THE EFFECTS OF TRAINING ON UNDERGRADUATE BEHAVIOR IN PLAY INTERACTION WITH CLINIC-REFERRED CHILDREN

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ABSTRACT

THE EFFECTS OF TRAINING ON UNDERGRADUATE BEHAVIOR
IN PLAY INTERACTION WITH CLINIC-REFERRED CHILDREN

By

Jeffrey R. Schreiber

The present study was designed to investigate the effects of training on the expression of "empathy" of undergraduates acting as play therapists with clinic-referred children. It was expected that trained and untrained undergraduates, and those designated as High Potential Subjects (HPS's) and Low Potential Subjects (LPS's) would differ in their ability to learn and act the therapist role. The four hypotheses tested were that: 1) trainees would exhibit more "empathic" behavior, including acceptance of the child, allowing the child self-direction, and involvement than would controls, 2) as would HPS's compared with LPS's. Also, 3) training would tend to reduce the differences between HPS's and LPS's, and 4) there would be less variability in the behavior of trained vs. untrained subjects.

Subjects were 28 undergraduates distributed into the following four groups: HPS-Trained, HPS-Control, LPS-Trained, and LPS-Control. The data were analyzed by means of a 2x2x3x2 analysis of variance with unequal cell frequencies and repeated measures on the last two factors

(categories and scores), and an analysis of simple effects in those instances where significant interaction effects were found. The results indicated strong support for the first hypothesis and partial support for the remaining three hypotheses.

It was concluded that the training program described did generally increase the expression of "empathy" in undergraduates acting as play therapists, a finding that was seen both as a reflection of and as support for a current trend in psychotherapy research in studying the effects of training non-professionals. Limitations of the present study, such as the relatively small number of subjects used, and the need for future research to explore such variables as the relationship between therapist and child behavior and characteristics, were discussed.

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Dedicated to Carrie and Paul

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INTRODUCTION

The purpose of the present study was to gather information regarding some of the therapist factors that account for success or lack of success of play therapy with clinic-referred children. The study attempted to assess behavioral variables which are presumed to differentiate between "high potential" and "low potential" undergraduate play therapists, between those who have been trained and those who are controls, and to assess differences in therapist behavior between the first, sixth, eleventh, and fifteenth sessions of play therapy.

The Crisis in Mental Health

In 1964 Hobbs recommended that we devote "at least 75% of our resources to the mental health of children. This is the only way to make substantial changes in the mental health of an adult population a generation from now" (p. 830). However, a recent report from the Joint Commission on Mental Health (1970) entitled Crisis in Child Mental Health states that:

> Using the most conservative estimate from various school surveys, the National Institute of Mental Health

> estimates that 1,400,000 children under the age of eighteen needed psychiatric care in 1967.
>
> Are they getting this treatment? Surveys of various psychiatric facilities undertaken by the National Institute of Mental Health show that nearly 1,000,000 of those children needing psychiatric care in 1966 did not receive treatment. These estimates indicate that we are providing care to only one-third of our children who are in serious need of attention. An additional seven to ten percent or more are estimated by school surveys to need some help for emotional problems (p. 5).

There is clearly a need for new and additional manpower and treatment programs.

The Non-Professional as Mental Health Agent

Carkhuff (1968), Cowen, Gardner and Zaz (1969), Gruver (1971), Guerney (1969), Matarazzo (1971), and Rioch (1966) are among the many mental health professionals who feel that there are beneficial effects of non-professionals working as therapeutic agents with individuals in a variety of mental health settings. Non-professionals involved in a helping relationship often seem to effect personality changes not unlike those effected by more traditional psychotherapists (Carkhuff, 1968). According to Carkhuff (1968), evidence indicates that with or without training and/or supervision, patients of lay counselors do as well or better than those of professionals; that lay persons can be trained to function at least at minimally facilitative levels of conditions related to constructive client change over relatively short

periods of time, and can effect significant constructive change in clients. Thus, whatever it is that allows one individual to help another may not be the exclusive domain of professionals.

Cowen, Gardner and Zax (1967) feel that traditional training in the mental health professions may be neither optimal nor necessary in promoting therapeutic behavior change, and the use of teachers, parents, nurses, college students, and so on, may greatly aid in alleviating the shortage of mental health workers. Guerney (1969) likewise notes that with traditional methods and limited forseeable increase in manpower, progress will remain unsatisfactory. He points to the development of new methods which require the use of others, besides professionals, who are naturally significant as intermediaries, aides, or agents of the professionals.

The use of nonprofessionals such as teachers, parents, and undergraduates reflects the professionals' wish to utilize what many feel to be the most effective and efficient sources of manpower because of their closeness and involvement to behavior problems. Such use also raises the question as to whether current psychiatric, social work, and clinical training programs are the only ways to produce mental health workers (Stollak, 1972). It may well be, as Matarazzo (1971) suggests, that non-professional personnel will provide a key to more complete coverage to the entire population.

Child Psychotherapy Research

Despite the great need for new manpower and programs, Levitt (1971) has reported that, unfortunately, there has been little research on what specific therapeutic interventions produce specific changes in specific children under specific conditions. Levitt (1971) notes that although much therapist-patient process research in adult psychotherapy has been initiated in recent years, unfortunately little additional research has been stimulated in child psychotherapy, where the volume of objective investigations has always been much smaller than in the adult field.

One possible explanation for the neglect, according to Levitt (1971), is the extra methodological difficulties involved in child psychotherapy research. Thus, (1) because the child is a developing organism, the many symptomatic manifestations in children who are basically "normal" tend to disappear in time as a function of development, and "symptoms that are pathognomic of an underlying emotional illness may also disappear as a function of development, but will then be replaced by other symptoms" (pp. 477-478); and (2) persons other than the child (e.g., the mother) may be the direct focus of the treatment. Levitt's (1971) survey suggests great variation in the specific behaviors of child therapists in the therapy situation. It also indicates the possibility that there is a broad variation in

effectiveness among therapists though again, objective measures are scarce. According to Levitt, "few conditions have been definitely established as requisite or even advisable for the treatment of the child patient. Innovation in therapy is the order of the day; rigid orthodoxies find scant empirical support" (p. 491).

Undergraduates as Therapists

More specifically, in terms of the effectiveness of undergraduates, Gruver (1971), summarizing his comprehensive review of the literature, notes that:

> The most obvious finding of this review are that there are few studies dealing with college students as therapeutic agents, and further most of those investigations which have been conducted are so methodologically inadequate that it is impossible to draw firm conclusions about the relative effectiveness of college students as therapeutic agents.
>
> The studies are plagued with inadequacies in design. But even more distressing is the fact that few of the investigations of efficacy of college students as therapeutic agents utilized even the basic necessities of scientific inquiry. For example, less than 25% boasted a control group of untreated counselees. Also, only five of these nineteen studies used pre- and post-testing and only five of the nineteen used objective measures" (p. 123).

Another problem encountered in reviewing the literature in which college students are used as therapeutic agents is that few of the studies are similar enough in any area to base conclusions upon; the populations of the studies are extremely diverse (Gruver, 1971).

The problems involved in evaluating the effects of training undergraduates are thus, in a sense, similar to those in the general area of psychotherapy research (though they do present special problems as Levitt (1971) has indicated). That is, adequate specification and measurement of therapist and client characteristics are necessary.

It would seem that the relatively high level of motivation, intelligence, and interest in psychological issues would make the undergraduate an extremely powerful source of child mental health workers (Stollak, 1972). But aside from Stollak's (1968) research, there have been no other published reports dealing with the training and effectiveness of undergraduates specifically in play interaction with clinic-referred young children, though Cowen (1968) and Mitchell (1966) did report related work with undergraduates and children in after-school activities. Gruver (1971) reviews studies using undergraduates in a variety of other settings and with other client populations.

Child Therapy Process Measures

One of the major interests of the current research project was attempting to evaluate possible factors that account for change or lack of change in the behavior of clinic-referred children as a

result of play interaction. The present study measured variables which are presumed to be positive therapist qualities and necessary for "success" in the play situation. The training programs focused essentially on increasing the empathic behavior of undergraduates during the play sessions. "Empathy" can be considered as the conveying of understanding and acceptance of the child's feelings, needs, and wishes.

