The purpose of the study was to examine the distribution of attitude responses among college students on the Attitude Toward Disabled Persons Scale (ATDP) and to compare the responses of male students to females within each of three classes of responses on the preferred Student Characteristic Scale (PSCS): affective, affective-cognitive, and cognitive. One hundred students of each sex (attrition eliminated 11) were administered both scales, and a significant difference favoring females was found. There was no significant degree of difference among the three PSCS subgroups. Support was found for the view that separate norms on the ATDP are needed for males and females in order to accurately understand the raw score profiles of specific subjects within a given area such as teachers versus nurses. (RJ)
SEX DIFFERENCES IN THE DISTRIBUTION OF ATTITUDES TOWARD HANDICAPPED INDIVIDUALS ON THE PART OF SELECTED COLLEGE SUBJECTS

by

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ATTITUDES TOWARD DISABLED PERSONS BY COLLEGE STUDENTS IDENTIFIED AS HAVING AN AFFECTIVE/COGNITIVE OUTLOOK

A select review of attitude research reveals that considerable investigating of the variables influencing attitude formation and change and the effects of attitude on individual behavior has been done during the past thirty-five years. It appears that much of past and present effort on attitude research has been centered in social psychology and sociology, with very little serious research by educators. Yet, when current social problems and climate are considered, especially as these relate to schools and education, there appears to be a serious need for educators to increase their efforts to study attitudes, values, motivation, and other determinants relating to social communications between minority groups and individuals per se. Some indication that educators have not moved in this direction in any general way emerges from a random selection of some of the more recently dated texts dealing with the subject of attitudes. (Shaw and Wright, 1967; Greenwald, Brock, and Ostrom, 1968; Fishbein, 1967; Rokeach, 1969; Jahoda and Warren, 1966; and Jordon, 1968)

Attitudes have been defined in a variety of ways with some of the differences among these definitions being quite pronounced in nature. G. W. Allport (1935:810) proposed that "an attitude is a mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related." This definition views an attitude primarily as a set to respond in a particular way. The emphasis is clearly on the behavioral implications of attitudes.

In contrast, Doob (1947:138) defined an attitude as "an implicit, drive-producing response considered socially significant in the individual's society."
The stress here is on what an attitude is rather than its implication, although it contains a clear implication that an attitude would affect the manner in which an individual acts. This definition is derived from a learning of stimulus-response tradition, and it conceptualizes an attitude as simply another response, albeit one that is implicit rather than explicit in nature.

A third definition, which to some degree incorporates the other two, is advocated by Rokeach (1969:132) which is that "an attitude is a relatively enduring organization of interrelated beliefs that describe, evaluate, and advocate action with respect to an object or situation, with each belief having cognitive, affective, and behavioral components."

Finally, Shaw and Wright (1967) prefer to limit the theoretical construct of attitude to an affective component which is based upon cognitive processes and is an antecedent of behavior; i.e., they consider an attitude to be an evaluative reaction based upon evaluative concepts which are closely related to other cognitions and to overt behavior. Restricting the notion of attitudes to evaluative reactions based upon cognitive processes has the advantage and value of relating the theoretical construct most closely with the operations implied in attitude scales utilized for research. This is so because the scales are comprised of statements of varying degrees of negative and positive intensity regarding the attitudinal referent, and the endorsement of the statement serves as the basis for inferring the existence of positive or negative evaluations on part of the person completing the scale. It is this latter definition that shall provide the orientation of this investigation.

Yuker, Block, and Young (1966) provide a comprehensive report on numerous studies that have used the Attitude Toward Disabled Persons Scale (ATDP) in their research. This scale was developed at the Human Resource Center in Albertson, New York to investigate attitudes toward disability by both the disabled and non-disabled persons in our society. The ATDP was first reported
at the 1959 American Psychological Association meeting and published in 1960. The ATDP was designed to provide an adequate positive-negative scaled measure of attitudes toward the disabled with evidence of reliability and validity; an instrument that could be used both with the disabled and non-disabled. (Yuker, Block, and Young, 1966)

One major advantage of the ATDP is that it attempts to measure attitudes toward disabled persons in general. Shaw and Wright (1967) report in their critical review of the ATDP and numerous other scales for the measurement of attitudes, that the ATDP has reasonably good content validity, better than most scales they reviewed, and that it seems adequate for research purposes.

