the Self-Concept as a Learner Scale.

It was concluded from this study that the Self-Esteem Inventory is measuring the construct of self-esteem to the degree possible given what is presently known about the construct. It substantiates the use of this measure with seventh graders for the purpose of assessing Goal I in the state-wide Educational Quality Assessment Program in Pennsylvania.

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APPENDIX A

GOAL I :

DEFINITION AND RATIONALE

GOAL I

QUALITY EDUCATION SHOULD HELP EVERY CHILD ACQUIRE THE GREATEST POSSIBLE UNDERSTANDING OF HIMSELF AND AN APPRECIATION OF HIS WORTHINESS AS A MEMBER OF SOCIETY.

It is widely held that self-understanding is significantly associated with personal satisfaction and with effective functioning. The views, which students have of their adequacies and their inadequacies and their values and their desires can strongly influence their performance in school.

Self-understanding is a personal judgment of worthiness, a subjective experience which individuals convey to others by verbal reports and other overt expressive behaviors. What are the conditions that lead individuals to value themselves as persons of worth? Coopersmith (1967) discusses four major factors which contribute to the development of self-understanding:

1. We value ourselves as we are valued. The amount of respectful accepting and concerned treatment we receive from parents, teachers, and other significant persons can have a profound effect on the amount of worth we ascribe to ourselves.
2. We achieve self-understanding when living up to aspirations in areas we regard as personally significant. All persons do not necessarily interpret indices of success and approval as equally favorable.
3. We perceive success and esteem in light of our personal goals and values.
4. Our manner of responding to devaluation can help us to maintain our self-respect or can lead us to minimize and distort it. The ability to defend the self in the face of negative appraisals help us to reduce anxiety and maintain personal equilibrium.

Quality education should provide the opportunity for students to achieve confidence in their personal attributes so that they will be able to make

decisions, defend their positions and plan ahead. Quality education should provide the opportunity for all students to achieve in their school work and to gain confidence in their abilities to achieve academically. Finally, quality education should provide the opportunity for students to relate successfully to peers, teachers, and parents.

APPENDIX B
THE SELF-ESTEEM INVENTORY
and
SELF-CONCEPT as a LEARNER SCALE

SELF-ESTEEM INVENTORY

DIRECTIONS: Please mark each statement in the following way: If the statement describes how you usually feel, place an X in the parenthesis next to the statement "Like Me". If the statement does not describe how you usually feel, place an X in the parenthesis next to the statement "Unlike Me". There are no right or wrong answers.

| | Like Me | Unlike Me |
|---|---------|-----------|
| EXAMPLE: I'm a hard worker | () | () |
| 1. I spend a lot of time daydreaming | () | () |
| 2. I'm pretty sure of myself | () | () |
| 3. I often wish I were someone else | () | () |
| 4. Every time I plan to do something (make a plan) something goes wrong | () | () |
| 5. I'm easy to like | () | () |
| 6. My parents and I have a lot of fun together | () | () |
| 7. I wish I were younger | () | () |
| 8. There are lots of things about myself I'd change if I could | () | () |
| 9. I can make up my mind without too much trouble | () | () |
| 10. I'm a lot of fun to be with | () | () |
| 11. I get upset easily at home | () | () |
| 12. Luck decides most things that happen to me | () | () |
| 13. Someone always has to tell me what to do | () | () |
| 14. It takes me a long time to get used to anything new | () | () |
| 15. I'm often sorry for the things I do | () | () |
| 16. I'm popular with kids my own age | () | () |
| 17. My parents usually consider my feelings | () | () |
| 18. I don't stick up for myself very much | () | () |
| 19. I can usually take care of myself | () | () |

| | Like Me | Unlike Me |
|---|---------|-----------|
| 20. I'm pretty happy | () | () |
| 21. If I work hard, I can be what I want to be | () | () |
| 22. My parents expect too much of me | () | () |
| 23. I would rather play with children younger than I | () | () |
| 24. I understand myself | () | () |
| 25. It's pretty tough to be me | () | () |
| 26. Things are all mixed up in my life | () | () |
| 27. If I stick to something long enough, I can make it work . . . | () | () |
| 28. No one pays much attention to me at home | () | () |
| 29. If I work hard, I can get a good job | () | () |
| 30. I can make up my mind and stick to it | () | () |
| 31. I have a low opinion of myself | () | () |
| 32. I don't like to be with other people | () | () |
| 33. There are many times when I'd like to leave home | () | () |
| 34. I often feel ashamed of myself | () | () |
| 35. I'm not as nice looking as most people | () | () |
| 36. If I have something to say, I usually say it | () | () |
| 37. Kids pick on me very often | () | () |
| 38. My parents understand me | () | () |
| 39. There isn't much of a chance for a person like me to succeed in life | () | () |
| 40. I get upset easily when I'm scolded | () | () |
| 41. I don't care what happens to me | () | () |
| 42. Most people are better liked than I am | () | () |

- | | Like Me | Unlike Me |
|--|---------|-----------|
| 43. I usually feel as though my parents are pushing me | () | () |
| 44. If I work hard, I'll be able to go to college | () | () |
| 45. If I work at something long enough, I will succeed | () | () |
| 46. I find it very hard to talk in front of the class | () | () |
| 47. I'm proud of my school work | () | () |
| 48. I'm doing the best work I can | () | () |
| 49. I like to be called on in class | () | () |
| 50. I wish I could do much better in school | () | () |
| 51. I often feel upset in school | () | () |
| 52. My teacher makes me feel I'm not good enough | () | () |
| 53. I often get discouraged in school | () | () |

SELF-CONCEPT AS A LEARNER SCALE

INSTRUCTIONS: These statements are to help you describe yourself. Please answer them as if you were describing yourself to yourself. Do not omit any item! Read each statement carefully; then select one of the following answers; and next record the number that represents that particular answer in the blank space at the end of that statement.

| | | | | | |
|------------|--------------------|----------------|------------------------------------|-----------------|---------------------|
| RESPONSES: | Completely True | Mostly True | Partly True and Partly False | Mostly False | Completely False |
| Number | 5 | 4 | 3 | 2 | 1 |

1. I am usually eager to go to class. _____
2. I never ask teachers to explain something again. _____
3. I try to change when I know I'm doing things wrong. _____
4. I wish I didn't give up as easily as I do. _____
5. I get the required work done, but I don't do extra work. _____
6. I would rather do well than poorly in school. _____
7. Once in a while I put off until tomorrow what I should do today. _____
8. I become discouraged easily in school. _____
9. I give up easily in school work. _____
10. I do things without being told several times. _____
11. I am satisfied to be just what I am. _____
12. I like school jobs which give me responsibility. _____
13. I like to start work on new things. _____
14. I cannot remember directions for doing things. _____
15. I do well when I work alone. _____
16. I am satisfied with my ability to speak before class. _____
17. I am able to get my work done on time. _____
18. I have difficulty deciding what to study. _____



APPENDIX C

EXPANDED SELF BIBLIOGRAPHY

EXPANDED BIBLIOGRAPHY

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