The present study employs a measurement scale based on the one developed by Stover, Guerney, and O'Connell (1971). The scale includes measures of (1) communication of acceptance, (2) allowing the child self-direction, and (3) involvement. The scales emerged from an observational scale of empathy for adults in spontaneous play with a child, designed by Guerney, Stover and DeMerritt (1968) to assess parent behavior with child as part of a research, diagnostic or therapeutic situation. The initial seven-point bipolar scale ranged from measuring the highest level of responsive and empathic behavior at one extreme to the least empathic, highest self-involvement evidenced at the other extreme. It seemed to those writers that there were, however, distinct variables which make up the total of empathic behavior and which could be isolated. The earlier scale was therefore elaborated to allow for separate coding on five-point scales of three major aspects of empathy which seemed to be incorporated in the earlier measure.

The first dimension, Communication of Acceptance, the verbal expression of acceptance-rejection of the child by the adult is, according to Stover, Guerney and O'Connell (1971) the major element in the communication of empathic feeling. Rogers (1957) considers this dimension to be one of the necessary conditions for therapeutic personality change. He states that, "For constructive personality change to occur, it is necessary that these conditions exist and continue over a period of time; . . . The therapist experiences an empathic understanding of the client's internal frame of reference and endeavors to communicate this experience to the client . . . . The communication to the client of the therapist's empathic understanding . . . is to a minimal degree achieved" (p. 96).

Similarly, Axline (1947) includes among the basic principles which guide the therapist in all non-directive therapeutic contacts the therapist accepting the child exactly as he is, and the therapist recognizing the feelings the child is expressing and reflecting those feelings back to him in such a manner that the child gains insight into his own behavior. According to Moustakas (1959), the therapist should convey his unqualified acceptance, respect and faith in the child and the child's feelings, thoughts, and potentialities. Stover, Guerney and O'Connell (1971) indicate that communication of acceptance does not usually occur in a large degree in general, spontaneous interaction between parent and child, but rather it has been regarded

as a measure of success in learning the therapeutic role, for example in training mothers in filial therapy (Stover and Guerney, 1967) and in group psychotherapy (Truax, 1961).

The second scale, Allowing the Child Self-Direction, is a measure of the behavioral willingness on the part of the adult to follow the child's lead and allow self-direction in behavior rather than attempting to control it. Axline (1947) includes in her basic principles the therapist's establishing a "feeling of permissiveness in the relationship so that the child feels free to express his feelings completely." Also, the therapist "maintains a deep respect for the child's ability to solve his own problems if given the opportunity to do so. The responsibility to make choices and to institute change is the child's." Also, the therapist "does not attempt to direct the child's actions or conversation in any manner. The child leads the way; the therapist follows" (p. 75). According to Moustakas (1959), the therapist must insist that the child lead the way. "He participates in the child's plans, sometimes by playing with him, but more often by following his cues, listening with tenderness and concern, and by watching with a desire to understand" (p. 5).

Involvement, the third scale, is a measure of the adult's attention to and participation in the child's activities. Moustakas (1959) feels that the therapist should listen with complete attentiveness to every expression of the child, and should "concentrate

with his whole being on what the child is saying or doing." The child, therefore, should feel the complete, undivided attention of the adult" (p. 5). Axline (1947), too, states that the therapist must be alert and attentive in order to recognize the child's feelings and reflect them back to him. Stover, Guerney and O'Connell (1971) note that the involvement dimension of adult behavior may or may not contribute positively. That is, involvement may be sympathetic or unsympathetic, very directive or appropriately supportive.

According to Stover, Guerney, and O'Connell (1971), the newer coding system demonstrated concurrent validity by correlating highly with the previously developed empathy measure, and construct validity for each subscale and the total empathy score shown with a group of fifty-one mothers who underwent training in conducting Rogerian play therapy sessions with their own children. At the same time, it offers measures of three variables that are relatively independent of each other.

Guerney's (1972) study of the effects of training in filial therapy makes use of the new coding system. Maternal role performance in terms of reflection of feeling, allowing self-direction, involvement and the average of these ("average empathy") was assessed in four periods: a) at intake, b) during the first practice session, c) during the third practice session, and d) during the sessions from that point up to the last observed clinic session (averaged). The

results showed that demonstration, guidance, and instruction had a significant effect on all variables at the time of the first role performance, and improvement continued during the next two practice sessions to a significant degree. The mothers' performance by this time, according to Guerney (1972), was already "quite good" and subsequent performance remained at the same high level throughout their observed sessions. The scores indicated that the "average mother was consistently showing recognition and acceptance of the child's behavior, and often showing acceptance of his underlying feelings as well; she was quite consistently allowing the child to take a leading role, but would occasionally volunteer information and usually focused on the child as a person in addition to attending to his activity per se" (p. 110).

Hypotheses

The present study was designed to investigate the effects of training on the expression of "empathy" of undergraduates acting as play therapists with clinic-referred children. It was expected that trained and untrained undergraduates, and those designated as High Potential Subjects (HPS's) and Low Potential Subjects (LPS's) would differ in their ability to learn and act the therapist role. The four hypotheses tested were that: 1) trainees would exhibit more

"empathic" behavior, including acceptance of the child, allowing the child self-direction, and involvement than would controls, 2) as would HPS's compared with LPS's. Also, 3) training would tend to reduce the differences between HPS's and LPS's, and 4) there would be less variability in the behavior of trained vs. untrained subjects.

METHOD

Personal Characteristics of Subjects

In research in progress (Stollak, 1972), specific personal characteristics of the subjects are being controlled for. From the large number of potential undergraduate subjects, the ten males and ten females who scored "highest" (i.e., had more 'child-oriented,' 'liberal' values and attitudes, were more able to communicate understanding and acceptance of children's needs and feelings, and presented themselves as being within the 'average' range on various psychological dimensions) in three inventories (the Parent Attitude Research Instrument, a Sensitivity to Children projective questionnaire developed by Stollak, and a Personality Questionnaire also developed by Stollak designed to assess general "mental health") were designated High Potential Students (HPS's), and the ten male and ten female subjects who scored "lowest" were designated as Low Potential Subjects (LPS's). Ten HPS's and ten LPS's were randomly chosen from this pool and comprise the experimental group (trainees) and the remaining ten HPS's and LPS's comprise the control or untrained group. The groups included equal numbers of females and males.

Control Group Activities

Stollak (1972) met individually with each of the twenty control group students and informed them of the (1) random selection process, (2) the necessity of a control condition to evaluate the effects of training and supervision on their's and the child's behavior, (3) that they would be called when there was a clinic-referred child to meet with, (4) that at the end of the experiment they would be permitted, if they so desired, to participate in a course of training similar to that received by the experimental group subjects, and (5) that until the conclusion of the study they would receive neither training nor supervision during the sessions. They were also told that they would be observed playing with the child through a one-way mirror every session, to insure that neither they nor the child were "destructive" to each other. Finally, they were given a list of books on play therapy to read if they wished, but they were not allowed to discuss the material with the observer.

Trainee Group Activities

The twenty trainees were randomly assigned to one of three groups. These groups, consisting of six or seven trainees each, with approximately equal numbers of HPS's and LPS's (and males and females) in each group, met two hours weekly from October, 1970, through

June, 1972. Stollak met with one of the groups, and each of the others was met by a graduate research assistant.* The activities of the trainees until they began play sessions with clinic-referred children included, for the first 19 weeks, discussion of the Sensitivity to Children questionnaire and attempts to get group agreement as to how best to handle each item problem, and specific readings and discussion topics. During the meetings principles of sensitive and effective communication with children were discussed; the principles involve a combination of traditional client-centered tenets and behavioristic concepts, especially the importance of the student understanding which child behaviors they are "reinforcing." Readings from the work of Axline, Moustakas, and material from five one-hour edited video-tapes consisting of sensitive and insensitive handling of various child behaviors ranging from expression of affection and aggression to uncertainty were primary sources for discussions. Extensive use was made of role-playing and examples and possible problems they would encounter with children were also discussed.

In addition, trainees began play with a "normal" child as soon as possible; each student was then video-taped playing with his child and this material became the focus of group discussions. The play practice allowed the trainee to establish an intimate relationship with a child, while enabling him to get a feel for the stability and

*The graduate assistants were Sharon Berliner and Allan Scholom.

repetitive themes of the child's behavior as well as the change and growth that took place. Throughout the group discussions, a major focus was on the importance of empathy and the possible effects of the adult's actions on the emotions and actions of the child.