The ATDP has been correlated with several other scales. Significant correlations were found between the ATDP and semantic differential scores (-.27), scores on a job satisfaction scale (+.47), and the Edwards Personal Preference Schedule (+.25). Nonsignificant correlations were found between ATDP and the following: Attitude Toward Intellectualism, The F scale, the Machiavellianism Scale, the ITAP Self Analysis Forms, and the Attitudes Toward Old People Scale. (Shaw and Wright, 1966)

What do scores on the ATDP mean? A high score would indicate that the respondent perceives disabled persons to be quite similar to non-disabled persons, whereas, a low score would indicate that the respondent perceives disabled persons to be "different" from the non-disabled persons. Yuker, Block, and Young (1966) contend that however, the majority of items on the ATDP suggest that where there is a difference perceived, this difference has negative connotations. Therefore, investigators may desire to extend the interpretation to suggest that a low score not only reflects the fact that the respondent perceives disabled persons to be different but also to be to some degree "inferior" or "disadvantaged." Thus, the scores
on the ATDP may indicate the degree of positive and negative stereotype in the non-disabled person's attitudes toward the disabled.

The research findings on sex and ATDP scores are not consistent. Several studies reported a statistically significant relationship between sex and the ATDP scores, while other studies reported a lack of relationship. It appears that the conflict of evidence at the present time makes any final judgment inconclusive, and that there is need for more precise research here. (Yuker, Block, and Young, 1966) Lazar, Gensley, and Orpet (1971) found the ATDP to be a useful instrument in measuring a change in attitudes in a pre-post, control versus experimental groups design with young gifted children in which the treatment to the experimental group consisted of a four week special instructional program. Using only the pre-test of both groups of Ss in this study, (Lazar, Orpet, and Revie, 1971) found a significant difference between males and females. The difference favored the female group in that their mean score was higher in respect to the males in terms of acceptance of handicapped individuals.

An inspection of the research studies cited by Yuker et al (1966) and the literature per se reveals that the ATDP has never been used with the Preferred Student Characteristic Scale (PSCS) developed by Nelson (1964). Nelson (1964) developed the PSCS to measure affective and cognitive attitudes of teachers. According to Nelson, a cognitive instructor would be an individual concerned with the intellectual, abstract, and subject-matter educational objectives and learnings, whereas the affective instructor would be concerned with the emotional adjustment of students and classroom climate and interpersonal relationships of the class members. The combined use of both scales would allow for the grouping of the sample into cognitive and affective groups, and
then assess them on the ATDP to see which kind of future teacher would be more accepting of the disabled. The importance of such a study is necessary as part of a long and difficult task in identifying the kinds of individuals that might be selected for training in special education.

THE PROBLEM:

The purpose of this study will be to examine the distribution of attitude responses among college students on the Attitude Toward Disabled Persons Scale (ATDP) and to compare the responses of male students on this instrument with those of female students within each of three classes of responses on the Preferred Student Characteristic Scale (PSCS): affective, affective-cognitive, and cognitive respectively.

METHOD AND PROCEDURE:

Subjects: 100 male and 100 female subjects were obtained. The Ss were students attending educational psychology classes during a summer session at a state college. The Ss were selected by utilizing the entire enrollment of 10 classes. Procedural attrition eliminated 11 Ss because of incomplete protocols. Of these 11 Ss, 2 were excluded from the study because of visible physical handicaps, i.e. post polio.

Control measures were taken to eliminate the possibility of a Ss taking the instruments more than once as a result of being enrolled in each of several of the classes being used in the sample. It is estimated that there were nearly 72 such enrollment situations. In each such instance the Ss were allowed to take the tests only in their first class.

The median age was 24.0 years for the female group of Ss and 26.0 years for the male group of Ss. The median age of the males was some 24 months older than the median age of the females. The actual age range was from 20 to 52 years for the females and from 21 to 53 years for the males. In both groups the age distribution of the population was heavily skewed to the right, or youthful side.
Instruments: Two instruments were administered to the sample groups. The ATDP (Attitude Toward Disabled Persons) Scale and the PSCS (Preferred Student Characteristic Scale) were stapled together so that the ATDP was taken first. Both were administered as group tests.

ATDP: The ATDP Form 0 was used in this study. The scale consists of 20 items, with each item providing a six alternative response pattern along a line: I agree very much, I agree pretty much, I agree a little, I disagree a little, I disagree pretty much, and I disagree very much. These alternatives are weighted +3, +2, +1, -1, -2, -3, respectively. The subject recorded his response to each item by entering the appropriate weight in a space provided to the left of each item. Each statement suggests that disabled persons are either the same as or different from normal people. The investigators modified only one item on the test, and that was in item two, in which the work physically was deleted, in order to avoid the possibility of a response set on the part of the subject. This was to assure that responses would be toward disabled persons in general, which is the claim of the instrument's authors. It takes about 10 to 15 minutes to complete the test.

