

DOCUMENT RESUME

ED 117 899

EC 081 251

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TITLE The Use of Semantic Differential to Assess the Perceptions and Attitudes of Preservice and Advanced Degree Candidates Toward Various Exceptionalities.

PUB DATE Nov 75

NOTE 14p.; Paper presented at the California Educational Research Association (54th, San Diego, California, November 12-13, 1975); A few lines may reproduce poorly

EDRS PRICE MF-\$0.83 HC-\$1.67 Plus Postage

DESCRIPTORS *Attitudes; Exceptional Child Research; *Handicapped Children; *Higher Education; *Perception; Post Secondary Education; Semantic Differential; Student Attitudes

ABSTRACT

The perceptions of three groups (n=30) of bachelor level special education majors and doctoral candidates in education toward the mentally retarded and various other exceptionalities were measured after exposure to three types of treatment. Of the three groups, the control group received no treatment, experimental group I received negative treatment consisting of a 10-minute slide-tape presentation of various syndromes associated with profound retardation, and experimental group II received positive treatment consisting of a 10-minute presentation of selections recorded by a musically superior group of educable mentally retarded students. Among the findings from pre- and posttests on semantic differential scales were that the attitudes and perceptions of the advanced degree Ss were significantly more positive than those of preservice special education Ss, and that the label gifted was viewed most positive of all labels while severely retarded was viewed most negative. (CL)

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THE USE OF SEMANTIC DIFFERENTIAL
TO ASSESS THE PERCEPTIONS AND ATTITUDES OF PRESERVICE
AND ADVANCED DEGREE CANDIDATES TOWARD VARIOUS EXCEPTIONALITIES

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A Paper Presented at the 54th Annual Meeting of the
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November 12-13, 1975, San Diego, California

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INTRODUCTION

Perceptions and attitudes towards various exceptionalities have been associated, throughout the literature, with the affects of degree of contact and the measurement of connotative meaning. The first dimension, the affect of increased contact with individuals about which negative group stereotypes exist, has been frequently hypothesized as an effective means to foster more favorable attitudes (Jaffe, 1967).

A review of related literature has indicated mixed or conflicting results in comparing degree of contact and change in perceptions toward various exceptionalities. Roeher (1961) and Yuker, Block, and Campbell (1960) reported contact to be related to expressions of favorable attitudes while a similar study by Granofsky (1955) found no such changes resulting from induced contact.

Warren and Turner (1966) reporting on attitudes of different professional and adolescent groups towards seven forms of exceptionalities, related that the less the individual knew about a certain form of exceptionality the lower he ranked the condition. Lazar, Gensley and Gowan (1971) also supported this contention by relating increased knowledge with more positive perceptions. Although Warren and Turner (1966) were able to positively correlate knowledge and ranking, the study failed to reveal differences in perceived meaning of the concept as a function of training and experience.

Cleland and Chambers (1959) found that a tour of an institution for the mentally retarded produced both positive and negative expressions

of attitudes by students. This research appears to be inconclusive in relating attitudes to degree and kind of contact with stereotyped groups.

There seems to exist a need to compare and contrast groups receiving organized positive and negative intervention in a controlled setting. This can be accomplished by controlling the nature of the contact situation, the measuring instruments and the individual subjects.

A second dimension, that of the level of connotative meaning, can be associated with the relationship between verbal labels and perceptual meaning. Although disability labels have different denotative meanings, i.e., meanings associated with the objective definitional aspects of a label, they may evoke similar connotative responses, i.e., association with emotive reactions to encoding and decoding of labels (Simmel & Dirkson, 1966). Thusly, the individual may cognitively be aware of and be able to express differences in exceptionalities while affectively responding in a similar nature to all exceptionalities. Over a period of time with contact and knowledge, individuals may change their perceptions favorably, or assimilate favorable traits into their perceptions of a handicapped group or person, yet maintain a consistency in their feelings toward that group of persons (Jaffe, 1967).

Although a multidimensional conceptualization of attitudes has been proposed by numerous investigators (Nunnally, 1961; Triandis, 1964) connotative measurement of attitudes may suggest unidimensionality across exceptionalities.