It was planned that all of the trainees would continue to see their "normal" child until they were assigned to a clinic-referred child approximately fifteen weeks into the school year. While training was progressing, referrals of four to nine year old children were being made to the Psychological Clinic. It was decided that if the clinic evaluation indicated that (a) emotional and behavioral problems did exist, (b) the child had an intelligence quotient within the average range, (c) the child's problems did not involve any neurological or physical impairment, (d) the child was not psychotic, and that (e) neither of the parents were psychotic, or suicidal or homicidal risks, then the recommendation would be for individual play assessment sessions. If the parents concurred with the recommendation for fifteen sessions of play interaction (at no fee) with a "therapist in training" whom a graduate student would be observing, then the graduate student, through a randomization process, called a trainee or control group subject and arranged a time convenient for him, the student and the parents to bring the child to the clinic.

The parents were only asked to make a commitment to an initial fifteen sessions of play. If at the end of the fifteen sessions they

were dissatisfied with "progress" and did not wish to continue such a procedure, or if it was felt that as a result of the second evaluation one or both parents needed to begin individual treatment or marital counseling, then other treatment programs or procedures were discussed and instituted and the child was dropped from the project. Otherwise, if the parents were content with the procedure and if it was felt that at least some progress was being made by the undergraduate with the child, then individual play continued for at least another fifteen sessions, subject to change when necessary.

All sessions were observed by a graduate student (participating in a child psychotherapy sequence) through a one-way mirror, and an attempt was made to videotape every first, sixth, eleventh, and fifteenth session. With the trainees (who were also participating in the weekly group meetings), the graduate student gave immediate supervision and feedback concerning the student's performance. The untrained student did not receive any supervision or feedback except for general encouragement or sympathy when needed.

Instruments and Procedures

The present study employed, as indicated previously, a measurement scale based on the one developed by Stover, Guerney and O'Connell (1971). The scale includes measures of (1) Communication of

Acceptance, (2) Allowing the Child Self-Direction, and (3) Involvement, with each ranging from a high rating of "1" to a low rating of "5" (see enclosed scoring and scale sheets in Appendix). A rating was made for every two-minute interval; the play session lasted for thirty minutes. In each case a coder entered a score which he thought qualified as the highest and lowest for each of the three subscale variables for the interval.

In order to obtain a reliability measure, after a four-hour training period with the experimenter designated as "expert," five coders independently rated three half-hour videotapes of undergraduate play interaction obtained in other projects. Ratings were made for the highest and lowest instances of undergraduate behavior in each scale for each two minutes of the videotapes. The scores from each coder were then compared to the scores of the "expert," and a mean percentage agreement with the "expert" across raters was obtained.

After adequate reliability was established, the coders*, who were unaware of the hypotheses of the study, the characteristics of the undergraduate therapist, or the session number, then independently rated the half-hour control and trainee play sessions (first, sixth, eleventh, and fifteenth) that were available. The following table gives a breakdown by session of the total of 28 subjects for whom results were obtained:

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*The coders were Nancy White, Richard Huber, Deletha Crum, Delores DeMike, and Ardis Armstrong.

TABLE 1.--Subjects (N = 28).

Group	Session	1	6	11	15
HPS-Trainee	(N = 6)	6	5	5	5
HPS-Control	(N = 7)	7	3	4	2
LPS-Trainee	(N = 11)	9	8	4	7
LPS-Control	(N = 4)	4	3	3	2

The reduced number of tapes was due to: 1) a lighter than expected referral rate which resulted in only 28 of 40 undergraduates being assigned cases and 2) poorly conducted videotape procedures. (Stollak (personal communication) will be replicating the project during 1972-1974.)

Following the coding, reliability measures (i.e., mean percentage agreement with the "expert") were again obtained with the three coders who were still available.

RESULTS

Reliability of the Rating Scale

Table 2 presents the mean percentage agreements with the "expert" across coders for the three categories of the rating scale, Acceptance of the Child, Allowing the Child Self-Direction, and Involvement. The pre-coding measures are based on scores of five raters, independently rating three half-hour videotapes of undergraduate play interaction obtained in other projects, after a four-hour training period with the experimenter designated as "expert"; the post-coding measures are based on the scores of the three raters who were still available at the time.

TABLE 2.--Mean Percentage Agreement with Expert Across Raters Before and After Coding.

Ratings:	Low		High	
Category:	pre-cod.	post-cod.	pre-cod.	post-cod.
Acceptance	93.8%	88.7%	88.2%	90.3%
Self-Direct.	87.0%	86.3%	90.2%	90.3%
Involvement	89.4%	91.7%	90.4%	90.0%

This table suggests that ratings were made with a consistently high reliability. The range for the pre-coding mean percentage agreements was 87.0% to 90.3% and the post-coding 86.3% to 91.7%.

Analysis of the Data

The data from each session were analyzed by means of a 2 (trained-untrained) X 2 (high potential-low potential) X 3 (categories: Acceptance, Allowing Self-Direction, Involvement) X 2 (high-low rating scores) analysis of variance with unequal cell frequencies and repeated measures on the last two factors. An unweighted means solution was used to adjust for unequal cell frequencies. Analyses of simple effects were performed in those instances where significant interactions were found.

The following tables can be found in the Appendix: means and standard deviations of scores for trained and untrained subjects for the three categories (Table 7); means and standard deviations of scores for High and Low Potential Subjects for the three categories (Table 8); summaries of analyses of variance for data collected from Sessions 1, 6, 11, and 15, respectively (Tables 9, 10, 11, and 12); and summaries of simple effects analyses exploring significant interactions found for data collected from Sessions 1, 6, 11, and 15, respectively (Tables 13, 14, 15, and 16).

In order to obtain an overall impression from the data, graphs (Figure 1, see next page) were plotted from the average of the means of Tables 6 and 7 for each session. They show the effects of training and potential in the four sessions for each of the three categories. These figures indicate that trained high potential students (HPS-T) had the highest "empathy" ratings (i.e., low scores) in each of the four sessions with the untrained low potential students (LPS-C) generally the lowest.

Hypothesis 1

The first hypothesis tested was that trainees would exhibit more "empathic" behavior, that is, communication of acceptance to the child, allowing the child self-direction, and involvement than controls. Support for this hypothesis would be obtained from significant training main effects and from lower mean scores for trained than for untrained subjects. (Note: lower scores indicate "empathy" ratings.)

Table 3, which summarizes the relevant data, shows that there are, in fact, significant training effects in every session and that trained subjects did have lower mean scores than untrained subjects, thus supporting the hypothesis. However, training X category interactions also tended to be significant and subsequent simple effects analyses indicated that the effect of training was most pronounced

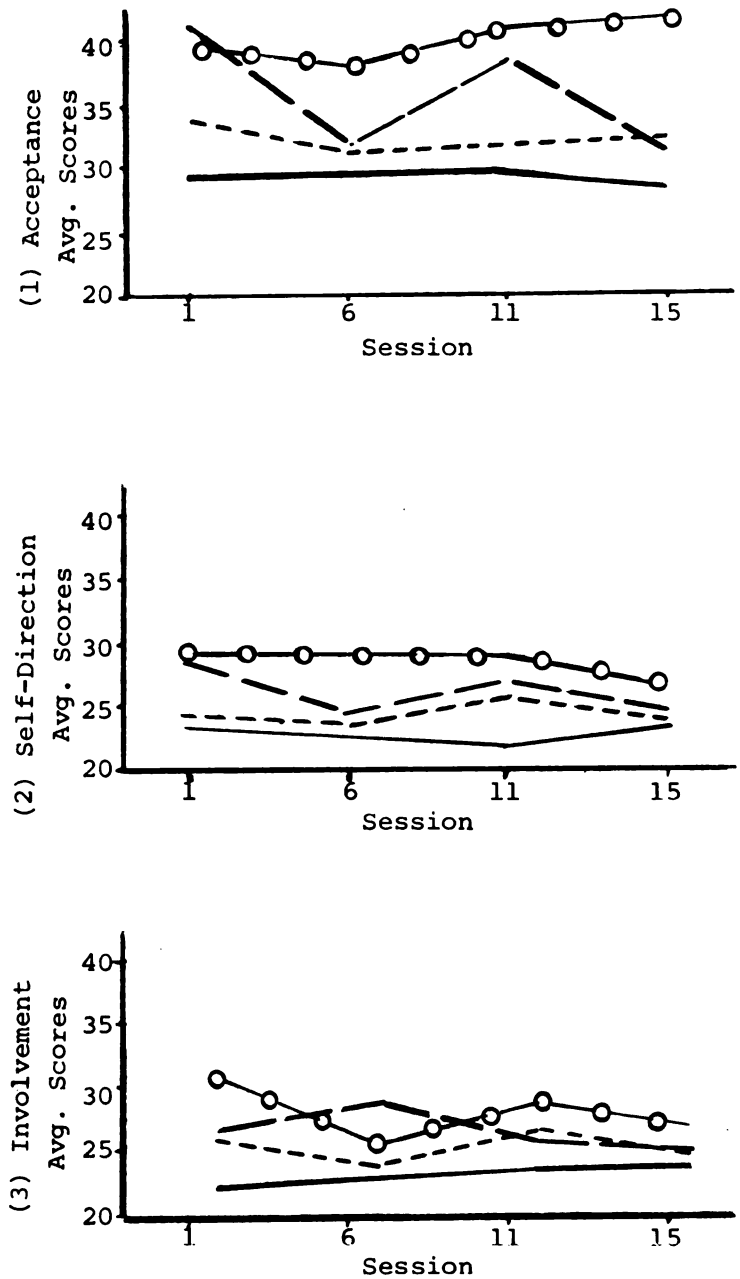


Fig. 1.--The Effects of Training and Potential on Communication of Acceptance, Allowing Self-Direction, and Involvement.

and always significant for Category 1, Communication of Acceptance; for this category, as Table 4 indicates, trainees conveyed significantly more acceptance than did controls in each session.

