AN EXAMINATION OF NONVERBAL BEHAVIORS OF TRAINED AND UNTRAINED COLLEGE UNDERGRADUATES ACTING AS PLAY THERAPISTS

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ABSTRACT

AN EXAMINATION OF NONVERBAL BEHAVIORS OF TRAINED AND UNTRAINED COLLEGE UNDERGRADUATES ACTING AS PLAY THERAPISTS

By

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In this study forty undergraduates, half of whom were males and half females, were divided into experimental and control groups, with the experimental groups receiving training in nondirective, client-centered play therapy and the control group receiving no training.

These undergraduates were assigned clinic-referred children whom they met for 15 half hour, weekly play therapy sessions. Videotapes of the first session were rated for the occurrence of nonverbal behaviors on the part of the student which would convey his willingness to form a relationship with the child and his positive regard for the child. More specifically, the nonverbal behaviors examined were looking at the child, remaining within two feet of the child, touching the child, displaying a friendly countenance, and mirroring the child's body posture.

A 2 X 2 analysis of variance for each dependent variable was performed after placing the students in four groups of untrained males, untrained females, trained males

and trained females. Results showed that untrained males watched the child significantly less than both untrained females and trained males.

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By

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INTRODUCTION

"In no way can our present training programs meet the ever-growing needs for psychological services. We are not meeting such needs now." (Blau, 1969, p. 31) What has been the mental health field's response to the widening gap between services offered and services needed?

Nolan & Cooke (1970) indicate that the military's direct response to a rising need for mental health workers has been to establish ten week training programs for non-professionals which have resulted in 800 social work/ psychologist specialists. A similar response, i.e. training non-professionals, can be noted in overburdened social service agencies (Lynch & Gardner, 1970; Reissman, 1967). Surveys of the literature indicate that non-professionals can be recruited from the ranks of college students (Linden & Stollak, 1969; Stollak, 1968, 1973), parents (Querney, 1964), and psychiatric aides (Sines, Silver & Lucero, 1961). Furthermore, Carkhuff (1968), after an extensive review of the literature, concludes not only that there is evidence that lay persons can be trained to function in ways that facilitate client change but, even more, that "in general after training, lay trainees function and engage clients in counseling

process movement at levels as high or higher than professional trainees." (p. 118)

Clearly, then, as even more recent reviews by Gruver (1971) and Matarazzo (1971) indicate, the use of non-professional agents as therapists with a wide variety of client populations is growing and requires further investigation.

Psychotherapy

Psychotherapy occurs within the medium of communication, mainly verbal. Yet one investigator has estimated that as much as 80% of the total communication which occurs between two people is transmitted through nonverbal behaviors (Mehrabian, 1969a). Ekman and Friesen (1968) further hypothesize that nonverbal discourse provides a leakage channel which is less susceptible than verbal behavior to conscious deception or unconscious censoring. However, psychologists have tended to focus on the verbal or vocal communication occurring in a psychotherapeutic setting, thereby missing valuable cues of how the communication was made and what the communicator did.

This study investigated the effects of training (or lack of training) in play therapy techniques on college undergraduates' nonverbal behaviors in an initial play therapy encounter. More specifically, the behaviors studied included looking at the child, touching the child, reflecting the child's body posture, smiling at the child,

and remaining physically close to the child. It is contended that the above behaviors serve as nonverbal indicators of the students' willingness to accept and understand the child and to engage the child in an interpersonal relationship.

Non-professionals as Therapeutic Agents

A number of attempts have been made to utilize parents as change agents for children (Bijou, 1965; Russo, 1964; Zimmerman & Zimmerman, 1962). One of the most notable of these has been Guerney's technique of filial therapy (Guerney, 1972; Stover & Guerney, 1969). Guerney and his colleague have attempted to instruct parents of clinic-referred children in the art of non-directive, client-centered, play therapy. They document success in training mothers to increase their reflective statements and decrease directive statements as quickly as within the first four parent-child therapy sessions. They further cite differences in the behavior of children playing with trained mothers, as compared to those whose mothers have not been trained, and reduction in behavior problems over an 18 month period in clinic-referred children seen by their own mothers.

Undergraduates as Therapeutic Agents

Another possible source of non-professional mental health agents is the college student population (Goodman, 1967; 1972). Many writers have described the special

qualities of such young people that make them particularly appropriate as behavior change agents. Greenblatt (1962) noted that volunteer students can offer patients friendship and companionship which closely approximate the types of relationships the patients must re-establish if they are to return to the outside world. Among qualities stated by other writers have been the students' enthusiasm, questioning attitude, innovative ideas, ability to model appropriate behaviors (especially in the case of young delinquents), ability to break through alienation, sense of personal conviction and altruistic feelings, spontaneity, and openness to face-to-face contact. In addition, there is a reduction of stigma involved in seeing a college student as opposed to a professional worker (Belz, Drehmel & Silverson, 1967; Fellows & Wolpin, 1969; Gorlich, 1967; Gruver, 1971).

In dealing with children as patients, Mitchell (1966) noted that students seem to have a talent for entering a child's world where he is. Perhaps this talent is due to the student's developmental proximity to the conflicts being experienced by the child. In the case of older children, the student may have just resolved or may be resolving some of the same maturational issues as the patients are experiencing (Reinherz, 1964).

