Evaluated in 102 students enrolled in a beginning special education course at three different universities were attitudes toward the handicapped, social adjustment, instructional goals desired, and self concept. Results of the Attitude Toward Handicapped Individuals (ATHI) scale, the Preferred Student Characteristic Student (PSCS) scale, the Is of Identity (I0I) Test, and the Tennessee Self Concept Scale (TSCS) demonstrated no significant mean differences on pre and post tests for Ss at California State University, Long Beach and Georgia State University. However, Ss at Eastern Kentucky University demonstrated a shift on the PSCS toward a desire for more affective instructional goals. Results suggested that attitude changes reported in other studies were due to specific instructional planning and unique treatment factors in the curriculum. (CL)
A STUDY OF ATTITUDE CHANGE IN SPECIAL EDUCATION

MAJORS IN THREE UNIVERSITY TRAINING PROGRAMS

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One expected outcome in some special education teacher training programs is the desire upon the part of the instructor and curriculum to change student attitudes. These attitude changes would be toward some specific objectives and in a positive direction.

Rokeach (1971) has pointed out that attitudes and values of people can be changed through information control techniques. He also raises the haunting question as to who shall decide which values and attitudes are to be changed.

It would appear that a special education instructor and curriculum would receive social support to change student attitudes toward greater understanding and acceptance toward the handicapped. This position is supported by growing legislation and committees or commissions being formed at local, state, and national levels to support the handicapped in their social, economic, and life adjustments in society.

Some recent studies in special education have shown that the attitudes of young gifted children in elementary school and older university level students can be changed in a positive direction toward the many different handicapped (Lazar, Gensley, & Orpet, 1971; Lazar, Gensley, & Gowan, 1972; Lazar, Orpet, & Revie, 1972; Lazar, Orpet, & Demos, 1973; and Lazar, Demos, & Orpet, 1974).

In the above studies, a carefully defined and sequenced curriculum (experimental treatment) was used in a pre-post testing design with experimental and control groups. Both the gifted and university experimental groups registered a significant difference when compared to their respective control groups.

This tends to raise a rather interesting research question. Will traditionally taught special education classes approximate the experimental or the control groups in terms of impact on attitude change?

PURPOSE OF THIS STUDY

The purpose of this study was to conduct an intra-group comparison of students taking a beginning course in special education at three different universities to see if the traditionally or normally used method of instruction in these courses would approximate the experimental or control groups in the previously mentioned studies as to impact on student attitude change toward the handicapped.
In addition to studying attitudes toward the handicapped, their attitudes toward instructional type goals on an affective/cognitive continuum, social adjustment, and self concept would also be studied.

This investigation would not be directed toward an inter-university comparison, but rather restricted to an intra-university comparison. Yet, it should be noted that the pre-post testing design allows for repeated measures by using two of the schools as sort of a quasi replication effort.

Finally, the grouping of the three scores would allow for some correlational treatment directed toward instrument reliability.

Five research questions were formulated but stated in null hypotheses form to guide the investigation:

1. There would be no significant mean differences between the pre and post mean scores toward the handicapped as measured by the Attitude Toward Handicapped Individuals scale (ATHI).

2. There would be no significant mean differences between the pre and post mean scores toward instructional goals along an affective/cognitive continuum as measured by the Preferred Student Characteristic Student scale (PSCS).

3. There would be no significant mean differences between the pre and post mean scores for social adjustment as measured by the Is of Identity Test (IOI).

4. There would be no significant mean differences between the pre and post mean scores for self concept as measured by the Tennessee Self Concept Scale (TSCS).

5. There would be no significant or high correlations when the Pearson product-moment coefficients of correlation are made to ascertain reliability on the four different instruments.

METHOD

Subjects: A total of 102 student subjects, with 34 per university comprised the pre post sample at each school. A table of random numbers was used to equalize the groups. A sex ratio of about 3 to 1 favoring the females prevailed.
about equally for each university group. Subjects were attending one of the following three universities: California State University Long Beach, Eastern Kentucky State University, and Georgia State University. They were enrolled in an introductory course concerning exceptional children.

**Instruments:** There were four instruments used as follows:

a. **ATHI:** This is a 20 item Likert type scale measuring attitudes toward the handicapped on a acceptance/rejection continuum. It has a possible range of scores from 0 to 120, with higher scores indicating acceptance, and lower ones rejection. Lazar (1973) has indicated 70+ as the point of separation.

