

DOCUMENT RESUME

ED 053 160

TM 000 677

AUTHOR Zirkel, Perry Alan; Greene, John Francis
TITLE The Measurement of Self-Concept of Disadvantaged Students.
PUB DATE Feb 71
NOTE 13p.; Paper presented at the Annual Meeting of the National Council on Measurement in Education, New York, New York, February 1971
EDRS PRICE MF-\$0.65 HC-\$3.29
DESCRIPTORS Caucasian Students, *Disadvantaged Youth, Elementary School Students, Ethnic Studies, *Measurement Techniques, Negro Students, Puerto Ricans, Rating Scales, *Self Concept, Self Esteem, *Self Evaluation, *Student Evaluation

ABSTRACT

In a preliminary study, researchers found that self-concept was related to ethnic group membership but not mixture (majority-minority dynamics). The purposes of this study were (1) to further explore the relationship between self-concept and ethnic group membership and mixture by employing a teacher-rating instrument on the teachers of a sample of students concurrently administered a self-rating instrument, and (2) to determine the relationship between the two instruments for the total sample and selected stratifications. Contrary to the self-perceptions of the students themselves in the previous study, Puerto Rican children were not measured to have a significantly lower self-concept than Negro and white children. The results of this study reveal that the instruments are interacting significantly with ethnic group. Thus, when feasible, both measures should be employed in an effort to maximize the understanding of self-concept and its relationship to other variables. A moderate, positive relationship exists between the two measures. (Author)

ED053160

The Measurement of Self-Concept
of Disadvantaged Students

Perry A. Zirkel
University of Connecticut

John F. Greene
University of Bridgeport

U.S. DEPARTMENT OF HEALTH, EDUCATION
& WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED
EXACTLY AS RECEIVED FROM THE PERSON OR
ORGANIZATION ORIGINATING IT. POINTS OF
VIEW OR OPINIONS STATED DO NOT NECES-
SARILY REPRESENT OFFICIAL OFFICE OF EDU-
CATION POSITION OR POLICY.

Presented at the 1971 Annual Meeting of the
National Council on Measurement in Education

New York City

TM 000 677

ABSTRACT

The Measurement of Self-Concept
of Disadvantaged Students

Ferry Alan Zirkel
University of Connecticut

and

John Francis Greene
University of Bridgeport

In a preliminary study, the researchers found that self-concept was related to ethnic group membership but not mixture (majority-minority dynamics). The purposes of this study were (1) to further explore the relationship between self-concept and ethnic group membership and mixture by employing a teacher-rating instrument on the teachers of a sample of students concurrently administered a self-rating instrument, and (2) to determine the relationship between the two instruments for the total sample and selected stratifications. Contrary to the self-perceptions of the students themselves in the previous study, Puerto Rican children were not measured to have a significantly lower self-concept than Negro and white children. The results of this study reveal that the instruments are interacting significantly with ethnic group. Thus, when feasible, both measures should be employed in an effort to maximize the understanding of self-concept and its relationship to other variables. A moderate, positive relationship exists between the two measures.

The Measurement of Self-Concept
of Disadvantaged Students

Perry Alan Zirkel

and

John Francis Greene

University of Connecticut

University of Bridgeport

There has been an increasing number of empirical studies on self-concept since 1950 and an increasing number relating self-concept to ethnic group membership and mixture* since 1960. Wylie (1961, p. 2) explained that there exists "a bewildering array of hypotheses, measuring instruments, and research designs" in this growing body of research.

The list of names of measuring instruments is endless, and the types of such instruments include Q-sorts, rating scales, open-ended questionnaires, and adjective check lists. Most studies on self-concept have employed instruments in which the students themselves have responded. However, some studies have used the teachers or other "significant others" on the school staff to serve as a supplementary or sole source to measure the students self-concept. Such a procedure has the practical advantages of not taking the time or aggravating the sensitivities of large numbers of students. Moreover, measures are thereby obtainable for the very young or defensive child. Such a procedure is in line with the theoretical basis of Mead, Sullivan, and others that one's perception of self is a result and reflection of the perceptions of "significant others" -- parents, teachers, peers, etc.

Davidson and Lang (1960) and Brookover and Thomas (1963) did find a significant relationship between students' self-concepts and the perceived evaluations of their teachers. However, the results of the few studies relating students' self-concepts to the actual evaluations of teachers are

*The term ethnic group "mixture" is used advisedly and generically. It is used to focus on the majority-minority dynamics common to such more confining and often confusing terms as nonsegregation, integration, desegregation, de facto segregation, de jure segregation, and resegregation.

not as supportive. Coopersmith (1959) argued for observer as well as self evaluations in determining self-esteem. Although he reported to have found "substantial agreement" between the results of his Self-Esteem Inventory and his Behavior Rating Form, it would appear from the incomplete data he provides that there was substantial disagreement as well. In another use of both instruments, Meketon (1966) found differential results regarding the relationship of self-concept to ethnic group proportion. Moreover, Butts (1963), Burke (1968), Williams (1968), and Soares and Soares (1970) also found significantly different results between self and observer evaluations using other instruments to measure the self-concept of disadvantaged students.