A number of rather uncontrolled, observational reports have been written about the effectiveness of student therapists or non-professionals. Mitchell (1966) notes

that Vermont's Winooski Valley Family Consultation Service uses carefully selected college volunteers to establish contact with children and the families of children who experience poor self-concept, difficulty in relating to peers, conflicts with family members and inadequate opportunities for socializing experience. He indicates that the program is considered successful. In Massachusetts State Hospital, student volunteers have worked with child patients. The volunteers have defined their goals as teaching children that loving people is not dangerous, helping children to achieve a sense of self-identity and self-esteem, providing auxillary ego and superego in times of stress, providing corrective emotional experiences with adults, helping establish inner controls, teaching new ways to handle old problems, and strengthening healthy espects of the patients' functioning (Reinherz, 1964).

A number of studies have related attempts to use college students in direct behavior modification processes with child psychiatric cases. Davison (1966) cited the training and use of four undergraduates as behavior therapists with two autistic children. In one child, after an initial increase in temper tantrums, more docile behavior and an increase in obedience of commands was observed. Kreitzer (1969) also described the effective use of 21 undergraduate therapists as behavior therapists who

were quite effective in modifying simple behaviors of seriously disturbed, hospitalized children.

Furthermore, such programs are seen as producing change in the college students themselves. Cowen, Zax & Laird (1966) administered pre and post tests to 17 college students who engaged in after school play activities with problem children. After their service, the students showed a less idealized self-image and a positive change in attitude toward emotionally disturbed children. Another study by Holzberg, Gewirtz & Elner (1964), who employed a control group of comparable students not involved in a volunteer program, found that the volunteers changed significantly in self-acceptance and in moral judgments concerning sexual and aggressive behaviors. The volunteers began with more severe moral judgement scores than their control counterparts and ended the program with slightly less severe moral judgements than the controls. Martin & Carkhuff (1968) compared college students trained in a counseling practicum with students who had taken a child psychology course. They found the two groups different on posttesting only, with practicum students showing significantly more constructive change on the MMPI, significantly more gain in levels of interpersonal functioning and significantly greater change in empathy, genuineness and self-exploration.

One must note, however, that, as Gruver (1971) found, few studies have included appropriate control groups. In

addition, the results of the non-professionals' work is seldom compared to professionals' work with similar populations.

Poser (1966) is one researcher who has attempted to compare the changes in hospitalized patients who participated in group therapy with untrained undergraduate students with the changes in patients seen in therapy groups led by professionals. Patients were tested on speed of tapping, visual reaction time, digit-symbol test, color-word conflict test, verbal fluency and a word association test. The largest changes in pre and posttest scores were among the patients of the lay therapists, and in a three year follow-up, test scores of the non-professionals' patients were still significantly better, although there was no difference in discharge rates between the two types of groups. Poser's study was severely criticized by Rosenbaum (1966) who pointed out that the groups were not run concurrently so changes in hospital staff or atmosphere could have affected results. He also noted that drop-out rates were not studied, the measures used were of dubious relevance, and only female untrained therapists were employed as opposed to a mixed sex group of professionals. Furthermore, Rosenbaum speculated that the enthusiasm of the students, who may have been more idealistic in their expectations, may have been greater than that of the professionals, who were tired and ready for a vacation. While Rosenbaum's

criticisms may be valid, they are certainly not sufficient reason to discontinue use of lay therapists if such therapists can create lasting changes in patients.

Play Therapy

Miller, Hampe, Barrett & Noble (1972), while compiling normative data for the Louisville Behavior Checklist, determined that there may be as many as a half million children in the United States between six and twelve years of age with scores on that checklist which are in the disturbed range. These researchers tripled this number to obtain an estimate of disturbed children under eighteen years of age. Using 1967 figures of the number of professional child mental health workers, they then determined a ratio of 1 professional for every 800 seriously disturbed children.

While the above estimate is speculative, it carries staggering implications! If these children and their parents desire treatment to whom can they turn for help? And what type of help, and evidence of its effectiveness, can be offered to them?

A review of the literature involving play therapy is disappointing. Very little in the way of controlled studies of play therapy and its effects can be found. In fact, Levitt's (1957, 1971) extensive reviews of psychotherapy with adolescents and younger children have noted that improvement rates in treated, as opposed to untreated

children, show very little difference between the two groups.

A further study (Shepherd, Oppenheim & Mitchell, 1966) in Buckinghamshire, England between 1961 and 1964 compared a sample of 50 "neurotic" children between 5 and 15 years of age seen at a child guidance clinic with a control sample matched for age, sex and symptoms but selected from a random sample of over 6,000 children who had never obtained or sought psychiatric treatment. (A further matched control of children who had sought but not received psychiatric help may have been a useful addition to this study.) Outcome ratings, made by clinicians, were based on parent interviews. The treated children were seen as 65% "improved" and 16% "worse" while the untreated children were 61% "improved" and 9% "worse".

Levitt (1971) blames these discouraging results on differences in therapists and facilities so that some places and some therapists have much worse improvement rates than others. Thus, while psychotherapy increases the variance among people receiving treatment, the means of both the untreated and treated populations remain the same.

In spite of these two discouraging reports which seem to indicate that treated and untreated children show the same proportion of improvement, many individual researchers indicate successful outcomes with play therapy. Such reports range from case studies (Axline, 1964) to studies

of the effect of play therapy on retarded readers (Bills, 1950; Seeman & Edwards, 1954). In the latter two studies, a strong case is made for the ability of play therapy to increase reading skills, especially if the reading deficiency is combined with an emotional problem. Bills (1950) used the children as their own controls by obtaining a 30 day base rate before providing a 30 day therapy period and a 30 day follow-up. In addition, a sample group of children in a slow learners' classroom provided a second control group. Significant changes in reading level occurred as a result of play therapy. Seeman & Edwards (1954), in a similar study employing a control group of untreated children, found a strong gain in reading ability but no change in the personal adjustment of poor readers receiving play therapy.