The proposition that attitudes are multidimensional may be useful as an explanation for the contradictory findings in the literature with regard to the effect of experience or contact on attitudes (Jaffe, 1967). Measures of attitude which are affectively weighted, e.g., on evaluation and potency factors of the semantic differential technique, may less readily show change in the groups having experience or contact, whereas cognitive measures may have the opposite effect. Jaffe (1967) suggests two areas worthy of investigation. These areas include (a) the effects of different types of contact on attitudinal dimensions and (b) the effect of severity of retardation on attitudes toward mentally retarded persons.

The major purpose of this research is to determine the relationship between degree and kind of experience (in the form of stipulated intervention in mental retardation) and perceptions and attitudes towards

- (1) the mentally retarded (mildly and severely retarded, and
- (2) various exceptionalities (emotionally disturbed, learning disabled, physically disabled, and gifted).

PROCEDURES

Subjects

A total N of 30 consisted of 15 special education majors involved in bachelor's level introductory coursework and 15 doctoral candidates in education. Through random selection the variety of the sample concerning age, sex, interest, and educational background, provided adequate variation from the population of subjects associated with the field of education. Each group of 15 students was randomly assigned into three groupings, i.e., control group with no treatment, experimental group I given positive treatment and experimental group II given negative treatment.

Measures of Attitude

The semantic differential technique (Osgood, Suci, & Tannenbaum, 1957) has found an important place in educational research methodology. The semantic differential consist of several bipolar adjective scales to measure the semantic space of the desired concepts, physical disabled, learning disabled, emotionally disturbed, mildly retarded, gifted, and severely retarded. The development of the semantic differential initially involves the selection of concepts or stimuli to be rated through scales of bipolar adjectives. As discussed by

Kerlinger (1967) the concepts selected for study must be relevant to the research problem at hand, must be familiar to and capable of eliciting varied responses from the population sampled and also must cover the desired semantic space as defined by the selection of representative bipolar adjectives. The selection of relevant semantic scales concerned the measurement of two dominant factors toward the concepts physically disabled, learning disabled, emotionally disturbed, mildly retarded, gifted, and severely retarded. These two factors were evaluation and potency; each having three bipolar adjective scales representative of the semantic space measured. The distance between each end of the bipolar adjective scales was divided into seven equal intervals, each labeled with a number. An odd number of intervals is necessary to have a distinct middle position. Seven intervals has proven to be best for response discrimination and judgment by the average adult (Osgood et al., 1957). The order and polar orientation of the scale was presented in the same manner for each subject, but care was taken to alternate polar direction to prevent formation of a positive set.

Treatment

Of the three groups, the control group did not receive treatment. Experimental group I received negative treatment which consisted of a ten minute tape and slide presentation of various syndromes which result in profound retardation. Experimental group II received positive treatment which consisted of a prepared ten



minute presentation and playing of selections recorded by a musically superior group of educable mentally retarded students from a state institution. Each group was tested immediately before and after

treatment on semantic differential scales for the concepts physically disabled, learning disabled, emotionally disturbed, gifted, mildly retarded and severely retarded.

Results

Statistical analysis, BMD 08V analysis of variance, revealed three areas of significance:

(1) Attitudes and perceptions as measured by the semantic differential scale on advanced degree candidates were significantly more positive than that of pre-service candidates in special education. This is a possible display of the effect of experience and training.

(2) Connotative response to the verbal labels physically disabled, emotionally disturbed, learning disabled, gifted, mildly retarded, and severely retarded showed significance as indicated in Table 1. Tukey's Honestly Significant Difference (HSD) post hoc test was used to determine levels of significance.

(a) Gifted were significantly different from each of the other five groups. Greatest differences were with severely retarded and emotionally disturbed.

(b) Each of the five areas were significantly different from emotionally disturbed and severely retarded.

(c) There were no significant differences between other areas.



Significant differences were found at the label gifted which was viewed most positive of all labels and severely retarded which was viewed most negative of all labels. Further significant negative responses included the verbal label emotionally disturbed. The remaining labels did not vary significantly. It was interesting to note that a distinction was made by the subjects in their responses to mildly and severely retarded.

(3) Interaction between various treatment groups on pre and post measures exhibited significance. Analysis through simple effects and post hoc tests indicated a significantly more positive response on the post test for the positive treatment groups (Group II), a significantly more negative response on the post test for the negative treatment groups and no significant difference between pre and post tests for the control groups. These results imply that there is a significant immediate correlation between kind of contact and change in attitudes (Table 2).