PSCS: The PSCS contains 36 paired choice items that permit the expression by teachers or future teachers of certain attitudes toward students in terms of affective or cognitive educational goals. Nelson (1964:82) states that a cognitive instructor is "one concerned with the intellectual, abstract, subject-matter goals of teaching," and the affective teacher was defined as "being concerned with emotional adjustment and student interaction in the classroom." The PSCS responses are scored in such a manner that a low score indicates teacher preference for an affectively oriented pupil, whereas, a high score indicates the teacher preference for a cognitive student.
Based upon Nelson's procedure for scoring, the center point on the affective/cognitive scale would be located at 18 scale units, since the scale ranges from zero to 36. The maximum possible affective score being zero and the maximum possible cognitive score being 36.

In preference to the scoring method as recommended above with the dividing point at 18, it was decided to use instead only those score values ranging from zero to 12 for the affective classification and only the score values ranging 25 to 36 for the cognitive classification in this study. This change was introduced in order to minimize the possible effects of an inherent weakness of many scales arising from the cluster effect around the mid point or mean. For purpose of this study, it was felt that those score values falling within the 13 to 24 scale unit range might well be designated as a third group with a cognitive-affective classification, which is not the concern of this study. It was the view of the investigators that such a modified score procedure would reduce the size of the sample in certain treatments, but that this would be offset by the degree of contrast between the extreme groups which would in turn facilitate inference and generalizations based on a differentiation of the two groups.

Administration: Permission was granted by the 10 instructors for the senior investigator to give the necessary instructions and to distribute the instruments in all 10 classes during a 1 week period. This procedure provided the required uniformity of test procedure in all classes. Students were not asked to sign their names, but only to indicate their sex and age on the cover sheet of the instruments. Scoring was done by the senior author and two assistants under his direct supervision.
Results: The senior author administered both instruments with the ATDP given first as a group test to all Ss. The Ss were then subgrouped as affective, affective-cognitive, or cognitive on the basis of their PSCS score. The result of this subgrouping according to PSCS score is indicated in Figure 1 below:

Figure 1.

Breakdown by Sex and 3 Levels of PSCS Performance Ss

<table>
<thead>
<tr>
<th>PSCS Categories</th>
<th>Male Ss</th>
<th>Female Ss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affective Ss</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Affective/Cognitive Ss</td>
<td>48</td>
<td>61</td>
</tr>
<tr>
<td>Cognitive Ss</td>
<td>36</td>
<td>23</td>
</tr>
<tr>
<td>Total N</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

An inspection of the figure above indicates that the greater number of subjects fall into the Affective/Cognitive classification regardless of sex. There is a bias toward the Cognitive classification and away from the Affective classification that characterizes both sex groups.

A 2 x 3 factorial design was used. A comparison was made between sexes for each of the three sub-groups indicated in Figure 1. A two-way analysis of variance was applied to the data. Table 1 contains the results of this two-way analysis of variance. A statistically significant differentiation between the sexes on a consolidated group basis was obtained (.06 level) indicating a more accepting attitude upon part of the female Ss. No evidence of a such a significant degree of differentiation among the three PSCS sub-groups: affective, affective/cognitive, or cognitive was obtained.
TABLE I
Two-Way Analysis of Variance

<table>
<thead>
<tr>
<th>SOURCE OF VARIATION</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Sex</td>
<td>896.05</td>
<td>1</td>
<td>896.05</td>
<td>3.58</td>
<td>.06</td>
</tr>
<tr>
<td>B Affective/</td>
<td>282.80</td>
<td>2</td>
<td>141.40</td>
<td>.56</td>
<td>n.s.</td>
</tr>
<tr>
<td>Cognitive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C Sex x Affective/</td>
<td>77.89</td>
<td>2</td>
<td>38.94</td>
<td>.16</td>
<td>n.s.</td>
</tr>
<tr>
<td>Cognitive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within Groups</td>
<td>48521.54</td>
<td>194</td>
<td>250.11</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

.05 level of significance = 3.89  1,194

SUMMARY AND CONCLUSION:

The results of this study tend to agree with the results of about ten other such studies using the performance of college and high school subjects on the ATDP scale with respect to the significant difference between sexes that there is generally found a significant sex difference in favor of the females. This study provides additional support to the views of Yuker, Block, and Young to the effect that separate norms for males and females are needed in order to understand accurately the raw scores profiles of specific Ss within a given area, i.e. teachers versus nurses with the sex variable taken into consideration in each group.

Further research using the ATDP and PSCS is recommended, but with a variety of professional individuals that service the needs of handicapped individuals.
Selected References