In a study using trained housewives as aides with young maladapting children, Cowen, Dorr, Frost & Izzo (1971) produced significant changes in the children's behavior as rated by their mothers and interviewers. The greatest improvement occurred in the children's attitude toward school.

Dorfman (1958) in research employing play therapy in a school setting found that the mean adjustment ratings of the children improved during therapy but did not change similarly during a pre-therapy control period or in a control group.

Love, Kaswan & Bugental (1972) randomly assigned 91 children manifesting emotional and behavioral problems in school to three treatment groups. One group received time-limited child psychotherapy; a second group was composed of children whose parents received time-limited counseling; and a third group was given "information feedback," a program aimed primarily at parents. All treatment groups showed improved grades in conduct. While all children had evidenced a significant drop in average academic grades the semester preceding treatment, grade averages for the children whose parents were receiving counseling or "information feedback" levelled off during treatment, thus indicating that therapeutic approaches involving parents may be more effective than simply providing psychotherapy for the child.

Using sociometric data and TAT responses as a measure of adjustment in an orphanage setting, Cox (1953) found that an experimental group which received play therapy improved their combined adjustment scores significantly more than a comparable control group not receiving therapy. It was further noted that older children benefitted more from the therapy. The author concludes that older children were best able to apply their discoveries in play therapy to their peer relations.

Another study by Seeman, Barry & Ellenwood (1964) showed significant positive change on the Tuddenham Reputation Test, which was administered to the classmates

of children receiving play therapy. The improvement remained in a 19-month follow-up. Only a marginally significant change ($p<.10$) in teachers' ratings of the treated children was found. In addition, all children in the experimental group had lower average aggression scores than their classmates at the end of treatment while their control counterparts retained their same higher than average aggression scores.

While Seeman, et al., found a permissive atmosphere in play therapy conducive to reduction of aggressive behaviors, Haring and Phillips (1962) concluded that a highly structured atmosphere is preferable to a permissive one in which expression of feeding is encouraged. Haring and Phillips placed disturbed children in three different classroom settings: a highly structured classroom environment which the researchers defined as one in which "clear direction, firm expectation, and consistent follow-through are paramount," a regular classroom, and a permissive classroom in which expression of feeings and self-direction were encouraged. On both the California Achievement Test and a behavior rating scale, children in the highly structured classroom gained the most.

A possible explanation of the discrepancy between Seeman, et al., and Haring and Phillips is that a situation in which a child's total school time is spent in a permissive atmosphere is not comparable to a regular play therapy setting which is time-limited. Perhaps, as

Moustakas (1959) notes, play therapy allows a child a safety valve to express and act out negative feelings which he can then control better in other situations, while a continuously permissive atmosphere does not encourage the learning of controls.

Some of the less discouraging results described above could be accounted for by the added attention given to the disturbed children rather than by the type of play therapy or experimental conditions used. Especially in studies where sociometric status and classmates' ratings were used as an indicator of adjustment, the child's status may have been enhanced in the eyes of his classmates due to the special adult attention he received. That enhancement may then have been valuable to the child and his personal adjustment. Lebo (1953) has noted in his review of the effects of nondirective therapy that usually when any new program is applied to people, they change. He hypothesized that the added interest taken in the child's welfare may cause the changes which are sometimes attributed to play therapy.

While the issue of the effectiveness of play therapy is of paramount importance and still needs thorough investigation, it is beyond the scope of this study in which the primary question was what effect, if any, does training have on the behavior of an undergraduate acting as a play therapist.

Several researchers have dealt directly with this question. Linden & Stollak (1969) studied three groups of students, one which received didactic training in Axline's approach to play therapy (E1), one which used group discussion in an attempt to find ideal ways of dealing with children (E2), and a control group which received no formal training (C). Behaviors of the students were rated during play sessions with normal children. Compared to students in E2, students in E1 displayed fewer responses categorized as unsolicited help, direction, seeking information, and non-attention. Both groups E1 and E2 gave less solicited help than the controls, but groups E2 and C were similar on all other measured dimensions. The researchers concluded that undergraduates can be trained to reflect both content and feeling of children's behavior and that didactic training is superior to a solely "experimental" approach in producing the above nondirective behaviors.

In another study by Stollak (1968), Guerney's approach to filial therapy was used to train college undergraduates. It was found that the students' behavior did change in that between the first and the tenth sessions the students increased their use of statements which clarified feelings and reflected content. The children meanwhile increased their expression of negative feelings and their willingness to take charge of and direct the

activities of the play session. All these changes were only investigated within the actual therapy sessions.

Finally, Stollak, Schreiber, Scholom & Messe (1973) have demonstrated that trained undergraduates communicate significantly more acceptance and empathy during play encounters with children than do untrained undergraduates.

In summary, the above research strongly indicates that the verbal behavior of undergraduates conducting play therapy sessions with children can be influenced by training in play techniques.

Nonverbal Behaviors

Why study nonverbal behaviors? Shlien (1968) made five assumptions in the study of nonverbal behaviors. First, nonverbal behaviors can sometimes express matters that it would be difficult to verbalize. Second, nonverbal behaviors are a primary means of communicating emotion. Third, nonverbal behaviors express attitudes toward the self or one's body image. Fourth, nonverbal cues give clues to the interpretation of verbal messages. And finally, nonverbal behaviors serve as a leakage channel that is less susceptible than verbal behavior to conscious deception or unconscious censoring. Whether these assumptions are valid, they epitomize some of the areas of concern with nonverbal behavior.