TABLE 3.--Mean Scores and Significance Tests for Trained and Untrained Subjects for Each Session (Across Categories).

Conditions	Session 1		6		11		15	
	Mean	F	Mean	F	Mean	F	Mean	F
Trained	26.54	11.89 (p<.005)	25.62	12.15 (p<.005)	26.83	6.34 (p<.05)	25.89	6.02 (p<.05)
Untrained	32.68		29.47		31.42		28.75	

TABLE 4.--Mean Scores and Significance Tests for Trained and Untrained Subjects for Category 1, Acceptance, for Each Session.

Session	Condition		F
	Trained	Untrained	
1	31.65	40.57	19.18 (p<.0005)
6	29.88	34.92	9.65 (p<.005)
11	31.33	39.79	16.21 (p<.0005)
15	30.55	36.50	12.95 (p<.005)

From Table 5, which presents the relevant data for Category 2, Allowing Self-Direction, it can be seen that training had a significant effect in Session 1, was marginally significant in Session 6, and was not significant in Sessions 11 and 15, though the differences between trained and untrained subjects were in the expected direction in those sessions as well.

TABLE 5.--Mean Scores and Significance Tests for Trained and Untrained Subjects for Category 2, Self-Direction, for Each Session.

Session	Condition		F
	Trained	Untrained	
1	23.80	28.73	5.86 ($p<.025$)
6	23.62	26.50	3.16 ($p<.10$)
11	23.91	27.44	2.81
15	23.42	24.88	.78

Finally, Table 6, which presents the relevant data for Category 3, Involvement, indicates that training had a significant effect for Session 1 and Session 6 but not for Sessions 11 and 15, though again the differences between trained and untrained in all the sessions are in the expected direction.

TABLE 6.--Mean Scores and Significance Tests for Trained and Untrained Subjects for Category 3, Involvement, for Each Session.

Session	Condition		F
	Trained	Untrained	
1	24.18	28.74	5.01 ($p<.05$)
6	23.37	27.00	5.02 ($p<.05$)
11	25.24	27.04	.74
15	23.71	24.88	.50

The results, then, indicate that trainees do exhibit more "empathic" behavior, especially in terms of communicating acceptance to the child.

Hypothesis 2

The second hypothesis tested was that High Potential Subjects would exhibit more "empathic" behavior than Low Potential Subjects. Support for this hypothesis would be obtained from significant potential main effects and from lower mean scores for High Potential Subjects than for Low Potential Subjects.

From the overall analysis of variance (see Appendix, Table 12), it can be seen that potential had a significant main effect in

Session 15 ($F = 6.22$, $p < .05$), and the lower mean scores for HPS's compared to LPS's in all sessions (except Session 6, Category 3) indicates that the difference was in the expected direction (see Appendix, Table 8). However, inspection of the simple effects analysis, which explored the significant potential X category interaction for the data from Session 15 (see Appendix, Table 16), reveals that significance was accounted for wholly by Category 1, Acceptance ($F = 16.42$, $p < .0005$), while the potential X category interaction for the other two categories was not significant. In Session 6, in which a significant potential X category interaction also occurred (see Appendix, Table 10), potential was found in the simple effects analysis (see Appendix, Table 14) to be significant for Category 1 ($F = 5.39$, $p < .05$) and marginally significant for Category 2 ($F = 3.03$, $p < .10$). Potential did not generate any significant effects in either Session 1 or 11.

The results thus indicate some support for Hypothesis 2, especially with regard to Category 1, Acceptance, in Session 15. Moreover, inspection of Table 8 (see Appendix) shows that differences between HPS's and LPS's were in the expected direction for the remaining categories and sessions with the exception of Category 3 in Session 6.

Hypothesis 3

The third hypothesis tested was that training would tend to reduce the differences between HPS's and LPS's. Support for this hypothesis would come from a significant training X potential X category interaction from the overall analysis of variance and, specifically in the analysis of simple effects, from a significant interaction between training and potential within a category. It would be expected that HPS's and LPS's would differ significantly in the untrained condition but not so in the trained condition.

There is a significant training X potential X category interaction in the overall analysis for Session 6 (Table 10, $F = 3.41$, $p < .05$). Further, inspection of the analysis of simple effects for this session indicates that training and potential interacted significantly in Category 1, Acceptance (Table 14, $F = 4.40$, $p < .05$). Within this category, HPS's and LPS's were not significantly different in the trained condition but were in the untrained (where HPS's had significantly more acceptance), thus lending support to the hypothesis.

There is, then, limited support for Hypothesis 3, specifically in regard to Category 1 in Session 6.

Hypothesis 4

The fourth hypothesis tested was that there would be less variability between high and low interval rating scores for trained vs. untrained subjects. Support for this hypothesis would come from a significant training X potential X scores interaction from the overall analysis of variance and, specifically, in the analysis of simple effects from a significant interaction between training and scores within potential. The high-low score difference would be expected to be significantly greater in the untrained condition than in the trained condition.

In the overall analysis of variance for Session 15, there was marginally significant training X potential X scores interaction (Table 12, $F = 3.71$, $p < .10$). From the analysis of simple effects for this session it can be seen training X scores interaction within low potential subjects was also marginally significant (Table 16, $F = 4.49$, $p < .10$). For LPS's here, there was a significantly different variation between high-low interval scores for trained vs. untrained subjects; that is, there was significantly greater difference between high-low scores for untrained LPS's as compared to trained LPS's. The high-low variations were not significantly different in the other conditions and for the other sessions, however. Support for Hypothesis 4 is thus limited.

Unpredicted Results

The finding that the interactions between categories and scores were significant in each of the four sessions was unpredicted. These effects did not, however, interact with training or potential except in Session 6, where potential interacted significantly with categories and scores (Table 10, $F = 3.41$, $p < .05$). Here the significance can be largely attributed to the interaction between potential and category in this session mentioned previously. The categories X scores interactions reflect an obtained difference in high-low score variation between categories: inspection of the simple effects analyses shows that in each of the four sessions the difference was greatest for Category 2, Allowing Self-Direction, and least for Category 1, Acceptance, across conditions of training and potential (see Tables 13-16 in Appendix). This is also indicated in Tables 7 and 8 (see Appendix), where the largest standard deviations generally obtained for Category 2, and the smallest for Category 1.

Thus, apparently there was most variation in performance in terms of allowing the child self-direction and least in terms of communicating acceptance to the child.

DISCUSSION

Hypotheses and Unpredicted Results

The present study was designed to investigate the effects of training on the expression of communication of acceptance, allowing self-direction, and involvement in undergraduates acting as play therapists with clinic-referred children. Of the four hypotheses that were tested, one received strong support and the remaining three were partially supported. Additional findings that were not specifically relevant to the stated hypotheses were also analyzed.

Hypothesis 1

The first hypothesis tested was that trainees would exhibit more "empathic" behavior, that is, communication of acceptance to the child, allowing the child self-direction, and involvement than untrained controls. The results were significant in the predicted direction in each of the four sessions. The effect of training was found to be most pronounced and always significant for Category 1, Communication of Acceptance, and somewhat less so for the remaining two categories, Allowing Self-Direction and Involvement, though

significance was found for these categories as well. Thus, trainees exhibited more "empathic" behavior, especially in terms of communicating acceptance to the child. The relevance of this finding is perhaps emphasized by Stover, Guerney and O'Connell's (1971) contention that the verbal expression of acceptance-rejection of the child by the adult is the major element in the communication of empathic feeling, and by Rogers' (1957) statement that this dimension is one of the necessary conditions for therapeutic personality change. If so, then training on this basis alone is significantly increasing the ability of undergraduates to function as effective play therapists.