The purposes of this study were (1) to further explore the relationship between self-concept and ethnic group membership and mixture by employing a teacher-rating instrument on the teachers of a sample of students concurrently administered a self-rating instrument, and (2) to determine the relationship between the two instruments for the total sample and selected stratifications.

In a preliminary study, Moses and Zirkel (1970) found that self-concept was related to ethnic group membership but not mixture. The mean self-concept scores of Negro and white students were found not to differ significantly but to both significantly surpass that of Puerto Rican pupils. The instrument used was the 42-item Coopersmith Self-Esteem Inventory, which consists of statements to which the student responds either "Like Me" or "Unlike Me." Coopersmith (1959) originally constructed the instrument on the basis of the judgements of five psychologists to selected items from the Rogers and Dymond scale. He and other investigators found reliability coefficients ranging from .65 to .88, but little evidence is given on the instrument's validity (Moses and Zirkel, 1970).

Method

In the present study the same sample but a different instrument was used. The sample consisted of 120 fifth- and sixth-grade students from three schools in a large Connecticut city. All three schools had Negro, Puerto Rican, and white students but in such proportions that each school had a different one of these three ethnic groups as a majority. The subjects selected were within similar SES and I.Q. brackets and almost equally distributed with regard to sex and school.

The instrument used was the McDaniel Inferred Self-Concept Judgment Scale, which consists of 30 statements about students which the observer rates from 1 (never) to 5 (always). McDaniel (1967) constructed the instrument in a manner somewhat similar to Coopersmith. The judgments of eight professionals, mostly of psychological backgrounds, were used to select items from Rogers and Dymond's and other scales. However, McDaniel's instrument was chosen because of the more complete and conclusive evidences of reliability and validity.

The regular fifth and sixth grade teachers of the students studied were given the McDaniel Inferred Self-Concept Scale with instructions to rate each child who had rated himself. Similar to the first study, an analysis of variance design was applied to the resultant scores. In addition, correlations between the two instruments were obtained for the total sample as well as for selected stratifications. Finally, in an effort to maximize the information gain available from the data and to confirm the discussion of the combined results of the first two procedures, a within subject dimension analysis of variance design was employed. In this type of analysis, both the student and the teacher ratings are considered.

Results

The total score on the Inferred Self-Concept, representing the average of the total number of rating points, ranged from a possible low of 1 to a possible high of 5. The means for the different groups are given in Table 1.

Insert Table 1 here

As can be seen by examining this table, the cell means vary from 3.58 to 3.88. The range of the cell standard deviations is bounded by .42 and .58. The standard deviation of the total sample is .53.

The results of the first analysis of variance design using only the teacher ratings as the criterion appear in Table 2.

Insert Table 2 here

It can be readily seen from Table 2 that, contrary to the results of the first study, neither the ethnic group membership nor the ethnic group mixture (i.e., majority-minority) factor approached significance.

The correlations between the instruments for the total sample and selected stratifications are given in Table 3.

Insert Table 3 here

Table 3 illustrates that the correlation between the two instruments for the total sample is significant ($p < .01$), but that variations in the degree of the relationship exist within the subsamples.

In Table 4 the results of the within subject analysis of variance using both the student and teacher ratings are presented.

Insert Table 1 here

In this analysis the interactions involving the instrument factor are the primary interest. The other sources of variance merely confirm the results of previous analyses or are of no importance. Both the instrument by ethnic group interaction and the ethnic group factor were significant at the .05 level. As expected and of no importance, the instrument factor was highly significant.

Discussion

The analysis of variance results in Table 2 failed to yield any significance for the ethnic group and mixture factors and their interaction. Contrary to the self-perceptions of the students themselves in the previous study, Puerto Rican children were not measured to have a significantly lower self-concept than Negro and white children. That is, whether a student was in a minority group in society did not seem to be related to his self concept. Whether the student was in a minority group in the school did not seem to be related to his self concept either.

The .37 ($p < .01$) correlation for the total sample implies that a moderate positive relationship does exist between the two measures. At the same time, however, it must be noted that the degree of relationship certainly does not allow one to assume that the two instruments are necessarily measuring the same aspect of the hypothetical construct of self-concept. For example, others have attributed the inconsistency and seeming contradictions of previous findings to such distinctions as self-evaluation v. self-description and school-related v. personal-social-related self-concept, (e.g., Kubiniec, 1970). Such distinctions are not always made clear in the terms and definitions used nor in the instruments

employed. As Kubiniec (1970, p. 321) pointed out, "The same instruments are employed to measure different self-constructs, and the same constructs are measured by different instruments."