Other researchers and psychotherapists also point to the importance of nonverbal cues. Ekman (1957) stated

that although nonverbal and vocal behavior come to be largely ignored after early childhood, they do have significant communication value. The implications of Ekman's assertion would make it a reasonable assumption that, since infants depend entirely on nonverbal and vocal behaviors, the young child may still retain vestiges of that reliance on nonverbal and vocal cues. Ruesch (1955) further asserts that mental illness is a result of improper learning or developing of nonverbal behavior, and that therapy, especially in severe cases where the patient uses more primitive modes of expression, must make use of the nonverbal appeal to feelings and imagery of the patient.

The undergraduate therapists in the present study received training in non-directive play therapy whose primary goals included providing warmth and understanding and communicating the therapist's respect for the child (Axline, 1969; Dorfman, 1951). This respect and understanding can be conveyed by communicating interest in the child and a willingness to be with him no matter what his thoughts or feelings. As noted previously, Linden and Stollak (1969) and Stollak et al. (1973) have shown that undergraduates can be trained to emit presumably helpful verbal behaviors. The question of this study became whether such training extended to affecting the therapists' nonverbal behaviors which might be communicating acceptance and warmth. The following sections provide a brief

review of each of the nonverbal behaviors that were examined and the rationale for their selection.

Smiling

In infants, a smiling response is generally solicited and rewarded by the mother. A mutual smiling interaction between child and mother further serves to strengthen the bond between the two (Morris, 1967). Adults usually perceive a smile as communicating a positive attitude toward its receiver. Thus, smiling can be interpreted as a signal of liking and positive regard.

Bugental, Kaswan & Love (1970) found that children experience women's smiles differently from men's smiles. A child tends to discount the counterbalancing effects of a woman's smile and thus to interpret a neutral statement in a neutral tone made by a smiling woman as neutral while a similar statement made by a man would be interpreted as friendly.

However, although smiling seems complexly related to sex of the smiler it is generally viewed as an act to convey goodwill.

Eye Contact

Looking at another person and making eye contact with him may be considered separate behaviors; however, for the purpose of this study, they are combined. Argyle & Dean (1965) note that eye contact permits information exchange and signals to the receiver an openness to

communication and possibly an obligation to interact. A number of researchers note the importance of eye contact as a signal of positive attitude and preference for the addressee (Exline, 1963; Exline, Gray & Schuette, 1965; Mehrabian, 1968a & b, 1969b), as an indicator of love or strong mutual respect (Heron, 1970), and as a reinforcer for children's behavior (Hore, 1970).

Moss & Robson (1968) have found that mutual looking between a mother and her 1 to 3-month-old child is positively correlated with positive maternal attitudes during pregnancy and, further may be a useful index of positive affective interchange in mother-infant relationships. In a later study, Robson, Pedersen & Moss (1969) found that the early mother-infant vis-a-vis interaction strongly predicted the extent of 8 to 9 1/2-month-old male infants' gazing at strangers. Furthermore, the extent to which an 8 to 9 1/2-month-old infant looks at a stranger is negatively related to his fearfulness of that stranger and, for males, is positively related to the child's unsolicited approaches toward a stranger.

On the other hand, refusal to make eye contact is seen as a withdrawal response or communicating dislike (Mehrabian, 1968a). Hutt and Ounsted (1966) noted that autistic children, noted for their social isolation, avoid looking at human faces and prefer inanimate objects. Chance (1962) also noted that in social animals, turning

the head away from another individual literally cuts off the social stimulation.

Mehrabian (1969b) has indicated a more complex relationship between eye contact and regard for another person noting that eye contact is minimal for a disliked addressee, increases to a maximum for an addressee toward whom there are neutral feelings and decreases slightly for those who are liked very much.

Distance

Argyle & Dean (1965) studied the distance at which people stand to view comfortably both a picture and a life-sized photo cut-out of a face. In all conditions, children stood closer than did adults.

Several studies have found a combination of eye contact and distance, sometimes with other variables, as indicators of liking. Mehrabian (1970) notes that immediancy positions, that is closeness, more forward lean, more eye contact and more direct orientation, indicate increases in positive regard. Mehrabian (1968b) also performed a series of studies in which subjects were asked to react non-verbally as if they felt a certain way toward an imaginary addressee. His findings suggest that in males behaviors representing an attempt to present a positive attitude, in order of importance, are more eye contact, smaller distance and relative absence of arms akimbo while female behaviors are relative absence of arms akimbo, smaller distance and arm openness.

Furthermore, Argyle (1965) and Kendon (1967) have supported the hypothesis that indices of intimacy such as smiling, physical proximity and eye contact covary with each other to maintain a comfortable degree of intimacy. Thus, two people who are very close or touching or smiling might avoid prolonged eye contact as it would combine with the distance cues to make the intimacy threatening.

Touching

Proximity and touching are seen as behaviors of primary importance to the infant and mother, and at later stages the infant directs these behaviors toward other adults. Thus, a very early attempt at intimacy for a child involves decreasing distance and increasing touching. At about age four, the child is seen as participating equally with other people, particularly his mother, in initiating such contact (Ainsworth, 1969). A therapist willing to participate in such mutual behaviors and to initiate the behaviors could then be seen as promoting intimacy.

For purposes of this study, we need only note that these behaviors in higher quantity commonly indicate positive regard whether in combination or alone.

Posture

In the early 1960's, Scheflen (1964, 1965) noted the importance of postural congruence in describing relationships in which there is agreement, equality, and alliance

with each other. Much of Scheflen's data was obtained from detailed analyses of therapy sessions. Charney (1966) also analyzed films of psychotherapy sessions and equated postural mirroring with critical awareness of the patients' previous day and attempts to bring about reactions to them, while non-congruence was equated with highly self-oriented, self-contradictory and frequently negational or non-specific statements on the part of the therapist.