Each of the 20 items is rated on a six point scale as follows:

- 3 I agree very much
- 2 I agree pretty much
- 1 I agree a little
0 I disagree a little
- 2 I disagree pretty much
- 3 I disagree very much

Basically, the ATHI is a modification derived from the Attitude Toward Disabled Persons scale developed by Yuker, Block, and Young (1966). Lazar (1973) changed the concept "disabled" to read "handicapped" on the assumption it would render a broader meaning and would allow for the measurement of other "label" groups that comprise the generic term "handicapped."

Pearson product-moment correlations of .80 and .83 have been reported between the ATHI and ATDP (Form-0) and a coefficient of stability at .73 over a two week period (test-retest) for the ATHI (Stodden, Graves, & Lazar, 1973; Lazar and Denham, 1974).

b. **PSCS:** This is a 36 item forced choice response scale developed by Nelson (1964) to measure affective and cognitive attitudes toward instructional goals. It is based on the assumption that a cognitive goal individual would be primarily concerned with intellectual, abstract, and curriculum content per se; while the affective goal person would be concerned with the emotional and social learning climate.

Nelson (1974) reports reliability measures of .91
(split-half corrected) and .63 (test-retest) for the PSCS. The range of scores is from zero (affective) to 36 (cognitive) with the mean of 18 being the division point for the two groups.

A modified scoring method for the PSCS was reported by Lazar, Orpet, and Fogg (1971) in which three categories are identified: (0-12) affective group, (13-24) affective/cognitive blend group, and (25-36) cognitive group. This three group method allows for real separation of the true affective and cognitive by control of the regression toward the mean effect that is often characteristic of attitude scales.

c. IOI: This is a 100 item, true or false, or undecided response instrument developed by Weiss (1954) to measure social adjustment. The range of scores can be from 0 to 100, with the normal range for the average adjusted being between 40 and 60. It is asserted by the author that the higher the score, the more socially adjusted the individual; conversely, the lower the score the greater the probability of social maladjustment.

Weiss (1954) reported a coefficient of reliability of .94, but did not indicate how it was derived. Lazar and Ernandes (1973) reported a rank correlation of .34 between the IOI and ATDP.

d. TSCS: The Tennessee Self Concept Scale consists of 100 self descriptive statements which the subject uses to portray his or her own picture of self (Fitts, 1965). It comes in two forms: (1) a Counseling Form, and (2) a Clinical-Research Form. Both forms use exactly the same test booklet and test items. They differ only in scoring procedure.

The Counseling Form was used in this study. A Positive Score or the full scale score will be the only one used in this study. There are three row scores and 6 column scores that might be used to assess: (1) physical self, (2) moral-ethical self, (3) personal self, (4) family self, (5) social self, (6) self criticism, (7) identity, (8) self-satisfaction, and (9) behavior. Scores on these latter factors will be reported in another paper that will deal only with the TSCS.

A reliability (test-retest) of .92 for the Positive Score has been reported by Fitts (1965).
Procedure: The four instruments were administered on the first and last day of the class by the appropriate professor at his respective university. The pre-post design allowed for a 15 week test-retest time factor. Uniform administration procedures were followed. Scoring and statistical treatment of data was completed at CSULB by the senior author.

Treatment: Correlated mean t test were used to determine if any significant mean differences between pre and post test results existed. They are reported in Table 1.

Pearson product-moment coefficients of correlation were used to look at instrument reliability. These results are reported in Table 2.

RESULTS

The purpose of this study was to conduct intra-group research for each university group on four instruments measuring attitudes toward the handicapped, social adjustment, instructional goals desired, and self-concept. Finally, a correlational analysis would be made concerning the four instruments using a test-retest design over a fifteen week period. Five null hypotheses were advocated to guide the effort.

A study of Table 1 will show that no significant mean differences for pre and post test on attitude changes for looking at the handicapped, type of instructional goals desired, social adjustment, and self concept were found for California State University, Long Beach (CSULB) and Georgia State University.

Again, in Table 1 we find that only for the Eastern Kentucky University group a significant mean difference for the PSCS measuring the kind of instructional goal sought. In this case, a shift in direction from that of cognitive to being more affective is evident when mean scores are examined. This shift might be attributed to the instructional program conducted. On the other three instruments, the EKU group matched the other two university groups.

