The Effect of a Training Program on the Empathic Ability of Psychiatric Aides.

This study was designed to determine whether a training program which focuses primarily on interpersonal relationships, communication and observation skills, and knowledge and understanding of both one's own behavior and that of others would increase the empathetic ability of psychiatric aides. Two studies were conducted. A pilot study was done to develop the training program; a follow-up study was done for further evaluation and documentation of the program. At the conclusion of the training program, significant changes were observed in the empathetic level of those aides in the experimental group while the control group increased only slightly over the project period. The control group's improvement may have been due to interaction on the hospital wards with the experimental group. Although the increased empathy of the experimental group appeared to be more than temporary, the average ratings on empathy still did not reach the minimum facilitating level identified by Carkhuff. References are included. (Author/SES)
A 60 bed unit for emotionally disturbed children within a large 1,400 bed metropolitan state mental hospital has a relatively small professional staff. The unit is primarily staffed with the nonprofessional persons called psychiatric aides. In the metropolitan community these will be typically black, low socioeconomic females, with an average educational level below high school graduation. These persons administer psychiatric and general nursing care to mentally or physically ill persons within the state hospital. This type mental facility is not atypical among state hospitals located in metropolitan areas.

Approximately eighty percent of all nursing care for psychiatric patients within state hospitals is given by psychiatric aides (Simpkins, 1968). The psychiatric aides generally have a closer association with more of the patients than any other person in that they are with the patients twenty-four hours a day. This creates a unique "helper" role for the psychiatric aides. However, of the hospital staff, these nonprofessional persons have the least amount of formal education and training in the care of persons with mental disorders (Vaughn, 1962).

Because of the importance of the aides to the patient care, they need to be effective helpers. A seemingly necessary condition for effectiveness in the helper relationship is empathy (Rogers, 1957). Empathy can be defined as the ability of one person to understand the feelings of another person.

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and to communicate this understanding to the other person. This involves both the experiencing of that person's feelings and the expressing to the other person that his feelings are being perceived.

The positive relation between empathy and therapeutic effectiveness has been well documented (Dymond, 1949; Rogers, 1959; Truax, 1961; Buchheimer, 1963; Truax, 1966; Hogan, 1969). Furthermore, it has been shown that para-professionals should and can be trained to be empathic and therapeutic (Truax, Carkhuff and Kodman, 1953; Vaughn, 1962; Rloch, 1963; Ishiyama, 1966; Spiegel, 1967; Banks, Berenson and Carkhuff, 1967; Simpkins, 1968; Carkhuff, 1969). The psychiatric aide population dealt with in this study presented many problems which were not dealt with in the preceding studies. Typically, they were deprived, black, married, middle-aged females, poorly educated and from the inner city. The problem of concern was whether or not empathy could be developed or increased in this population. The question as to how one goes about increasing abilities to empathize with such a unique population is a significant one and one that has not been adequately answered in the literature.

PURPOSE

This study was assigned to determine whether a training program which focuses primarily on interpersonal relationships, communication and observation skills, and knowledge and understanding of both one's own behavior and that of others, would increase the empathic ability of psychiatric aides.

Two studies were conducted. A pilot study was done to develop the training program. The follow-up study was done for further evaluation and documentation of the program.
The sample consisted of 20 psychiatric aides drawn from the population of aides working in the children's unit of the state mental hospital in a large metropolitan area. A total of 36 aides comprised the day and evening shifts. All but one of these aides volunteered to participate in the study.

In order to maximize sample selection, it was deemed desirable to obtain a pre-measure of empathic level for each aide. The Hogan Empathy Scale (Hogan, 1969) was used for this purpose. The scale was administered to the 35 aides several days before the experimental program began.

The sample was chosen so that two groups of 10 aides were similar in (1) distribution of scores on the Hogan Empathy Scale, (2) number of aides working day and evening shifts, and (3) length of employment at the mental hospital. Due to the limited number of aides in the sample pairing of individuals on the three variables was not possible. Nevertheless, in overall composition, the two groups were highly similar on all three variables.

One of these groups was denoted the experimental group and the other the control group.

Outcome Criterion

The final outcome of the training program was measured by the Hogan Empathy Scale (Hogan, 1969). The scale was administered to the sample on three occasions as pre-test, immediate post-test, and delayed post-test. The first post-test was administered on the last day of the treatment period and the delayed post-test was administered four weeks later.
The 10 psychiatric aides in the experimental group and the primary investigator met for 6 weeks--2 two-hour sessions per week. The program focused on: (1) an awareness and understanding of one's own feelings and those of emotionally disturbed children, (2) the development of communication and observation skills, and (3) an ability to empathize with these children.