The above reviews indicate that the nonverbal behaviors examined in this study generally signal increased intimacy, positive regard, and openness to interact. Thus, it was predicted that training would influence the undergraduates such that the trained undergraduates, more often than their untrained counterparts, would engage in the activities of smiling, remaining close to the child, touching the child, mirroring the child's body posture, and looking at the child.

Hypothesis

The training in play therapy received by the experimental subjects in this study will be more fully described in a later section. However, the basic approach used in the training and supervision is congruent with the non-directive approaches of Axline (1969) and Moustakas (1959). Potential therapists were helped to learn to identify and understand children's feelings, and to convey

their understanding and acceptance of those feelings to the child. It was expected that these behaviors, by conveying an interest in and acceptance of the child, would help him establish a sense of self-worth and self-acceptance.

Hypothesis: Training in nondirective play techniques will increase the occurrence of the five nonverbal behaviors described above which presumably indicate the undergraduates' acceptance of the child and his feelings and willingness to form a relationship with the child.

METHOD

This particular study is a part of a larger research project conducted by Stollak (1973). A full description of the selection of Ss and training processes can be found in his publication.

Briefly, approximately 400 sophomore and junior undergraduates volunteered to participate because of their interest in increasing their sensitivity and ability to communicate with young children four to nine years of age. The students responded to an advertisement placed in the university newspaper. On the basis of their scores on three inventories, the Parent Attitude Research Instrument (Schaefer & Bell, 1950), a Sensitivity to Children projective questionnaire, and a set of self-ratings designed to assess general "mental health," forty of these students were assigned to either a control group or an experimental group, each containing equal numbers of males and females.

The experimental group was randomly assigned to three training groups run by research assistants[1] and by Stollak. Students met in their training groups for two hours a week during which principles of sensitive and effective communication with children (Axline, 1969;

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[1]The research assistants have been Sharon Berliner, Loretta Green and Allan Scholom.

Dreikurs, 1948; Ginott, 1965; Gordon, 1970) were discussed. Briefly stated, this is a client-centered and behavioristic approach to children with emphasis on the importance of empathy and the possible reinforcing effects of an adult's behavior on a child's feelings and actions. Students were not specifically instructed to engage in the nonverbal behaviors which were measured. In addition to the weekly meetings, each student was instructed to begin weekly half-hour play sessions with a "normal" child of his own choosing. These play sessions served to allow the students to practice the principles discussed in their training groups, and videotapes of the sessions provided material for group discussion. Play with the normal child continued until the student was assigned a clinic case for play therapy.

Control students met with the researcher once when the importance of a control group along with the random selection process used to assign students to experimental and control groups was explained. Control students were further told that if they wished, they could participate in a course of training similar to the experimental group at the end of the experiment but that until that time they would receive no training or supervision although their play sessions with clinic-referred children would be observed in order to insure that neither the child nor the student was destructive to the other. Control students

were contacted and assigned clinic cases as they became available.

Each student's first play session, and every fifth session after that was videotaped. Whenever videotaping failed due to equipment malfunction, the next session was taped. Only the data obtained in the first or second session were used in the present study.

Rating of Nonverbal Behaviors

Five undergraduates were trained to rate the nonverbal behavior of the videotaped students. The raters were unaware of the study. They were either paid or received academic credit for their participation in the experiment.

Two training sessions were held in which the raters learned descriptions of the behaviors to be rated and during which the raters coded progressively longer segments of videotaped play sessions. Between coding segments of tapes, differences among ratings were discussed and resolved according to the instructions for coding. Finally, all raters coded two complete half-hour play sessions before beginning final coding of the tapes.

A copy of the rating instructions can be found in Appendix A. Ratings were made at 20 second intervals. Thus, a count was kept of all intervals during which the student engaged in each of the five behaviors of (1) looking at the child (Looking), (2) remaining within two feet of the child (Distance), (3) maintaining a similar

body position to the child (Body Posture), (4) smiling or displaying an approving facial expression (Friendly), and (5) touching the child (Touch). In addition, a tally of the intervals which were rated and a tally of the intervals which could not be rated due to the absence of the student on the video screen were kept.

Of the total pool of video tapes of initial play therapy sessions, only those tapes in which the student was visible on the screen for at least ten minutes of the thirty-minute play session were rated. This left usable tapes of initial play sessions for 7 trained males, 7 trained females, 3 control males and 5 control females. Each of these remaining video-tapes was rated by two raters whose scores were averaged to obtain the data for the session.

Reliability was obtained by computing the Pearson product-moment correlation coefficient for each rater pair in each of the five behavior categories. Reliability coefficients for three of the four rater pairs revealed the correlation of the two raters for each of the five recorded variables. This analysis yielded 15 correlations which ranged from .21 to .99 with an average of .85 reliability. Much of the lack of agreement was found to be in rating the category of Friendly. When this category was eliminated, the 12 remaining coefficients ranged from .83 to .99. The fourth rater pair had coded only two videotapes together. A separate correlation coefficient

for each of those two sets of ratings yielded an average reliability of .98 for that rater pair.

Analysis

Total scores obtained for each category were divided by the total number of intervals recorded during the session to obtain the fraction of scoreable time each student performed a given nonverbal behavior. A 2 (male-female) X 2 (trained-untrained) analysis of variance was performed for each of the behavior categories.

RESULTS

The occurrence of each of the dependent variables of Looking, Distance, Body Posture, Friendly and Touch was examined by separate 2 X 2 analyses of variance. Summary tables for each variable can be found in Appendix B. Tables showing the means of each variable for each of the four groups of untrained females, untrained males, trained males and trained females can be found in Appendix C.