The correlations between the two instruments in the subsamples reported in Table 3 suggest that there is more agreement between the teacher and student ratings for the majority groups as compared to the minority groups. Less agreement between the two instruments was found for the Puerto Rican subjects than for the Negro or white students. Moreover, a wider range between the majority-minority correlations within ethnic group exists for the Negro and white groups, implying that the instruments may be interacting with the other variables. The difference between the analysis of variance results already discussed above and the results of the previous study also indicates that such an interaction may be present. The task of identifying which interaction, if any, is significant by analysing the differences between the two ANOVA tables (Table 2 and the results of the previous study) and the correlations is somewhat bewildering. Perhaps this difficulty arises because in one analysis mean differences are of primary concern while in the other the differences between means is not considered. In order to specify the expected significant interaction, the within subject analysis was employed. The results of this analysis, presented in Table 4, reveal that the instruments are interacting significantly with ethnic group. The results of analyses concerning self-concept and ethnic group membership are not independent of the type of self-concept measure utilized. Thus, when feasible, both measures should be employed in an effort to maximize the understanding of self-concept and its relationship to other variables.

REFERENCES

- BROOKOVER, W.B. & THOMAS, S. Self-concept of Ability and School Achievement. Sociology of Education, 1963, 37, 271-275.
- BURKE, B.P. An Exploratory Study of the Relationships Among Third Grade Negro Children's Self-concept, Creativity and Intelligence and Teachers' Perceptions of These Relationships. Unpublished doctoral dissertation. Wayne State University, 1968.
- BUTTS, H.F. Skin Color Perception and Self-esteem. Journal of Negro Education, 1963, 32, 122-128.
- COOPERSMITH, S. A Method for Determining Types of Self-esteem. Journal of Abnormal and Social Psychology, 1959, 59, 87-94.
- DAVIDSON, H.H. and LANG, G. Children's Perceptions of Their Teachers' Feelings Toward Them Related to Self-perception, School Achievement, and Behavior. Journal of Experimental Education, 1960, 29, 107-118.
- KUBINIEC, C.M. The Relative Efficacy of Various Dimensions of the Self-concept in Predicting Academic Achievement. American Educational Research Journal, 1970, 7, 321-355.
- MCDANIEL, E.L. Final Report on Head Start Evaluation and Research. Austin: University of Texas: August 31, 1967. ERIC ED 019 124 (microfiche).
- MEKETON, B.F. The Effect of Integration Upon the Negro Child's Responses to Various Tasks and Upon his Level of Self-esteem. Unpublished doctoral dissertation, University of Kentucky, 1966.
- MOSES, E.G. and ZIRKEL, P.A. Self-concept and Ethnic Group Membership Among Public School Students. (In preparation)
- SOARES, A. and SOARES, L. Interpersonal and Self-perceptions of Disadvantaged and Advantaged High School Students. Proceedings, 78th Annual Convention, American Psychological Association, 1970, 457-458.
- WILLIAMS, D.E. Self-concept and Verbal Mental Ability in Negro Preschool Children. Unpublished doctoral dissertation, St. John's University, 1968.
- WYLIE, R. The Self-concept. Lincoln, Nebraska: University of Nebraska Press, 1961.

Table 1
Means for the Ethnic Groups by Mixture

MIXTURE	ETHNIC GROUPS			Total
	Negro	Puerto Rican	White	
Majority	3.67	3.88	3.71	3.75
Minority	3.86	3.58	3.69	3.71
Total	3.76	3.73	3.70	3.73

Table 2
 Analysis of Variance Results for the Teacher
 Self-concept Ratings

Source of Variation	df	Sum of Squares	Mean Squares	F Ratio
Ethnic Group	2	.090	.045	.16 ns
Mixture	1	.057	.057	.20 ns
Interaction	2	1.176	.588	2.09 ns
Within	114	32.122	.281	
Total	119	33.445		

Table 3
 Correlations between the Instruments
 for Total Sample and Selected Subsamples
 (n=size)

MIXTURE	ETHNIC GROUPS						Total	
	Negro r	n	Puerto Rican r	n	White r	n	r	n
Majority	.65**	20	.28	20	.54*	20	.45**	60
Minority	.16	20	.26	20	.29	20	.28*	60
Total	.42**	40	.29	40	.42**	40	.37**	120

*p<.05
 **p<.01

Table 4
 Analysis of Variance Results for Teacher
and Student Self-concept Ratings

Source of Variation	df	Sum of Squares	Mean Squares	F Ratio
Between Subjects	119	2771.8		
ethnic group	2	148.5	74.2	3.28*
mixture	1	2.9	2.9	.12
interaction	2	39.5	19.7	.87
error	114	2580.7	22.6	
Within Subject	120	34232.7		
instrument	1	31769.4	31769.4	1582.22**
instrument X ethnic group	2	147.6	73.8	3.67*
instrument X mixture	1	4.2	4.2	.20
interaction	2	22.5	11.2	.56
error	114	2289.0	20.0	
Total	239	37004.5		

*p < .05

**p < .01