The fact that Category 2, Allowing the Child Self-Direction, varies widely in the spontaneous interaction between parent and child (Stover, Guerney and O'Connell, 1971) indicates that the somewhat less significant training effect here may reflect occasional "spontaneous" instances of undergraduates in the control condition allowing the child self-direction. Stover, Guerney, and O'Connell (1971) also note that Involvement may or may not contribute in a positive way, that is, it may be sympathetic or non-sympathetic, highly directive or appropriately supportive. Thus, for example, an untrained person may be involved with the child but not necessarily in a positive way, and still be rated highly in this category. This rating scale does not discriminate between these different types of involvement.

Hypothesis 2

The second hypothesis tested was that High Potential Subjects (HPS's) would exhibit more "empathic" behavior than Low Potential Subjects (LPS's). Partial support was obtained for this hypothesis; significance was found for Category 1, Acceptance, in Session 15. For the remaining categories and sessions the differences between HPS's and PLS's were in the expected direction (with one exception). The effect of potential was perhaps somewhat obscured by that of training; that is, training might have increased LPS "empathy" to such an extent that overall HPS-LPS differences were not as great as they would be if considered independently. Still, differences were always in the expected direction. The effect of potential cannot be discounted; there were some initial differences in the ability of undergraduates with the High Potential-Trained group receiving generally higher "empathy" ratings than the Low Potential-Trained group. However, it does appear that training is, essentially, the most significant variable to be considered.

Hypothesis 3

The third hypothesis tested was that training would tend to reduce the differences between HPS's and LPS's, that is, that HPS's and LPS's would differ significantly in the untrained condition but

not so in the trained condition. This hypothesis assumed, in effect, that LPS's would benefit more from training than would HPS's. The hypothesis received limited support; significance was found for Category 1, Acceptance, in Session 6. Here HPS's and LPS's were not significantly different in the trained condition but were in the untrained. It might be speculated that the overall significance of training would produce stronger results in the hypothesized direction here if the study was repeated with a larger number of subjects. That there was some statistical significance indicates possible training and potential interaction which needs to be explored further. It would seem likely that the initial differences between HPS's and LPS's would be reduced by training. On the other hand, HPS's may benefit from training as much as LPS's; thus, in spite of training, HPS-LPS differences would remain.

Hypothesis 4

The fourth hypothesis tested was that there would be less variability between high and low interval rating scores for trained as compared to untrained subjects; that is, that the high-low score difference would be significantly greater in the untrained condition than in the trained condition. This hypothesis assumes that trained subjects will be more consistent in their expression of empathy to

the child than will untrained subjects, who might express a high level of empathy in one instance and then negate it in the next. This hypothesis also received limited support. In Session 15 for LPS's there was significantly greater difference between high-low scores for untrained LPS's as compared to trained LPS's. The high-low variations for trained and untrained were not significantly different in the other conditions and for the other sessions, however. Again, conclusions must be reserved; perhaps stronger results in the hypothesized direction would be obtained if the study were repeated with a greater number of subjects. That there was significance indicates possible training X scores interaction which needs to be further explored. It would appear likely that training would have the effect of producing more consistently empathic responses. On the other hand, it may be that while training does increase the level of empathic responses it does not reduce their variability; thus, a trained subject would communicate generally more empathically but would still vary in his responses as much as the untrained subject would. If this were the case, then perhaps further training procedures could be devised to reduce this variability.

Unpredicted Results

As indicated previously, the finding that interactions between categories and scores were significant in each of the four sessions was predicted. These interactions reflect an obtained difference in high-low score variation between categories. Apparently, for each session, there was most variation in performance in terms of allowing the child self-direction and least in terms of communicating acceptance to the child. This might be explained by the fact that on the one hand, as mentioned previously, the dimension of Allowing the Child Self-Direction varies widely in the "spontaneous" interaction between adult and child. Therefore, even if a subject were not trained, on some occasions he or she may allow the child a good deal of self-direction and on others, even immediately afterwards, do otherwise. On the other hand, the dimension of Acceptance seems to discriminate best between trained and untrained; thus, it would not tend to occur spontaneously for untrained subjects, who would be consistent in their relative non-acceptance of the child as compared to the trained subjects, whose acceptance of the child would be relatively consistent.

Limitations of the Present Study

One of the shortcomings of the present study was the relatively small number of undergraduates in each cell of the experimental

design. It proved to be difficult to obtain both children and parents; although the undergraduates were waiting for cases, some for up to a year and a half, low referral rates reduced possible assignment of cases to them. Videotaping errors also reduced the total number of tapes available for data analyses. Perhaps with a larger number of clinic referrals significance would have occurred in cases where marginal or non-significance were obtained. As noted previously, Stollak (personal communication) plans to replicate the study during 1972-1973 in order to obtain additional data.

Also, because of the small number of undergraduates used, the variable of sex was not included in the study. Though male-female differences were not determined, they might prove to be important dimensions in considering the effect of training, in the ability to communicate empathically to the child, and in the relationship between therapist and child. It may be, for example, that cultural factors predispose females to be generally more empathic and to respond more readily to training than males. Perhaps it would be necessary to vary training procedures for males and females. Ideally, the study should have included a greater number of male and female subjects with an equal number in each condition. There should also have been a division of males and females into groups in accordance with the sex of the child with whom they were playing.

Further, the present study did not evaluate the effect of the play sessions on the child. If it is true that training is "successful" and that trained and untrained undergraduates differ in their ability to learn and perform the role of play therapist, then such difference should be manifested by changes in the child's behavior on videotape, rating scales, checklists, questionnaires, and projective materials obtained during the course of the project. Currently, analysis of the children's play session behavior is being conducted by Loretta Laurenitis (at Michigan State University).

It is also possible that the training procedures used need to be changed or modified in certain ways. For example, the training was done by three different persons, a senior faculty member and two relatively inexperienced clinical graduate students. Analysis across trainers was not possible, though each trainer might have conducted his group somewhat differently and such difference might be reflected in trainee performance. Perhaps it is necessary that all the trainees have the same trainer so as to standardize the "input" they receive. Or the different trainers may have to more closely coordinate their efforts. Possibly, too much time was allotted to discussion of the Sensitivity to Children questionnaire and to readings and discussion topics as opposed to playing with a child and learning from that experience and from group and trainer feedback, or simply that more of the latter is necessary in order to qualify the undergraduate as

being "trained." Moreover, there may be in some cases a qualitative difference between playing with a "normal" child and playing with a child who is referred to the clinic, and it may be quite difficult for the undergraduate to make the adjustment from one situation to the other. Training might, then, possibly focus more extensively on the assessment of child psychopathology and on ways of dealing with specific problems.

Finally, it may be that the personality measures used to determine High Potential Subjects and Low Potential Subjects did not discriminate adequately enough significant differences in therapist potential. Perhaps subjects in taking the tests answered in a way that would not necessarily coincide with their real behavior in a given situation. Or, the tests themselves might not have been tapping the therapist variables that are most essential to the therapeutic process. It may be necessary to use a larger battery of inventories and/or tests or to replace those used (The Parent Attitude Research Instrument, a Sensitivity to Children projective questionnaire and a Personality Questionnaire) with measures that further research proves to be more effective.

Current Research Trends

It may be said that the training program did generally increase the expression of communication of acceptance, allowing the

child self-direction and involvement in undergraduates acting as play therapists. The focus and results of this study are both a reflection of a current trend in psychotherapy research in studying the effects of training on non-professionals and, at the same time, an indication of the need to explore further the relevant processes and variables in this area. The findings of the present study point in a direction similar to that of others, such as Guerney's (1972) study which showed that demonstration, guidance, and instruction had a significant effect on all variables (acceptance, allowing self-direction, and involvement) in terms of maternal role performance during filial therapy.

Carkhuff (1969) noted in a report on a program of training parents to work with their disturbed children (Carkhuff and Bierman, 1969) that: ". . . The trainer and the other trainees not only provided feedback on ratings of level of functioning but also attempted to enable the trainee to achieve new levels of understanding of the problem area involved" (p. 234). The groups were "extremely successful in terms of functioning with each other, but changes in functioning weren't as great for the parents in relation to their children, thus underscoring the need for more training specific to the child's play" (Carkhuff, 1969, p. 234).