Significant differences were found only for Looking behavior. The analyses of variance for this variable revealed that the incidence of looking at the child was significantly higher among trained students than it was among untrained students ($F=11.96$, $df=1/18$, $p<.01$). Also, there was a significant difference between males and females ($F=6.97$, $df=1/18$, $p<.05$), and a significant first-order interaction ($F=6.97$, $df=1/18$, $p<.01$). Cell means relevant to this last finding are presented in Table 1.

Tests of the simple main effects (Winer, 1962) were performed to further explore interaction between sex and training in the variable of Looking. These tests revealed that male control subjects engaged in looking at the child a significantly smaller proportion of time than both

female control subjects (F=14.15, df=1/18, p<.01) and trained male subjects (F=20.82, df=1/18, p<.01).

The only additional finding that approached significance was a marginal training X sex interaction for touching the child (F=4.04, df=1/18, p<.10). Cell means for the variable of touch are found in Table 2. Tests of the simple main effects were performed to investigate this interaction. These revealed that trained male subjects engaged in significantly less touching of the child than trained females (F=4.46, df=1/18, p<.05).

Table 1

Means for the Variable of Looking*

Sex of Subject	Treatment Group: Control	Trained	Total
MALE	.7324	.9732	1.7056
FEMALE	.9311	.9678	1.8989
TOTAL	1.6635	1.9410	3.6045

*Scores indicate the proportion of total recordable intervals in which the student engaged in the nonverbal behavior.

Table 2

Means for the Variable of Touching

Sex of Subject	Treatment Group: Control	Trained	Total
MALE	.0651	.0031	.0682
FEMALE	.0349	.0897	.1246
TOTAL	.1000	.0928	.1928

DISCUSSION

The only statistically significant results of this study indicated that untrained male subjects spent less time than their female control counterparts looking at a child during their first play therapy contact and that the incidence of the male students' looking behavior can be significantly affected by training. A number of cultural factors could explain the fact that untrained males do not watch a child's play activity as much as females.

First, as women typically perform most child rearing duties, men as a rule, do not engage in frequent interaction with young children. Thus, male subjects would begin play encounters with less experience and quite likely with less comfort and confidence. This anxiety and general ignorance might lead to defensiveness and infrequent looking at the child in an attempt to prevent the child's "reading" the student's uneasiness in his facial expressions.

Second, it has been commonly believed in the past that males, as fathers in our culture, are concerned with instrumental skills and the ability to adapt to the environment. Fathers are likely to perform roles as teachers, guides, disciplinarians and models of

masculinity (Parsons & Bales, 1955; Tasch, 1952). Children's attitudes toward their fathers further confirm that the father is seen as being concerned with instrumental skills and the ability to adapt to the environment (Kagan & Lempkin, 1960). Thus, untrained male subjects are more likely to base their attending to the child on his accomplishments rather than acting as a generally concerned adult in spite of the content and outcome of the child's play. Untrained males, being more task oriented, may also be more likely to initiate their own activities which they may consider more constructive than attending to the child's activities.

On the other hand, trained male subjects were taught to attend to the child's behavior and the content of his play. They were specifically instructed to be nondirective and to let the child initiate and complete his own activities. In effect, their culturally-established roles with children were somewhat contradicted by the training procedures and as a result the undergraduates modified their behavior.

It would be interesting in future research to assess how much experience is necessary and if training is vital to produce changes in the male students' behavior. This would involve comparing the male control subjects' looking behavior in the initial play contact with their behavior in later sessions.

A second question of interest is: why did training not affect the incidence of the remaining nonberbal behaviors studied? As noted earlier, it was hypothesized that training would increase the students' willingness to enter into a relationship with a child and that this increase in willingness would be manifested by an increase in nonverbal behaviors which previous research has indicated reflect willingness to interact with the child and positive regard for him. The possible explanations for the failure of these variables include: (1) invalidity of the underlying assumptions, (2) lack of sophisticated enough measures and analyses of behavior, and (3) unexpected effects of the conditions of the experiment on the subjects involved.

First, the underlying assumption that control subjects would be less willing to involve themselves in a relationship with the child or to regard him as positively as trained subjects may be false. All subjects were volunteers who subjected themselves to a testing session which could have served as a test of their eagerness to learn to interact better with young children. Control subjects would have had their motivation further tested by the fact that they did not receive immediate training or supervision for their play therapy contacts. Their willingness to remain in the study, in spite of not receiving supervision or reinforcement from a training group, may indicate a great deal of motivation and interest

in children on their part. Thus, both control and trained groups may have entered their first play session with approximately equal motivation and willingness to interact with the child. In fact, it is the author's observation from viewing the play sessions and the student therapists that both control and experimental students seemed highly motivated and interested in their clients' welfare.

Also, if, as Shlien (1968) noted, nonverbal behaviors are less susceptible to conscious changes than verbal behaviors, it may not be reasonable to expect significant nonverbal differences in a student's first play therapy contact with a disturbed child. While it has been shown that training can change a student therapist's verbal communication (Linden & Stollak, 1969), perhaps nonverbal behavior changes would only result from more training, more experience and direct supervision of the therapy interaction.

As noted above, the conditions of the experiment may have imposed limits on the subjects' behaviors. As the first session alone was rated, both control and trained subjects were observed only in the initial aspects of their interaction with the children. None of the subjects had the time to develop a clear understanding of his particular child's dynamics or behavior. None had experienced an extended relationship with the child which might lead to intimacy. Thus it may be unreasonable to expect nonverbal behaviors promoting intimacy to occur between two

"strangers" in their first meeting, and a more appropriate time to sample the subject's nonverbal behaviors may have been during a later session.