The content of the sessions was based on a 39 page booklet developed by the primary investigator for the training program. Each group member had a copy of the booklet for his own use. Course content was presented informally in the form of lectures, individual presentations, group presentations, class discussion, assignments, and role-playing.

Results

The data were analyzed from two vantage points. For the first of these, the mixed model analysis of variance was used to determine whether or not there were any significant differences in mean empathy scores over time between the experimental and control groups. None of the differences between means were significant at the .05 level of confidence. The mean empathy scores on pre-, post-, and delayed post- measures were, respectively, for the experimental group 35.5, 37.1, and 36.9 and for the control group 35.2, 34.5 and 35.5.

Also of concern was whether or not the treatment might systematically affect some subgroups of aides and not others. This kind of result would tend to change the within group variances. Therefore, F and t tests were run to determine the significance of differences between variances. None
of the variances were significantly different from any of the other. The pre-, post-, and delayed post- standard deviations were, respectively, for the experimental group 5.1, 3.6, and 5.1 and for the control group 4.9, and 5.1.

These results indicate that as measured by the Hogan Empathy Scale the experimental program did not have a systematic impact on the psychiatric aides. The mean scores and variances remained approximately the same for both the experimental and control groups on all three testing.

These findings indicated that revisions were needed in the program. One of the major difficulties in the experimental program was the improper balance between didactic material and dealing with interpersonal skills. Much of the didactic instruction, particularly that involving group and individual presentations, seemed to take an inordinate amount of time. Less time dealing with presentations and the more time devoted to developing the aides' interpersonal skills was needed.

Furthermore, the large error variance for the Hogan Empathy Scale led the authors to question its suitability as a group instrument sufficiently sensitive to measure change.

FOLLOW-UP STUDY

Sample

This sample also consisted of 20 psychiatric aides drawn from the population of aides working in the children's unit of the state mental hospital. The pilot study was run using 10 of the 35 available aides. This reduced the available population to 25 aides. Of these, 5 aides were not available
because of staff changes and vacations. The remaining 20 aides were used for this study.

The twenty aides were randomly divided into two groups, 10 in the experimental group and 10 in the control group. Care was taken to place the same number of aides working day and evening shifts in both groups.

The subjects were all black of low socioeconomic background. Their educational level ran from grade 10 to High School graduation, with a mean of grade 11. The age range was from 35 to 45, with a mean for the control group of 40 and a mean for the experimental group of 43. Seventeen of the subjects were female, with eight females in the control group and nine in the experimental group.

**Outcome Criterion**

The purpose of this study was to determine if the revised program would be successful in developing in psychiatric aides the ability to be more empathic when interacting with patients. Therefore, as the outcome criterion, interviews were taped and rated by using Empathy Scales (Carkhuff, 1969) as direct measures of the empathic skills of the aides. This shift in measuring devices from the Pilot Study was made (1) since the Empathy Scales provide a more direct measure of empathic skills and (2) because of the questionable suitability of the Hogan Empathy Scale as a group instrument as noted in the Pilot Study.

However, it was impossible to unobtrusively observe the aides while on the job in the psychiatric wards. The intrusion caused by the presence of observers and the lack of standardization in observations would have caused the validity of the results to be highly questionable.
Consequently the investigators decided to collect the data using trained clients and to collect interview tapes for all subjects at specified times during the project period. Interviews were held on three occasions with trained clients as a pre-test, immediate post-test, and delayed post-test to the experimental treatment. The pre-test interview was held immediately preceding the training period; the first post interview was held at the conclusion of training; and the delayed post was held six weeks after the training.

The empathy scale used for rating the tapes describes five levels of behavior from a low of not attending to feelings (Level 1) through minimum facilitation (Level 3) to a high of accurate response to deep feelings (Level 5). For each interview a three minute sample was rated from the first half and a three minute sample was rated from the second half. The mode rating from each sample was taken as the value to represent the level at which the aide was operating during that sample of the taped interview.