In addition, Bierman, Carkhuff and Santilli (1972) have developed an empathic communication training program with Head Start preschool personnel, with the communication of empathic understanding

defined as involving both "sensitivity to current feelings and the verbal facility to communicate this understanding in a language attuned to the other's current feelings" (p. 2). They found that the Head Start personnel, both professionals and non-professionals, "significantly increased their sensitive empathic responsiveness over training," and that trainees evaluated the communication workshops as having made "a significantly greater contribution both to their effectiveness at work and to their conceptual development" (p. 1). According to Carkhuff (1971), "training is truly the preferred modality for effecting therapeutic change or gain" (p. 129), while Bierman (1969) suggests that "conditions of active engagement in the context of positive regard and accurate empathic understanding are optimal for personal development and well-being" (p. 348).

Finally, Linden and Stollak (1969) studied the changes in behavior of undergraduates trained to be "reflective, non-interesting and empathic with children" (p. 123). They found that students trained didactically to play the non-directive role "reflected significantly more feeling and content, gave significantly less direction and unsolicited help, and asked fewer questions and restricted less often than did the other groups" (p. 218). In one group, students observed each other play with children without discussion of the principles of play therapy; the other was a control group which received no training. The implications of the Linden and Stollak (1969)

study, as of the present study, point to the possible use of undergraduates as play therapists, and perhaps more specific training of these undergraduates for parenthood with the goal of preventing emotional disturbances in their own children.

Implications for Future Research

The present study has attempted to assess the effectiveness of the training program on the ability of undergraduates to communicate empathy to clinic-referred children. It is part of a larger research project which is also attempting to obtain information concerning the characteristics of children and processes that occur in the play sessions which produce varying kinds of success. Further study is necessary to explore the relationship between therapist and child characteristics and what specific combinations of characteristics in each produce what specific kinds of outcomes in the therapeutic process. Research should also study in greater detail the training procedures and the specific kinds of variations in these procedures in objective outcome measures. Also, procedures in case selection need to be more thoroughly investigated so as to enable precise identification of the types of children's problems that would benefit most from specific therapeutic procedures, in conjunction with the therapist qualities that most enhance the process.

Programs designed to utilize such non-professionals as undergraduates may also, on the one hand, have positive effects on the undergraduates themselves, as Stollak (1972) has suggested. On the other hand, it seems necessary to utilize research on the effect of undergraduates and other non-professionals on the behavior of specific subjects or clients to begin implementing these programs with the hope of alleviating the shortage of mental health workers. And, if training in play techniques can be found in follow-up studies to significantly increase undergraduates' attention to and recognition of the emotional needs of children, both theirs and others', then it may be possible that college programs and courses could aid in the long term reduction of child psychopathology.

SUMMARY

The present study was designed to investigate the effects of training on the expression of "empathy" of undergraduates acting as play therapists with clinic-referred children. It was expected that trained and untrained undergraduates, and those designated as High Potential Subjects (HPS's) and Low Potential Subjects (LPS's) would differ in their ability to learn and act the therapist role. The four hypotheses tested were that: 1) trainees would exhibit more "empathic" behavior, including acceptance of the child, allowing the child self-direction, and involvement than would controls, 2) as would HPS's compared with LPS's. Also, 3) training would tend to reduce the differences between HPS's and LPS's, and 4) there would be less variability in the behavior of trained vs. untrained subjects.

Subjects were 28 undergraduates distributed into the following four groups: HPS-Trained, HPS-Control, LPS-Trained, and LPS-Control. The data were analyzed by means of a 2x2x3x2 analysis of variance with unequal cell frequencies and repeated measures on the last two factors (categories and scores), and an analysis of simple effects in those instances where significant interactions were found.

The results indicated strong support for the first hypothesis and partial support for the remaining three hypotheses.

It was concluded that the training program described did generally increase the expression of "empathy" in undergraduates acting as play therapists, a finding that was seen both as a reflection of and as support for a current trend in psychotherapy research in studying the effects of training non-professionals. Limitations of the present study, such as the relatively small number of subjects used, and the need for future research to explore such variables as the relationship between therapist and child behavior and characteristics, were discussed.

APPENDIX

TABLE 7.--Means and Standard Deviations of Scores for Trained (A_1) and Untrained (A_2) Subjects for the Three Categories (Acceptance: CI, Self-Direction: CII, and Involvement: CIII).

		CI		CII		CIII	
		Mean	S.D.	Mean	S.D.	Mean	S.D.
Session 1 (N=26)	A_1(N=15)	31.65	4.96	23.80	7.21	24.18	6.75
	A_2(N=11)	40.57	3.20	28.73	6.39	28.74	5.30
Session 6 (N=19)	A_1(N=13)	29.88	5.72	23.62	8.15	23.37	6.61
	A_2(N=6)	34.92	5.47	26.50	7.68	27.00	5.93
Session 11 (N=16)	A_1(N=9)	31.33	4.45	23.91	6.57	25.24	5.60
	A_2(N=7)	39.79	3.71	27.44	5.52	27.04	4.28
Session 15 (N=15)	A_1(N=12)	30.55	4.66	23.42	7.52	23.71	6.18
	A_2(N=4)	36.50	6.03	24.88	6.84	24.88	5.18

TABLE 8.--Means and Standard Deviations of Scores for High Potential (B_1) and Low Potential (B_2) Subjects for the Three Categories (Acceptance: CI, Self-Direction: CII, and Involvement: CIII).

		CI		CII		CIII	
		Mean	S.D.	Mean	S.D.	Mean	S.D.
Session 1 (N=26)	B_1(N=13)	35.53	7.36	25.86	7.13	24.97	6.58
	B_2(N=13)	36.70	4.38	26.68	7.30	27.95	6.02
Session 6 (N=19)	B_1(N=8)	30.52	4.02	23.65	8.03	25.99	6.98
	B_2(N=11)	34.28	7.21	26.47	7.83	24.39	5.91
Session 11 (N=16)	B_1(N=9)	34.33	5.75	24.29	7.01	24.93	5.77
	B_2(N=7)	36.79	5.76	27.06	6.17	27.36	5.81
Session 15 (N=16)	B_1(N=7)	30.18	4.39	23.45	7.88	23.98	5.91
	B_2(N=9)	36.88	5.78	24.84	6.47	24.61	5.53

TABLE 9.--Summary of Analysis of Variance for Data Collected from Session 1.

Source	df	SS	MS	F
A (Training)	1	1348.21	1348.21	11.89 (p<.005)
B (Potential)	1	98.15	98.15	.87
AB	1	43.46	43.46	.38
Error 1	22	2494.80	113.40	
C (Categories)	2	3027.27	1513.64	86.19 (p<.0005)
AC	2	139.52	69.76	3.97 (p<.05)
BC	2	32.12	16.06	.91
ABC	2	88.18	44.09	2.51 (p<.10)
Error 2	44	772.70	17.56	
D (Scores)	1	4130.46	4130.46	37.08 (p<.0005)
AD	1	52.29	52.29	.47
BD	1	1.01	1.01	.01
ABD	1	86.62	86.62	.78
Error 3	22	222.80	111.40	
CD	2	245.61	122.81	11.73 (p<.0005)
ACD	2	2.33	1.17	.11
BCD	2	2.21	1.11	.11
ABCD	2	3.58	1.79	.17
Error 4	44	460.80	10.47	

TABLE 10.--Summary of Analysis of Variance for Data Collected from Session 6.

Source	df	SS	MS	F
A (Training)	1	359.12	359.12	12.15 (p<.005)
B (Potential)	1	66.98	66.98	2.27
AB	1	39.79	39.79	1.35
Error 1	15	443.40	29.56	
C (Categories)	2	1141.22	570.61	33.43 (p<.0005)
AC	2	19.35	9.68	.57
BC	2	132.43	66.22	3.88 (p<.05)
ABC	2	116.39	58.20	3.41 (p<.05)
Error 2	30	512.10	17.07	
D (Scores)	1	3735.67	3735.67	139.41 (p<.0005)
AD	1	31.39	31.39	1.17
BD	1	.61	.61	.02
ABD	1	10.50	10.50	.39
Error 3	15	401.80	26.79	
CD	2	127.83	63.92	13.63 (p<.0005)
ACD	2	1.66	.83	.18
BCD	2	34.30	17.15	3.66 (p<.05)
ABCD	2	11.03	5.52	1.18
Error 4	30	140.80	4.69	

TABLE 11.--Summary of Analysis of Variance for Data Collected from Session 11.