A further result of sampling only the first session is that it provided a sample of behavior which may not have been typical of behavior in later sessions. Moustakas (1955) has noted that a clinic-referred child begins play therapy with rather diffuse and very intense feelings of hostility. Landisberg and Snyder (1946) have further noted that during nondirective play therapy a child increases the amount of his activity and increases his expression of feelings toward other people and situations. Furthermore, a child's expression of negative feelings is typically rather low at the onset of therapy and increases to a peak during the middle sessions. The present study did not evaluate the subjects' reaction to these changes in the child's behavior. Thus, later in therapy, when the child began to express more negative feelings, the control subjects may not have continued to display signs of acceptance and willingness to interact at the same level as the trained subjects, who received supervision and encouragement to understand the child's behavior and to continue to respond positively.

Further, all subjects were being observed and video-taped. As the camera could not be concealed behind one-way glass, both observers and camera were obvious. It would be naive to believe that such observation and recording did

not have some effect on the participants' behavior. One expected result of the observation could be an increase in the undergraduates' feelings of self-consciousness. Such an increase might have led the students to be more introspective and concerned about their behaviors, thus inhibiting the range of behaviors in which they engaged. In fact, the writer heard one supervisor relate that once when she entered the observation room after the play session had started and without the knowledge of the undergraduate and the child, she observed her supervisee engaging in actingout behaviors with the child such as throwing play materials about the room. She had not typically engaged in these behaviors in previous sessions.

Also, the study was arranged so that trained subjects may have felt even more inhibited by being observed than untrained subjects. Untrained subjects knew that their observers would not engage in supervisory activities with them. Untrained subjects further knew that their lack of training would produce expectations in their observers that they would not perform as well as their trained counterparts. Thus control subjects may have felt that there was less of their self-esteem riding on their performance and, as a consequence of that, may not have felt as inhibited by the observers as their trained counterparts who knew that their supervisors were evaluating their performance and who had additional peer pressure from their training groups to perform well.

Finally, the behaviors chosen and the methods used for recording them in this study may not have been sensitive enough to demonstrate differences between trained and untrained therapists. In the interest of clarity and rater agreement, the behaviors chosen for this study were easily observable and obvious. They were also recorded as frequency counts, as suggested by Ekman (1957).

Perhaps in order to investigate the effects of training, more sophisticated and complex behaviors must be examined. For example, behaviors such as direction of body lean, tone of voice, degree of body congruity, pupil dilation, hand gestures and body openness could have been examined. Also indices of anxiety, such as extraneous movements and smoothness of actions could have been observed. Furthermore, this study only attempted to examine behaviors which would indicate positive regard for the child and openness to interact with the child. Perhaps different results would have been obtained if measures of nonverbal behaviors which avoid intimacy or convey nonacceptance had also been included.

In addition, more sophisticated recording of the behaviors could have been used. Rather than frequency counts, continuous recording could have been attempted. Also a careful examination of the context in which certain nonverbal behaviors occurred may have revealed differences due to training. For example, what kind of nonverbal cues accompany verbal communications of the undergraduate? How

does he act when making a directive statement as compared to making an empathic statement? What are the undergraduates' nonverbal behaviors in the face of the child's acting out hostile and/or more neutral feelings?

The author contends that the behavior of trained therapists was likely to continue to be more accepting and supportive of the child's behavior, even when the child engaged in expression of negative or regressive feelings, than the behavior of the untrained therapist who might withdraw his approval in the face of feelings which threatened him. In fact, this writer observed the ongoing sessions of one untrained subject. In later contacts this particular subject consistently refused to recognize the child's anger at him and responded to the child in a scolding manner for expressing feelings of anger toward a teacher and other children. This particular child was also repeatedly told to "be a good sport" while his desire to win at the game being played was ignored.

Future Research

Certainly one basic question raised by the results of this study is whether nonverbal behaviors are affected at all by training and/or experience. To answer this question either an assessment of the nonverbal behavior of trainees at many later points in therapy and training could be made, or a comparison between the nonverbal behavior of

professional child psychotherapists and untrained therapists could be performed.

In light of the above discussion, sequences of ongoing play sessions could be examined for more subtle differences in the behavior of trained and untrained therapists, especially the undergraduates' behavior in the presence of certain commonly expressed themes of children in play therapy, such as aggression, jealousy, etc.

If a running account were kept of the undergraduates' nonverbal and verbal behavior, possibly in connection with the ongoing verbal and nonverbal behavior of the child, more complex questions about the attitudes of the undergraduates while they are making verbal communications and while the child is engaging in expressive play, especially play that centers around the so-called "negative" feelings, could be answered.

Finally, a basic question is whether this type of research is practical to engage in. In order to answer this question it would first be necessary to relate the presence of certain nonverbal behaviors, either positively or negatively, with the outcome of therapy. In other words, such research would assess if it makes any difference to the child how his therapist behaves nonverbally or if the child attends mainly to verbal content. This would be a difficult question to assess. Possibly therapists could be trained with varying degrees of emphasis on their nonverbal cues and the outcome of

their therapy assessed. Another possible method would be to examine play sessions of professional play therapists for degree of congruence between verbal and nonverbal communication. The relationship between this congruence and the clients' improvement could then be examined. And finally, if nonverbal behavior is found to be related to play therapy success, i.e. improvement in the child, we need to determine whether it is more efficient to train therapists to display certain nonverbal behaviors or to select trainees who already display appropriate nonverbal cues.

SUMMARY

In this study forty undergraduates, half of whom were males and half females were divided into experimental and control groups, with the experimental groups receiving training in nondirective, client-centered play therapy and the control group receiving no training.