**Trained Clients**

Three undergraduates from the University of Missouri-St. Louis were trained as clients. All three had prior experience as a client. The three were trained to function at Level 3 of Self-Exploration (Carkhuff, 1969). At this level clients volunteer a personal feeling. After each counselor response, the trained clients answered when necessary and then volunteered a personal feeling or reaction. The use of clients trained to a consistent level of self-exploration provided control over the content of the interviews. Such constant level of personally relevant material assures that differences between counselors were not caused by client differences.
Three graduate students in the counseling program at the University of Missouri-St. Louis were used as raters. Each of the three had completed training on the Empathy Scale in a beginning practicum. The three met for a total of twelve hours of training. The training criterion was an average reliability of .80 among raters using the analysis of variance technique reported by Ebel (Ebel, 1951). At the beginning of training, the three raters were moderately consistent with an individual reliability of .434 and an average reliability of .688 using 8 tapes. At the close of training the consistency among raters had increased considerably with an individual reliability estimate of .833 and an average reliability estimate of .938 using 15 tapes. The tapes used to obtain these reliability estimates were randomly drawn from the counseling practica at the University of Missouri-St. Louis.

Training began with complete familiarity with the Empathy Scale. The three learned to discriminate Level 3 responses first. Then the discrimination between non-helpful statements into Level 1 and Level 2 was accomplished. Finally Level 4 statements were learned.

The training process was made up of listening examples from recorded interviews, rating the examples, and discussion. Gradually the three raters devised more and more examples for the others to rate.

Training Program

The 10 psychiatric aides in the experimental group and one of the investigators met for 6 weeks--2 two-hour sessions per week. The program focused on: (1) an awareness and understanding of one's own feelings and those of emotionally disturbed children; and (2) an ability to empathize with these children.
The content of the sessions was based on a 43 page booklet developed by the investigator for the training program. Each group member had a copy of the booklet for his own use. Course content was presented internally in the form of discussions, role playing, and training tapes.

The objectives for each session and methods of presentation are presented in Table 1. A summary of the six weeks follows.

TABLE 1 ABOUT HERE

Week 1. The group members participated freely in group discussions, and the formation of a "group feeling" began to evolve. The use of concrete examples and writing on the blackboard proved to be very helpful. Objective 16 "To gain a basic understanding of the meaning of disturbed behavior in children" was facilitated by the following assignment. Each aide was to think of a patient who she worked with and was then to list 5 characteristics of that child's behavior. Class time was then used to interpret possible meanings and reasons for this behavior. This experience seemed to bring the real ward-world into the classroom. Theories and concepts were then related to these real situations and interactions. Objective 16 was met in this manner throughout the training program.

Week 2. Role playing was used for demonstrating attitudes and feelings. A chart entitled the "Interchangeable Chart" was introduced. This was to encourage and reward the aides who used interchangeables and to help later pairing of aides for role playing situations. Each time an aide recognized that someone said an interchangeable, he would receive 1 point. The points were totaled at the end of each session and each week for two weeks. At the conclusion of the third week, the points were totaled and pairs for role playing situations were formed. Each pair consisted of one aide who had a high score.
and one who had a lower score. These pairs then worked together in the role playing situations in the last four sessions. The use of the chart provided a means of stimulation for the aides. The aides practiced interchangeables and were verbally rewarded by each other out of the classroom situation.

The aides were able to integrate concepts to previously learned ones and into actual ward situations. The aides seemed to become more aware of the importance of their roles with the children, and that their interactions should be purposefully therapeutic.

**Week 3.** The focus for this week was primarily directed towards the recognition and expression of interchangeables, and the concept of empathy. A training tape was introduced which gave examples of interchangeables and provided structure and allowed the aides to practice interchangeables as a group. This seemed to help the aides feel more confident in expressing their own interchangeables during the role playing situations. Five of the ten aides were able to identify all interchangeables on the training tape correctly. The other five aides each missed one response. A criterion tape was also used. Four aides were able to identify all interchangeables correctly; three missed one response; and three missed two responses. The "Interchangeable Chart" was continued for this week.

**Week 4.** The focus for this week was primarily on communication and observation skills. The aides chose partners for role playing situations according to the total number of points each person had accumulated on the "Interchangeable Chart". At this time, the five most successful aides were able to serve as "trainers" for the five least successful aides.

**Week 5.** This week consisted primarily of practicing interchangeables and emphasizing the concept of empathy. The aides role played situations which
happened on the ward in which they were involved. The "aide" would try to help the "patient" in the situation by letting her know that her feelings were being understood. The aides reversed roles when they found it useful. The "patient" in the situation would tell the "aide" how he felt after the "aide" expressed an understanding of her feelings. This feedback seemed to help the aides to determine their accuracy. The aides continued using interchangeables on the wards to the children and to each other. By this time, persons in the control group were also being exposed to interchangeables because they were in the same working environment as aides in the experimental group.

Week 6. The focus for the last week was the same as for the fifth week. Most of the aides seemed to be able to say interchangeables accurately and with relatively little difficulty. The group reviewed the content of the booklet during the last session.