Finally, a careful study of Table 2 will indicate that the Pearson product-moment correlations on all four instruments with the three groups were all statistically significant at the .01 level.
Thus, the null hypothesis that there would be no significant or high correlations must be rejected.

DISCUSSION

The results of this investigation gives rise to some rather important assumptions for discussion that merits further discussion and study.

1. While this first part of the study revealed no significant attitude changes in eleven out of twelve efforts as indicated in Table 1, it will be important and interesting to see if any inter-institutional differences will appear in the next stage of data study. This aspect will be reported in a future paper.

2. The fact that in eleven out of twelve pre-post comparisons no significant attitude shift was reported supports the notion that traditional teaching might well approximate that of the effects normally found in control groups, no significant changes.

3. Another point might be that organismic variables as such are not normally change agents per se, nor are they so easily found to change as measured by most attitude instrumentation. This point is strongly driven home by Pedhazur (1973).

4. It appears that if special educators are to change attitudes, they must plan specific informational control and delivery as advocated by Rokeach (1971). Thus, unique teaching and curriculum methods must be used if attitude changes are to be registered as evidenced in the young gifted studies and older university students reported by Lazar and others (1971, 1972, 1973, and 1974).

5. This means that teachers and researchers in special education need to focus on treatment variables more, and less on organismic variables in the study of attitude change.

6. On the ATHI, the pre-post means as shown in Table 1 reveals that all scores were in the accepting range for all groups. Thus, there might be a selection factor operating in terms of the kinds of persons that would enroll for such a course in the first place. It is asserted that if this is so, it only stands to reason that such a factor would make it more difficult to register significant gains.
7. The IOI results in Table 1 indicate that both the pre and post scores for the three university groups were higher than the average norm of 40 to 60 suggested by Weiss (1954). This would tend to raise some doubt as to the efficacy of such norm ranges. Yet, another operating factor could be the selection bias favoring special education students entering special education programs.

8. On the TSCS, all groups registered in the average self concept area on the profile provided for plotting scores. While data was collected on the nine subscales, it will not be reported at this time.

9. In terms of instructional goals as measured by the PSCS, the EKU group was the only one to register a significant change. This was at the .05 level, indicating a shift in direction on the continuum from cognitive direction to that of affect.

When the alternate group scheme by Lazar, Orpet, and Fogg (1971) is employed, all three groups for both pre and post scores fall into the affective/cognitive category. Thus, implying that they tend to cluster around the mean.

10. The Pearson product-moment coefficients for the ATHI are much lower than the .80 and .83 reported earlier. One reason might be that the higher correlations had only a two week separation for test-retest, while in this study a fifteen week period existed. Guilford (1965) indicates that longer periods of time between test-retest tend to lower the correlations.

In terms of the the PSCS, Nelson (1964) reported a test-retest correlation of .63 which is much lower than the three reported in this study that range from 71 to 78. In this case, time length between test-retest did not result in decay as suggested by Guilford (1965). Why this is so cannot be explained.

The IOI results in this study are much lower than the .94 reported by Weiss. Since the author did not provide discussion of his finding, it makes further comparison and discussion meaningless.
Finally, the TSCS reliability measure of .92 reported by Fitts (1965) for Positive Score is much higher than the three reported for this study, .59, .46, and .76 respectively. Once again, time might have caused the decay, along with smaller sample size.

SUMMARY

In summary, it can be stated that no significant differences between the pre and post scores were found in eleven out of twelve measures for the three university student groups on four criterion instruments. The three traditional methods of instruction used approximated a control group response pattern of no basic attitude change. It appears that when attitude changes were reported in other studies, it was because a specific instructional planning effort was utilized by the instructors and unique treatment factors in the curriculum.

All twelve Pearson product-moment coefficients for instrument reliability were found to be significant at the .01 level. In most instances the correlations were lower than those reported previously in other research, but this was attributed to the longer time span between pre-post testing in this study, which might have resulted in decay.

SELECTED REFERENCES


Lazar, A., Orpet, R., & Revie, V. Attitudes of young gifted boys and girls toward handicapped individuals. Exceptional Children: 1972, 38, 489-490.


Table 1: Correlated mean t test results with four instruments for special education majors at three universities.

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*For special education majors at three universities.*
Table 2

Correlations Between Pre-Post Scores
For Each University *

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* Pearson product-moment coefficients of correlations