Source	df	SS	MS	F
A (Training)	1	492.45	492.45	6.34 ($p<.05$)
B (Potential)	1	152.30	152.30	1.96
AB	1	1.94	1.94	.03
Error 1	12	932.30	77.69	
C (Categories)	2	1930.88	965.44	76.32 ($p<.0005$)
AC	2	185.62	92.81	7.34 ($p<.005$)
BC	2	.54	.27	.02
ABC	2	5.70	2.85	.23
Error 2	24	303.50	12.65	
D (Scores)	1	2121.35	2121.35	142.18 ($p<.0005$)
AD	1	23.44	23.44	1.57
BD	1	29.68	29.68	1.99
ABD	1	8.07	8.07	.54
Error 3	12	179.00	14.92	
CD	2	57.93	28.97	3.43 ($p<,05$)
ACD	2	.74	.37	.04
BCD	2	29.45	14.73	1.75
ABCD	2	4.07	2.04	.24
Error 4	24	202.50	8.44	

TABLE 12.--Summary of Analysis of Variance for Data Collected from Session 15.

Source	df	SS	MS	F
A (Training)	1	146.66	146.66	6.02 (p<.05)
B (Potential)	1	151.68	151.68	6.22 (p<.05)
AB	1	45.48	45.48	1.87
Error 1	12	292.60	24.38	
C (Categories)	2	1381.53	690.77	56.02 (p<.0005)
AC	2	85.96	42.98	3.49 (p<.05)
BC	2	130.72	65.36	5.30 (p<.025)
ABC	2	14.71	7.36	.60
Error 2	24	295.90	12.33	
D (Scores)	1	2155.97	2155.97	148.99 (p<.0005)
AD	1	16.62	16.62	1.15
BD	1	15.76	15.76	1.09
ABD	1	53.64	53.64	3.71 (p<.10)
Error 3	12	173.60	14.47	
CD	2	117.57	58.79	6.69 (p<.005)
ACD	2	.78	.39	.04
BCD	2	6.58	3.29	.37
ABCD	2	9.81	4.91	.56
Error 4	24	210.90	8.79	

TABLE 13.--Simple Effects Analysis Exploring Significant ABD and CD Interactions found from Data Collected in Session 1.

	Source	df	SS	MS	F
ABC	Within C_1:				
	A	1	949.53	949.53	19.18 (p<.0005)
	B	1	16.18	16.18	.33
	AB	1	130.56	130.56	2.64
	Within C_2:				
	A	1	289.90	289.90	5.86 (p<.025)
	B	1	8.06	8.06	.16
	AB	1	.54	.54	.01
	Within C_3:				
	A	1	248.29	248.29	5.01 (p<.05)
	B	1	106.03	106.03	2.14
	AB	1	.54	.54	.01
	Error 1 (pooled)	66	3267.50	49.51	
CD	D Within C_1	1	622.01	622.01	60.04 (p<.0005)
	D Within C_2	1	2173.62	2173.62	209.81 (p<.0005)
	D Within C_3	1	1580.44	1580.44	152.55 (p<.0005)
	Error 2 (pooled)	66	683.60	10.36	

TABLE 14.--Simple Effects Analysis Exploring Significant ABC and BCD Interactions Found from Data Collected in Session 6.

	Source	df	SS	MS	F
ABC	Within C_1				
	A	1	204.83	204.83	9.65 (p<.005)
	B	1	114.53	114.53	5.39 (p<.05)
	AB	1	93.40	93.40	4.40 (p<.05)
	B in A_1C_1	1	.53	.53	.03
	B in A_2C_1	1	207.37	207.37	9.77 (p<.005)
	Within C_2				
	A	1	67.02	67.02	3.16 (p<.10)
	B	1	64.24	64.24	3.03 (p<.10)
	AB	1	38.42	38.42	1.81
	Within C_3				
	A	1	106.62	106.62	5.02 (p<.05)
	B	1	20.60	20.60	.97
	AB	1	24.40	24.40	1.15
	Error 1 (pooled)	45	955.50		
BCD	B Within C_1	1	114.53	114.53	6.88 (p<.025)
	B Within C_2	1	64.24	64.24	3.86 (p<.10)
	B Within C_3	1	20.60	20.60	1.24
	Error (pooled)	90			
	D Within C_1	1	756.33	756.33	62.71 (p<.0005)
	BD Within C_1	1	27.35	27.35	2.27
	D Within C_2	1	1890.19	1890.19	156.73 (p<.0005)
	BD Within C_2	1	4.40	4.40	.36
	D Within C_3	1	1216.97	1216.97	100.91 (p<.0005)
	BD Within C_3	1	3.19	3.19	.26
	Error 2 (pooled)	45	542.60	12.06	

TABLE 15.--Simple Effects Analysis Exploring Significant AC and CD Interactions Found from Data Collected in Session 11.

	Source	df	SS	MS	F
AC	A Within C_1	1	556.35	556.35	16.21 ($p<.0005$)
	A Within C_2	1	96.38	96.38	2.81
	A Within C_3	1	25.26	25.26	.74
	Error 1 (pooled)	36	1235.80	34.33	
CD	D Within C_1	1	460.98	460.98	43.49 ($p<.0005$)
	D Within C_2	1	1036.97	1036.97	97.83 ($p<.0005$)
	D Within C_3	1	681.29	681.29	64.27 ($p<.0005$)
	Error 2 (pooled)	36	381.50	381.50	

TABLE 16.--Simple Effects Analysis Exploring Significant AC, BC, ABD, and CD Interactions Found from Data Collected in Session 15.

	Source	df	SS	MS	F
AC	A Within C_1	1	211.69	211.69	12.95 (p<.005)
	A Within C_2	1	12.74	12.74	.78
	A Within C_3	1	8.13	8.13	.50
	Error 1 (pooled)	36	588.50	16.35	
BC	B Within C_1	1	268.44	268.44	16.42 (p<.0005)
	B Within C_2	1	11.54	11.54	.71
	B Within C_3	1	2.39	2.39	.15
	Error 2 (pooled)	36	588.50	16.35	
ABD (Blocked on B)	A Within B_1	1	14.41	14.41	.74
	A Within B_2	1	177.76	177.76	9.15 (p<.01)
	Error 3 (pooled)	24	466.20	466.20	
	D Within B_1	1	1270.24	1270.24	87.78 (p<.0005)
	AD Within B_1	1	5.26	5.26	.36
	D Within B_2	1	901.49	901.49	62.30 (p<.0005)
	AD Within B_2	1	65.00	65.00	4.49 (p<.10)
	D in A_1B_2	1	1087.91	1087.91	75.18 (p<.0005)
	D in A_2B_2	1	361.79	361.79	25.00 (p<.0005)
	Error 4	12	173.60	14.47	
CD	D Within C_1	1	351.33	351.33	36.02 (p<.0005)
	D Within C_2	1	1156.23	1156.23	126.78 (p<.0005)
	D Within C_3	1	765.95	765.95	83.99 (p<.0005)
	Error 5 (pooled)	36	328.47	9.12	

Scales

The scales range from a high rating of one to a low rating of five. Each point on the scale is followed by typical responses obtained from codings of the direct observations of adult and child.

1. Communication of Acceptance

1. Verbal Recognition and Acceptance of Feelings: Examples: You're proud of how you fixed that; That makes you feel good; That made you angry; You feel better already; You're enjoying that; You really like smashing that.

2. Verbal Recognition and Acceptance of Behavior Only: Examples: You got it that time; You really stabbed him; You're getting a workout; Bam, Pop, etc.; You're hitting the mother doll.

3. Social Conversation or No Conversation: Examples: I'm not so good at building toys; Mary's been away most of the summer; Mothers aren't very good at that; These are nice toys.

4. Slight or Moderate Verbal Criticism Stated or Strongly Implied: Examples: That's cheating; The head you made is too big; You'll ruin the floor; That's not fair; You'll have to be more careful; Watch what you're doing; No, not that way.

5. Verbal Criticism: Argumentative, "Preaching," Openly Rejecting Feelings or Behavior, Abusive Language: It's not nice to feel that way; You're nasty; I'm talking to a dope; You're not so hot yourself; You're a fresh kid; You see, I told you to do it the other way.