Design

Taped interviews were obtained for each subject immediately preceding the treatment (pre-), immediately following the six week treatment (post-), and six weeks after the treatment (delayed post-). These interviews consisted of 20 minute sessions with one of three coached clients. The aides were randomly assigned to the clients so that by the end of the third interview each aide had seen each client once.

The clients were three undergraduate females attending the University of Missouri-St. Louis. They met with one of the investigators on several occasions to listen to taped interviews and role play their situations. Prior to the initial interviews they met with the three investigators and a psychiatric aide
who was not included in the study. This provided the opportunity for the clients to interact with staff personnel, view the setting in which they would be working, and play their roles in a more realistic setting.

The aides were instructed that these were high school girls that had some personal problems with which the aides were to help them. Even though somewhat uneasy at first, the aides seemed to quickly adapt to the taped interview situation.

In total, 60 interviews were taped. "Mini-reels" were used for the taping. One interview was contained on each side of a tape.

All 60 interviews were collected before any of the tapes were rated. Using a Table of Random Numbers (Klugh, 1970) the interviews were randomly assigned numbers from 1 to 60 indicating the order in which they would be played back for rating the levels of empathic responses expressed by the aides.

Three graduate students enrolled in the counseling program at the University of Missouri-St. Louis served as raters. They were trained by one of the investigators until they reached a relatively high level of consistency in their ratings.

The tapes were played for the raters in the Language Laboratory, University of Missouri-St. Louis. This enabled the investigators to play the same tape to all three raters simultaneously so that the same parts of all the tapes were rated by the same three raters, at the same time, under the same conditions. Two three-minute segments from the first and second half of each interview were rated. Thus, ratings for six observations were taken on each interview. The means of these ratings were used as the levels of empathy for which the aides were functioning during each of the interviews.
The data were analyzed using a 2 by 3 mixed model factorial design. The
dependent measure was the treatment with an experimental group and a control
group. The repeated measure was the three time periods at which the interviews
were collected. The .05 level of confidence was used for all the statistical
tests.

RESULTS

As previously indicated, the purpose of this study was to determine if
a six week inservice training program meeting twice weekly for two hours and
focusing on interpersonal relationships, communication and observation skills,
and knowledge and understanding of both one's own behavior and that of others,
would increase the empathic ability of psychiatric aides. Toward this end,
pre-treatment, post-treatment, and delayed post-treatment interview tapes were
collected for 10 experimental and 10 control subjects. These 60 tapes were
rated on the Carkhuff scale for the levels of empathy expressed by the aides.
The differences between mean ratings were tested using a 2 by 3 mixed model
design.

Since the results of this study are dependent upon the reliabilities of
the ratings, these results need to be presented before discussing the project
results. The rater reliabilities and standard deviations are presented in Table 2.

TABLE 2 ABOUT HERE

It can be noted that for the post-tapes and delayed post-tapes both the individual
and average rater reliabilities were quite high, with values in the .80's and
.90's, respectively. The larger average values are indicative of the confidence
which can be placed in these data since average ratings were entered into the
data analysis.
Further examination of Table 2 reveals that the individual reliability for the pre-tapes was only a moderately high .64. This discrepancy probably be accounted for by the extreme homogeneity of the ratings on this series of tapes. The standard deviation was only .35 while for the other tape sets it was .72 and .65, respectively. Nevertheless, the average rater reliability of .84 did surpass the criterion level of .80 set by the investigators.

The mean ratings are presented in Table 3 and a summary of the statistical analysis is presented in Table 4. As can be noted from Table 4, all analyses were significant at the .01 level of confidence.

The significant treatment factor indicates that one of the treatment groups obtained higher overall ratings than the other group. Similarly, the significant F for time indicates that the level of empathy is related to the time period in which it was obtained. Examination of Table 2 reveals that overall the experimental group obtained higher ratings than the control group. Further examination of the means indicates that a systematic increase in empathic level occurred between pre- and post- ratings and that this increased level was maintained through the six week period between post- and delayed post-ratings. However, the result of major interest was the significant interaction. Pictorially this result is illustrated in the graphs of cell means presented in Figure 1. As can be noted from the figure both groups increased in empathic level. However, the rates of increase were quite different for the two groups.

FIGURE 1 ABOUT HERE
The control groups increased only very slightly over the project period. This increase might be related to any of several factors. First, it might be a random occurrence; second, the initial interview might serve as a learning experience for the subject; and third, the experimental and control groups interacted on the hospital wards during and after the treatment was administered.

