ABSTRACT

Investigated were the attitudes of 28 community recreation volunteers (11-66 years old) toward five selected trainable mentally retarded adolescent and adult participants. The five participants were determined to be ready for the mainstreamed program on the basis of scores on the Fairview Social Skills Scale. Results of pre and posttests on the Attitude Toward Handicapped Individuals scale revealed a significant positive shift in attitudes of the non-retarded persons toward the retarded persons as a result of the mainstreaming experience. (CL)
CHANGING ATTITUDES TOWARD TMR THROUGH AN INTEGRATED RECREATION PROGRAM

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Mainstreaming as an emerging special education philosophy is translated into educational practice as the inclusion of handicapped pupils into the regular school program. The impact of mainstreaming has been felt in agencies outside of the school that are helping service the needs of handicapped children and their parents. Thus, a greater effort is now being made by such agencies to include the handicapped into regular community and social activities. This new educational and social thrust is very important to the individuals bearing the label trainable mentally retarded.

The freedom and civil right to participate in regular community recreational programs can only be fostered in a social climate that is positive and very accepting of the TMR. Only under such social climate can the TMR have the greatest chance for success in integrated social and recreational functions. Yet, it would appear that the advocates of mainstreaming would develop some means for assessing the attitudes of the non-handicapped that will be coming into contact with the TMR. While the number of mainstreaming efforts are expanding and being reported as successful, the data to support such claims for program efficacy are lacking (Mann, 1974; Deno, 1973; and Birch, 1973).
One reason given for separated recreational and social experiences for the TMR is to protect them from negative experiences and attitudes. These writers think that with certain selection and placement precautions, the risk of negative and harmful expectations might be eliminated or greatly reduced. Furthermore, a careful study of attitudes might assist in the changing of such attitudes in a more positive and accepting direction. Several studies have shown that thorough use of contact with the handicapped and a carefully selected program of information giving the attitudes of non-handicapped can be shifted significantly in a more positive and accepting direction (Lazar, Gensley, & Orpet, 1971; Lazar, Gensley, & Gowan, 1972; Lazar, Orpet, & Revie, 1972; Lazar, Orpet, & Demos, 1973; Lazar, Demos, & Orpet, 1974).

PURPOSE OF THIS STUDY

The purpose of this investigation was to study the attitudes of some volunteer workers in a community recreational program that included the mainstreaming of carefully selected TMR individuals. A pre-post design for assessing attitudes with the Attitude Toward Handicapped Individuals (ATHI) scale was conducted to ascertain the impact of this particular mainstreaming effort on the attitudes of the non-handicapped involved.
A select review of the related literature revealed no studies using the criterion instrument (ATHI) to assess attitudes toward the mentally retarded in a recreational setting. Yet, several studies were cited earlier that would support a directional hypothesis concerning the changing of attitudes through some sort of a treatment effect. In this study it was through exposure to TMR.

The following direction hypothesis was offered:

That there would be a significant mean difference between the pre-post ATHI scores for the non-retarded individuals toward the TMR because of exposure to them in a variety of situations that comprise the specific mainstreamed recreational and social program.

METHOD

Subjects:

a. Non-retarded Subjects: This group of non-retarded volunteer recreational workers consisted of 28 persons, 16 female and 10 male. Their CA ranged from eleven to sixty-six, with a group mean age of eighteen. The members of this group had to meet the following three criteria to be selected for this study:

1. were participating in youth or adult community recreation programs conducted by a Corona, California based agency.

2. had no mentally retarded individuals in their family.

3. were adolescent or adult in age.
The ATHI scale was administered to this group. It was the attitudes of this group that were the focus of this study.

b. TMR Subjects: This group was comprised of five male subjects. The members of this group had to meet the following criteria to be selected for this study:

1. were state certified as TMR.
2. attended the Victress Bower school for the TMR in Corona, California.
3. were adolescent or adult in age.
4. performed within specified limits on each of the five sections of the Fairview Social Skills Scale.
5. were not suffering from disruptive behavior such as temper tantrums, hyperactivity, hostility, or lethargic behavior.
6. had parental approval to participate in the study.