2. Allowing the Child Self-Direction

1. Shows Willingness to Follow Child's Lead (No indication to the contrary: i.e., there need be no verbal comment; behavior compliant with the child's directions or lead is sufficient.) Examples: You want me to do it for you; I'm supposed to pick them up (or simply moving to do so); You'd like me to play catch with you (or simply doing so at the child's request).

2. Child Has Option for Lead-Taking. (Choice genuinely left to the child but mitigated by direct or indirect suggestions; gives unsolicited praise; volunteers information; asks for information.) Examples: What shall we do?; What would you like me to make?; You did that right; Shall we pretend it (the phone) rings?; It's under

the table; You can shoot this if you want; Good ("Good" reinforces a certain type of activity and therefore represents a degree of control).

3. Takes Lead Without Giving Child an Option: Unsolicited instruction on how to do or accomplish something; "teaching," praise accompanying a suggestion; questions with intent to guide the child. Examples: play with what you have; You have to keep practicing; Maybe the best way is to take the crayons out of the box; Take your time and aim it; See if you can do it again just like that; Are you sure that's the way it goes?

4. Directs or Instructs Child to do Something. Initiating new activity when there has been no previous sign of inertia and/or resistance shown by the child. Examples: Put the tinker toy away first; Why don't you paint something; Let's play with clay; You'd better put him back together; Don't squeeze water in there.

5. Persuades, Cajoles, Demands, Pushes, Interrupts, Interferes in Child's Activity, Insists on New Activity. Resistance by the child is implicit, or there is other involvement, or inertia, on the part of the child which the parent is seeking to overcome. Examples: You've got to play with something else now; You'd better give me one; You can't do that anymore; I told you not to turn out the lights; That's enough of that; No, take this one.

3. Involvement

1. Fully Observant of Child's Behavior, Adult gives no indication of being unaware of the child's behavior: More attention is given to the child than to other stimuli, such as the objects the child is using. (Such attention is not necessarily sympathetic or constructive.) The parent may be involved in a joint activity; e.g., role playing, games. He participates in an active way physically as well as verbally when it is appropriate.

2. High Level of Attention. Although not involved in anything other than that which also involves the child, the adult's concentration here is almost exclusively on activities per se rather than child's behavior. Joint activities, such as card playing and dart shooting, lend themselves to "2" scores when the parent is keenly interested in the game itself (e.g., the cards that turn up), without paying attention to the child's reactions and behaviors.

3. Marginal Attention: The adult is involved in his own independent activity to a degree that interferes somewhat with attention to child. No joint activity. Adult is preoccupied with own activities to the extent that he is not always providing company, e.g., briefly primping in a mirror, briefly attending to own attire, inspecting nails. The adult may occasionally remark spontaneously on the child's activity.

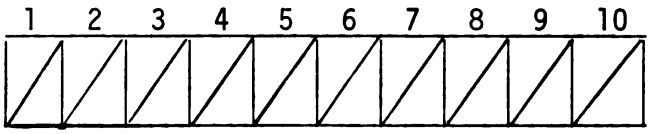
4. Partially Withdrawn, or Preoccupied. Adult may infrequently observe child's activity, but doesn't comment spontaneously. Adult may be so involved in his own role (e.g., in independent play) that he fails to attend to the child's apparent needs. He responds promptly, however, when alerted by the child.

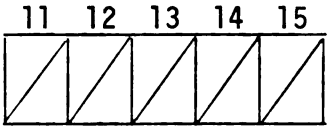
5. Completely preoccupied, or Self-Involved, or Shut-Off. Here the child is ignored and must repeat or prompt to get a response from the adult. The adult is completely absorbed with an independent activity or with his own thoughts for prolonged periods, or engaged in prolonged self-grooming; seemingly unaware and uninterested in child's behavior.

Scoring

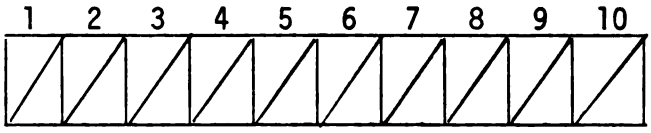
Name_____ Session No._____

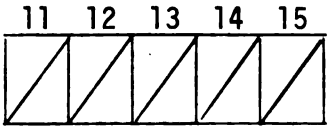
Communication of Acceptance Score Highest Level / Score Lowest Level



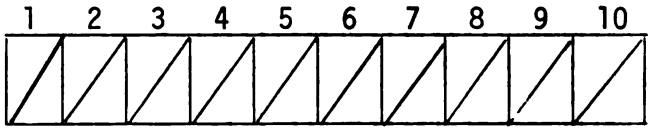


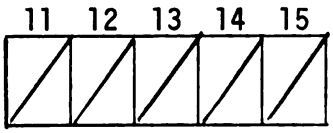
Allowing Self-Direction Score Highest Level / Score Lowest Level





Involvement Score Highest Level / Score Lowest Level





REFERENCES

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Axline, V. M. Play Therapy. Cambridge, Mass., The Riverside Press, 1947.

Bierman, R. Dimensions of interpersonal facilitation in psychotherapy and child development. Psych. Bull., 1969, Vol. 12, 5, 338-352.

Bierman, R., Carkhuff, R. R., and Santilli, M. Efficacy of empathic communication training groups for inner city preschool teachers and family workers. J. Appl. Behav. Sci., in press.

Carkhuff, R. R. Differential functioning of lay and professional helpers. J. Couns. Psychol., 1968, 15, 117-126.

Carkhuff, R. R. Helping and Human Relations. New York: Holt, Rinehart and Winston, Vol. 1, 1969.

Carkhuff, R. R. Training as a preferred mode of treatment. J. Couns. Psychol., 1971, 18, 123-131.

Cowen, E. L. Effectiveness of secondary prevention programs using non-professionals in the school setting. Proceedings of the 76th Annual Convention of the American Psychological Association, 1968, 3, 705-706.

Cowen, E. L., Gardner, E. A., and Zax, M. Emergent Approaches to Mental Health Problems, New York: Appleton-Century-Crofts, 1967.

Guerney, B. G., Jr., and Stover, L. Filial Therapy. Final report, December, 1971, MH 18264-01.

Guerney, B. G. Jr. Psychotherapeutic Agents: New Roles for Non-Professionals, Parents and Teachers. New York: Holt, Rinehart and Winston, 1969.

Gruver, G. G. College students as therapeutic agents. Psych. Bull., 1971, 76, 111-127.

Hobbs, N. Mental health's third revolution. Amer. J. Ortho-Psychiat., 1964, 34, 822-833.

Joint Commission on Mental Health of Children. Crisis in Mental Health: Challenge for the 1970's. New York: Harper and Row, 1970.

Levitt, E. E. Research on psychotherapy with children. In A. E. Bergin and S. L. Garfield (eds.). Handbook of Psychotherapy and Behavior Change. New York: John Wiley, 1971.

Linden, J. I., and Stollak, G. E. The training of undergraduates in play techniques. J. Clin. Psychol., 1969, Vol. 25, 2, 213-218.

Matarazzo, J. D. Some national developments in the utilization of non-traditional mental health manpower. Amer. Psychol., 1971, 26, 363-372.

Mitchell, W. E. Amicatherapy: theoretical perspectives and an example of practice. Community Ment. Health J., 1966, 2, 307-314.

Moustakas, C. E. Psychotherapy With Children. New York: Harper and Row, 1959.

Rioch, M. Changing concepts in the training of therapists. J. Consult. Psychol., 1966, 30, 290-292.

Rogers, C. R. The necessary and sufficient conditions of therapeutic personality change. J. Consult. Psychol., 1957, 21, 95-103.

Stollak, G. E. The experimental effects of training college students as play therapists. Psychother.: Theory Res. and Prac., 1968, 5, 77-80.

Stollak, G. E. Undergraduates as play therapists. Paper presented at the third annual meeting of the Society for Psychotherapy Research, June 16, 1972, Nashville, Tenn.

Stover, L. and Guerney, B. G., Jr. The efficacy of training procedures for mothers in filial therapy. Psychother.: Theory Res. and Prac., 1967, 4 (No. 3), 110-115.

Stover, L., Guerney, B. G., Jr., and O'Connell, M. Measurements of acceptance, allowing self-direction, involvement and empathy in adult-child interaction. J. Psychol., 1971, 77, 261-269.

Truax, C. B. The process of group psychotherapy relationship between hypothesized therapeutic condition and interpersonal exploration. Psychol. Monog., 1961, 75 (No. 7).