Discussion

This study clearly emphasizes the effect, both negatively and positively, of contact on perceptions and attitudes towards groups about which predominantly negative stereotypes exist. Although pretest measures indicated three groups of response, i.e., positive response towards the verbal label gifted, slightly negative response towards the verbal labels physically disabled, learning disabled and mildly retarded and greater negative response towards the verbal labels emotionally disturbed and severely retarded, posttest measures



indicated a generalized more positive or more negative response to all labels dependent upon type of intervention. These findings are similar to those of Jaffe (1967) and Semmel and Dirkson (1966) concerning the relationship between contact and attitudes towards mentally retarded children and connotative reactions of college students to disability labels, respectively. In general, contact may change the cognitive dimension of attitude while the affective dimension may remain relatively unaffected or stable. The results of this study indicate an "all encompassing" perceptual effect, i.e., a general trend of across the board perceptions of various exceptionalities, which for all exceptionalities is similarly influenced by the degree and quality of contact.

While generalizations from this study are specific to the particular method and subjects used, several considerations for further research in this area are worthy of mention:

- (1) A similar study might measure the long range effect of positive and negative contact upon perceptions and attitudes towards varying exceptionalities.
- (2) An additional concept of "normal" may help establish a baseline from which attitudes and perceptions may be compared.
- (3) A definition of each concept, e.g., physically disabled, mentally retarded, etc., may be given to further test and stabilize the denotative meaning toward each exceptionality.
- (4) A comparison of varying populations with assorted contact

experiences may further substantiate the effect of contact
on connotative response.

Finally, the authors suggest a replication of this study with
increased sample size and expanded semantic measurement.

SELECTED REFERENCES

- Cleland, C. C., & Chambers, W. R. Experimental modification of attitudes as a function of an institutional tour. American Journal of Mental Deficiency, 1959, 64, 124-130.
- Granofsky, J. Modification of attitudes toward the visably disabled. Unpublished doctoral dissertation, Yeshiva University, 1955.
- Jaffe, J. Attitudes and interpersonal contact with the mentally retarded and dimensions of attitude. Journal of Counseling Psychology, 1967, 14(5), 482-484.
- Kerlinger, F. N. Foundations in behavior research. New York: Holt, Rinehart and Winston, 1973.
- Lazar, A., Gensley, J., & Gowan, J. Developing positive attitudes through curriculum planning for young gifted children. The Gifted Child Quarterly, Spring, 1971.
- Osgood, C. E., Suci, G. J., & Tannenbaum, P. H. The measurement of meaning. Urbana, Illinois: University of Illinois Press, 1957.
- Roehrer, G. A. The significance of public attitudes in the rehabilitation of the disabled. Rehabilitation Literature, 1961, 22, 66-72.
- Semmel, M. I., & Dickson, S. Connotative reactions of college students to disability labels. Exceptional Children, 1966, 31.
- Yuker, H. E., Block, J. F., & Campbell, W. A scale to measure attitudes toward disabled persons. Human Resources Study No. 6. Albertson, N.Y.: Human Resources Foundation, 1960, 5, 14.
- Warren, S. A., & Turner, D. R. Attitudes of professionals and students toward exceptional children. Training School Bulletin, 1966, 62 (4), 136-144.

Table 1

A Comparison of Connotative Response Between Concepts

Concepts	L1	L2	L3	L4	L5	L6
L1 Gifted	-----	4.43*	4.60*	4.92*	6.83*	9.30*
L2 Learning Disabled	-----	-----	.17	.49	2.40*	4.87*
L3 Mildly Retarded	-----	-----	-----	.32	2.23*	4.70*
L4 Physically Disabled	-----	-----	-----	-----	1.91*	4.38*
L5 Emotionally Disturbed	-----	-----	-----	-----	-----	2.47*
L6 Severely Retarded	-----	-----	-----	-----	-----	-----

Tukey's Honestly Significant Difference (HSD) post hoc test was used to determine levels of significance (Tukey's H.S.D. = 1.78).

Table 2
Group Comparison

Groups	Pretest	Posttest
Negative Treatment Group	-.7167	-3.2833*
Positive Treatment Group	-.9500	1.8000*
Control Group	-1.9167	-2.2167

*p. .05