The experimental group increased from 1.42 to 2.33 or approximately nine-tenths of a level over the six-week training period. Since the program consisted of 24 hours of instruction spread over six weeks, this represents slightly less than .04 of a unit change per hour of instruction or .15 of a unit change per week. This represented a significant change on the part of the aides who experienced the experimental program. Further examination of Figure 1 indicates that the change in the aides' empathic level was lasting, at least for six weeks after termination of the treatment.

However, even though significant changes were observed in the empathic skills of those aides in the experimental group they did not reach the minimum facilitation level of 3.0. Figure 2 represents the projection of increased levels of empathy for an expanded program based on the change rate for the six week program. It can be noted from the figure that it could be expected to take just under 11 weeks for the average aide to reach Level 3, assuming that the same rate of change could be maintained.

Of final note, half of the experimental group were rated at Level 3 or better on at least 50 percent of the post-treatment ratings. This result represented considerable improvement in that none of the control group reached this level and furthermore none of the experimental group obtained ratings at this level on the pre-tapes.
CONCLUSIONS

This study indicated that an inservice program meeting two two-hour sessions weekly for six weeks which focuses on interpersonal relationships, communication and observation skills, and knowledge and understanding of both one's own behavior and that of others can be effective in increasing the empathic skills of psychiatric aides. Furthermore, the increases seem to be retained for at least six weeks after the termination of the program.

The results of this program were particularly encouraging since they were obtained with subjects which represented a relatively low socio-economic level and low educational background.

However, with six weeks of training the average ratings on empathy did not reach the minimum facilitating level identified by Carkhuff (Carkhuff, 1969). This indicates that even though the general success of the program was encouraging, it probably needs to be revised through extending the time period or stepping up the program within the six weeks period if the minimum facilitation level, Level 3, is the criterion.
BIBLIOGRAPHY


Simpkins, William J. "A Study to Determine How the Effectiveness of the Psychiatric Aide Training Program Can Be Increased at St. Louis State Hospital, St. Louis, Missouri." Unpublished Master's thesis, Baylor University, 1968.


## TABLE 1

Sequential Listing of Objectives and Methods

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### LEGENDS

**Objectives**

1. To understand the purpose of the training program
2. To understand the concept of groups as it applies to their specific group
3. To understand Sullivan's concept of human behavior as it applies to the functioning of mentally healthy and mentally disturbed children (Sullivan, 1953)
4. To understand the concept of mental health and mental illness
5. To understand Maslow's concept of the five levels of needs as it applies to mentally healthy and mentally ill children (Brown and Fowler, 1961)
6. To understand the concept of Carkhuff's levels of empathy (Carkhuff, 1969)
7. To understand the purposes of role-playing
8. To understand the concept of empathy as it relates to therapeutic functioning
9. To understand the effects one's attitudes have on interpersonal relationships
10. To understand the significance of interpersonal security as it relates to mentally healthy and mentally ill children
11. To understand some of the factors involved in the formation of a therapeutic relationship
12. To understand ten basic assumptions in regard to human behavior which have implications for psychiatric aides
13. To understand the importance of good observation and communication skills as they relate to the therapeutic effectiveness of psychiatric aides
14. To develop skill in understanding and communicating therapeutically
15. To understand the concept of anxiety as it relates to the functioning of people
16. To gain a basic understanding of the meaning of disturbed behavior in children
17. Review

### Methods

- **Δ** Role Playing
- **0** Discussion
- **T** Training Tape
- **C** Criterion Tape
- ***** Interchangeable Chart
- **XX** Choose partners for role-playing
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### TABLE 3

Overall and Cell Means Mean Ratings on Empathic Level

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### TABLE 4

Analysis of Variance Summary Table

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<td>Subjects within treatments</td>
<td>3.787</td>
<td>18</td>
<td>0.210</td>
<td></td>
</tr>
<tr>
<td><strong>WITHIN</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>3.284</td>
<td>2</td>
<td>1.642</td>
<td>9.769*</td>
</tr>
<tr>
<td>Treatment by time</td>
<td>2.553</td>
<td>2</td>
<td>1.276</td>
<td>7.600*</td>
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<tr>
<td>Subjects by time within treatment</td>
<td>6.052</td>
<td>36</td>
<td>0.168</td>
<td></td>
</tr>
</tbody>
</table>

* Significant at the .05 level of confidence.
Figure 1. Mean empathic levels for experiment and control groups over the 12 week project period.
Figure 2. Projected increases in empathy for extended training periods.