Additional information about CA, IQ, and scores on the five major sections of the Fairview Social Skills Scale is reported in Table 1.

Procedure:

a. Non-retarded Subjects: This group was administered the ATHI as a group test by the senior author for both pre and post testing sessions. Uniformed procedures for administration were followed. Caution was exercised to insure that members of this group did not come into contact with the TMR subjects until after the pre-ATHI
test had been completed. During both the pre-post testing sessions the subjects were instructed to consider the term "handicapped" on the ATHI to pertain to persons that were identified as trainable mentally retarded. After the pre-ATHI testing the group was informed that some TMR individuals would participate in the various recreational and social activities of the group.

b. TMR Subjects: The five sections of the Fairview Social Skills Scale criteria as used at the Fairview State Hospital in California for determining readiness of an individual identified as TMR to participate in an integrated recreation program were adopted for use in this study. The minimal score for each section are as follows: Self Help - 22, Communications - 10, Social Interaction - 12, Occupation - 7, and Self Direction - 9. The actual scores for each subject are reported in Table 1. For the purpose of the study the ceiling level of each section was placed at one point less than the total possible raw score. This insured that the subjects' ability did not exceed the ceiling of the scale. The subjects' scores had to fall between the upper and lower levels of the scale in each section. Exceeding the limits in any one area disqualified the subjects. This limitation was not made to suggest that these limits are the only possible criteria for selection of individuals that
could be integrated successfully into a recreational program.

**Program:** The experimental treatment program of the mainstreamed recreational program included bus trips, go-cart driving, a beach party, dog obedience classes, and swimming and camping. The TMR subjects participated in all activities with the non-retarded members. This covered over a five week period of time.

**Instruments:**

a. **ATHI:** The ATHI scale is a 20 item instrument having a possible range score from 0-120, with a score of 70+ indicating normal acceptance of the handicapped (Lazar, 1973).

The ATHI scale is a modification of the ATDP (Attitudes Toward Disabled Persons Scale) developed by Yuker and others (1966). The basic modification involved the changing of the term "disabled" to read "handicapped." Lazar's assumption being that the latter concept was much broader in meaning.

Each of the 20 items on the ATHI scale are rated on the following six point Likert type scale:

- 3  I agree very much
- 2  I agree pretty much
- 1  I agree a little
- 1  I disagree a little
- 2  I disagree pretty much
- 3  I disagree very much
Lazar and Denham (1974) reported a Pearson product moment correlation of .83 between the ATHI and the ATDP scales. Another study reported a .80 Pearson product moment correlation between the same two instruments (Stodden, Graves, and Lazar, 1973). These three writers also reported a coefficient of stability reliability of .73 utilizing a test-retest design with two weeks between testing sessions. All correlations just mentioned were significant at the .01 level.

b. Fairview Scale: The Fairview Social Scale is a behavior rating instrument for use primarily with the mildly and moderately retarded. It is composed of 36 items which provide measures in five areas: Self-Help, Communications, Social Interaction, Occupation, and Self-Direction. Sippel (1975) reports that this scale is recommended for use where the behaviors seem to be at, or above, the 10 year level.

Treatment of Data:
A correlated mean t test was used to compare mean differences between the pre-post ATHI scores. A Pearson product moment correlation was also computed. Statistical data is reported in Tables 2 and 3.

FINDINGS & DISCUSSION

As reported in Table 2, a significant mean t difference was found between the pre-post ATHI scores at the .05 level. This finding supports the directional
hypothesis that a significant difference would exist between the ATHI scores for the non-retarded individuals toward the TMR subjects in this study. Furthermore, that the shift would be in a positive direction toward the TMR in terms of greater understanding and acceptance because of the mainstreaming experience. Thus, it appears that the mainstreaming recreation program proved successful for both the non-retarded volunteer aides and the TMR subjects involved.