These undergraduates were assigned clinic-referred children whom they met for 15 half hour, weekly play therapy sessions. Videotapes of the first session were rated for the occurrence of nonverbal behaviors on the part of the student which would convey his willingness to form a relationship with the child and his positive regard for the child. More specifically, the nonverbal behaviors examined were looking at the child, remaining within two feet of the child, touching the child, displaying a friendly countenance, and mirroring the child's body posture.

A 2 X 2 analysis of variance for each depedent variable was performed after placing the students in four groups of untrained males, untrained females, trained males and trained females. Results showed that untrained males watched the child significantly less than both untrained females and trained males. This difference

was speculated to be a result of cultural role expectations which lead males to attend more selectively to a child's behavior. In the case of the trained males, training overcame this bias.

Lack of significant differences on other variables was attributed to the fact that only the initial play sessions were examined and possibly to the lack of sophistication of the behaviors chosen and the methods used for recording them.

SUMMARY

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APPENDIX A

RATING CATEGORIES

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RATING CATEGORIES

1. LOOKING: Record when most (more than half) of the 20-second interval was spent looking at the child, his face or his hands as they work. To score, the student must be watching the child. Therefore, if the child is shooting the dart gun, the interval should be recorded if the student is looking at the child or his hands; it should not be recorded if the student is watching the dart or the wall where the dart will hit.

2. DISTANCE: Record when most of the 20-second interval was spent within two feet of the child. To visualize this, it might help if you consider whether the child and student are within an arm's length (the child's arm) of each other.

3. BODY POSTURE: Record the interval when most of the 20 seconds were spent with the child and student engaging in similar body activities, e.g., running, sitting on the floor, sitting in chairs, standing, lying on the floor, etc.

4. FRIENDLY: Record the interval if at any time during the interval the student smiles or displays an approving face. Do not record neutral expression or frowning.

5. TOUCH: Record the interval if at any time during the interval the child and student are touching each other.

6. NUMBER OF INTERVALS RECORDED: Record every interval which is scorable.

7. INTERVALS NOT RECORDED: If the student does not appear on the screen or does not appear long enough for his behavior to be observed or inferred, record this category.

GUESSING: In some cases, the student may not appear on the screen for the whole 20-second interval. If his behavior can be reasonably inferred from the time he is on the screen, then record the appropriate categories in the "Guess" column. For example, the interval may begin showing

Appendix A (Cont'd)

the student sitting in a chair watching the child, then the camera may move away from the student to focus on the child and later back to the student who is still sitting and watching. You may guess that the student continued the same behavior even while the camera was not focused on him. However, if the student is not on the screen for any part of the interval, or is not on the screen long enough for his behavior to be "guessed", the interval should be recorded in the category labelled "Intervals Not Recorded."

APPENDIX B

ANALYSIS OF VARIANCE SUMMARY TABLES

APPENDIX B

ANALYSIS OF VARIANCE SUMMARY TABLES

VARIABLE: LOOKING

SOURCE	SS	df	MS	F
Sex	.0474	1	.0474	6.97
Training	.0957	1	.0957	11.96
Sex X Training	.0474	1	.0474	6.97
Within Cell	.1224	18	.0068	

VARIABLE: TOUCHING

SOURCE	SS	df	MS	F
Sex	.0039	1	.0039	.95
Training	.0000	1	.0000	.00
Sex X Training	.0166	1	.0166	4.05
Within Cell	.0729	18	.0041	

VARIABLE: FRIENDLY

SOURCE	SS	df	MS	F
Sex	.0034	1	.0034	.12
Training	.0010	1	.0010	.03
Sex X Training	.0000	1	.0000	.00
Within Cell	.5184	18	.0288	

VARIABLE: BODY POSITION

SOURCE	SS	df	MS	F
Sex	.2530	1	.2530	2.80
Training	.1768	1	.1768	1.97
Sex X Training	.1616	1	.1616	1.79
Within Cell	1.6283	18	.0905	

Appendix B (Cont'd)

VARIABLE: DISTANCE

SOURCE	SS	df	MS	F
Sex	.0337	1	.0337	.47
Training	.1060	1	.1060	1.49
Sex X Training	.0684	1	.0684	.96
Within Cell	1.2777	18	.0710	

APPENDIX C

CELL MEAN TABLES FOR DEPENDENT VARIABLES

APPENDIX C

CELL MEAN TABLES FOR DEPENDENT VARIABLES

VARIABLE: LOOKING

Sex of Subject	Treatment Group CONTROL	TRAINED	TOTAL
MALE	.7324	.9732	1.7056
FEMALE	.9311	.9678	1.8989
TOTAL	1.6635	1.9410	3.6045

VARIABLE: TOUCHING

Sex of Subject	Treatment Group CONTROL	TRAINED	TOTAL
MALE	.0651	.0031	.0682
FEMALE	.0349	.0897	.1246
TOTAL	.1000	.0928	.1928

VARIABLE: FRIENDLY

Sex of Subject	Treatment Group CONTROL	TRAINED	TOTAL
MALE	.1998	.2226	.4224
FEMALE	.1839	.1886	.3725
TOTAL	.3837	.4112	.7949

VARIABLE: BODY POSITION

Sex of Subject	Treatment Group CONTROL	TRAINED	TOTAL
MALE	.8275	.4547	1.2822
FEMALE	.4172	.4109	.8281
TOTAL	1.2447	.8656	2.1103

Appendix C (Cont'd)

VARIABLE: DISTANCE

Sex of Subject	Treatment Group CONTROL	TRAINED	TOTAL
MALE	.6225	.6479	1.2704
FEMALE	.5832	.8502	1.4334
TOTAL	1.2057	1.4981	2.7038