While the results were statistically significant in this study, and supports previously reported studies that attitudes toward the handicapped can be enhanced by well planned informational and experience type activities (Lazar, Gensley, and Orpet, 1971; Lazar, Gensley, and Gowan, 1972; Lazar, Orpet, and Revie, 1972; Lazar, Orpet, and Demos, 1973; Lazar, Orpet, and Demos, 1974), care must be exercised to limit generalization beyond the scope of this study. The reason for this position is that each unique treatment program has limitations to the group involved. Another reason for caution is that the TMR sample was very small, highly selective, and not random.

In Table 3, a significant Pearson product moment correlation was found. It compares closely to the ones reported in two previous studies (Lazar and Denham, 1974; Stodden, Graves, and Lazar, 1973).
While caution was offered concerning the findings, this study does offer a neat simple model using research design and techniques to ascertain program efficacy. Too often many mainstreaming success stories lack supporting evidence based upon facts. Instead, they are supported with biased opinion and guesswork, both inimical and inappropriate to effective mainstreaming efforts. Another point for those involved with mainstreaming is to focus less on randomized samples but utilize highly selective samples based upon specific expected outcomes and learning situations. In this case, effort is directed toward the evaluation of program efficacy as distinct from the desire to find knowledge that can be generalized to larger groups and other learning situations. The nature of this remark is not to demean vigorous research efforts, but only point out alternatives, that might prove equally useful to the classroom teacher and others concerned in making application of more serious ventures to data collecting and treatment beyond opinion and biased testimony.

In conclusion, the findings of this study supported the major assumption that attitudes toward the TMR could be changed in a more accepting and positive manner by means of some mainstreaming activities offered in a recreation program. It would also support the notion that the ATHI scale is an effective instrument for measuring changes.


Ross, Robert T., Fairview Social Skills Scale. Costa Mesa, California: Fairview State Hospital, 1972.


Yuker, H., Block, J., and Young, J. The measurement of attitudes toward the disabled. Albertson, N.Y.: Human Resources Center, 1966.
<table>
<thead>
<tr>
<th>Subject</th>
<th>CA</th>
<th>IQ</th>
<th>Self-Help</th>
<th>Communication</th>
<th>Self-Esteem</th>
<th>Scale Score</th>
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<tr>
<td>14-6</td>
<td>40</td>
<td>30</td>
<td>19</td>
<td>11</td>
<td>10</td>
<td>28</td>
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<td>45</td>
<td>32</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>33</td>
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<tr>
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<td>56</td>
<td>30</td>
<td>12</td>
<td>14</td>
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</tr>
<tr>
<td>13-3</td>
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<td>27</td>
<td>13</td>
<td>16</td>
<td>17</td>
<td>33</td>
</tr>
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Table 1: Fairview Social Skills Scale Scores for TMR
Table 2
COMPARISON OF PRE AND POST MEAN ATHI SCORES NON-HANDICAPPED Ss

<table>
<thead>
<tr>
<th>TEST</th>
<th>N</th>
<th>ATHI X</th>
<th>S.D.</th>
<th>t</th>
<th>P</th>
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</thead>
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<tr>
<td>Pre</td>
<td>26</td>
<td>67.58</td>
<td>17.34</td>
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<tr>
<td>Post</td>
<td>26</td>
<td>73.35</td>
<td>18.02</td>
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two-tailed test

Table 3
PEARSON PRODUCT MOMENT CORRELATION

<table>
<thead>
<tr>
<th>TEST</th>
<th>N</th>
<th>ATHI X</th>
<th>S.D.</th>
<th>r</th>
<th>P</th>
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<tr>
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<td>67.58</td>
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<td>Post</td>
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two tailed test