HUMAN RELATIONS TRAINING FOR FAMILIES: A COMPARATIVE STRATEGY

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Abstract

To evaluate the efficacy of a human relations training program for parents of personality disorder pre-adolescent boys, sixty families were randomly assigned to four experimental groups: 1) Control, 2) Mother, 3) Mother-Father, 4) Mother-Father-Child. Pre- and posttest measure of Parents' and Subjects' behaviour were obtained by audio and video tape recordings of family interaction in a standardized laboratory setting. Significant differences between groups at posttesting were found on four dependent variables: Empathy, Warmth, and Genuineness of Parents, and Positive Assertive Behaviour of Subjects.

Résumé

Comment évaluer la valeur d'un stage d'entrainement en relations humaines pour les parents de garçons préadolescents qui éprouvent des difficultés de comportement? Pour ce faire, on a réparti au hasard soixante familles à quatre groupes expérimentaux: 1) Contrôle, 2) Mère, 3) Mère-Père 4) Mère-Père-Enfant. Des enregistrements sur bande sonore et magnétoscopique dans une situation de laboratoire ont facilité l'obtention de mesures pre et post-tests relatives à l'interaction entre les parents et leur garçon. A la suite du stage d'entrainement, on a relevé entre les groupes des différences significatives sur quatre variables dépendantes: l'empathie, la cordialité, l'authenticité des parents et le comportement positif des garçons.

Theories of child development have emphasized the role of early family experiences in the development of psychopathology to such an extent that it has become axiomatic to regard many child behaviour problems as symptomatic expressions of disturbed family relationships. It is not surprising, therefore, that many counselling intervention strategies are aimed at changing intereaction patterns within families by involving parents in the treatment of their child. However, while there is considerable agreement that inclusion of parents increases the likelihood of positive behaviour change, there is little consensus regarding the extent and nature of the parents' role in the treatment process, and there is little research evidence to support the hypothesis that a more broadly-based family approach improves the outcomes of counselling with children.

The present study evaluates one method of working with parents of personality disordered[1] pre-adolescent boys. The evaluated method involves training parents to use specific interpersonal skills in their relationships with their children. The rationale for this approach is based on the theoretical writings of Rogers (1951, 1957), who has emphasized the importance of the therapeutic relationship and has outlined specific relationship variables (empathy, warmth, genuineness) which he considered to be both necessary and sufficient to effect positive personality change. The rationale is based also on research studies which indicate that: 1) parental and family variables are related to behaviour problems in children (Becker, 1964; Kagan & Moss, 1962; Leighton, Stollak & Ferguson, 1971; Mishler & Waxler, 1968; Murrel & Stachowiak, 1967; Schaefer, 1959); 2) counsellors' levels of empathy, warmth and genuineness (EWG) are related to therapeutic outcomes (Rogers, Gendlin,

1. Factor analytic studies of children's behaviour traits have indicated that most problem behaviours can be reduced to four relatively independent factors which Quay (1972) has described as "conduct disorder," "personality disorder," "immaturity," and "socialized delinquency." The personality disorder dimension defines a pattern of behaviour characterized by interpersonal withdrawal, shyness, fearfulness, neuroticism.

Kiesler & Truax, 1967; Truax & Carkhuff, 1967; Truax & Mitchell, 1971); 3) lay persons can be trained to communicate EWG at a level comparable to that of professionally trained counsellors (Carkhuff, 1968); and 4) parents can be trained to change the manner in which they interact with their emotionally disturbed children (Carkhuff & Bierman, 1970; Stover & Guerney, 1967).

THE PROBLEM

The present research was designed to answer three questions: 1) With respect to *training,* can parents be trained to communicate higher levels of EWG to their personality-disordered children? 2) With respect to *outcome,* do parents who have been trained to communicate higher levels of EWG effect greater behavioural change in their children than parents who have not been so trained? 3) With respect to *treatment focus,* upon what combination of significant others should training focus in order to optimize treatment effects?

METHOD

The Sample

The sample consisted of 60 families in which the principal Subject was a personality disordered boy between the ages of 10 and 12. Families were referred by counsellors in the Calgary Public and Separate School Systems, and from the Province of Alberta Child Guidance Clinic.

To describe Subjects' behaviour, Parents were asked to rate their child independently on the *Peterson-Quay Behaviour Problem Checklist.* Mean scaled scores of mothers' and fathers' ratings on each of the four behavioural dimensions indicated that Parents perceived the Subjects' behaviour to be personality disordered. To a lesser extent, Subjects were perceived as immature and as conduct problems.

Experimental Groups

Participating families were assigned randomly to four groups. Experimental Group 1 consisted of mothers only (M), Experimental Group 2 consisted of mothers and fathers (MF), and Experimental Group 3 consisted of mothers, fathers and children (MFC). These experimental groups were compared with a time-control groups (C) which consisted of families who had volunteered to participate but agreed to wait until the first groups were finished before starting training.

Measurement Procedures

Two sets of outcome measures were used to assess the effects of training: 1) measures of Parents' interpersonal skills, and 2) measures of specific Subject behaviours.

Interpersonal Skills of Parents. The measurement of Parents' interpersonal skills involved the audio tape recording of family interaction in a laboratory setting. Strodtbeck's (1951) revealed-differences technique was used to standardize the laboratory task and to generate discussion between Subjects and Parents.

Three segments of family interaction were selected from each of the pre- and posttesting one-half hour discussion sessions. Each sample was three minutes in length and segments were selected from the beginning, middle and end of the session. The three-minute segments of interaction were then coded for identification, randomly located on twenty master tapes, and rated for Parental Empathy, Warmth and Genuineness.

An overall measure of each interpersonal skill was obtained by calculating the mean of both mothers' and fathers' ratings over the six segments. This procedure provided a single measure per variable for each Subject.

The Truax Scales for the Measurement of Accurate Empathy, Non-possessive Warmth and Genuineness (Truax, 1970 a,b,c) were used to measure Parents' responses. Nine raters were used and each received training specific to the variable which they were responsible for rating. Three judges rated Empathy, three rated Warmth, and three rated Genuineness. Raters were trained to an inter-rater reliability criterion of .80.

Subject Behaviours. Measurement of specific Subject behaviours involved the video tape recording of families in a one-half hour standardized play setting before and after treatment. A group process activity (Pfeiffer & Jones, 1971) was used to structure a situation which would generate interaction between Subjects and Parents, and allow for the accurate assessment of Subjects' behaviour.

A modified form of Bales' (1970) Interaction Process Analysis was used to code six categories of behaviour: 1) Cooperative and Friendly Behaviour, 2) Positive Assertive Behaviour, 3) Positive Affective Behaviour, 4) Anxiety and Distress Behaviour, 5) Negative Dependent Behaviour, and 6) Uncooperative and Unfriendly Behaviour.

Transformation of data on the video tape recordings to allow comparisons to be made between experimental groups required two steps: 1) a frequency count of Subjects' behaviour was made in ten-second intervals by three coders who had been trained to identify acts falling within each of the six behaviour categories, and 2) the frequency counts in each code category were expressed as a ratio to the total number of acts in that testing session.

Prior to coding experimental data, coders were trained until act-by-act comparisons reached a criterion level of 80% agreement.

The Treatment Condition

The human relations training program was based on the didactic-experiential method of training counsellors described by Truax and Carkhuff (1967) and Carkhuff (1969 a,b; 1971). The program stressed the communication of accurate empathic understanding, nonpossessive warmth and genuineness between Parents and Subjects.

The total number of families represented within each treatment condition was 15. However, the total number of individuals in any one training group never exceeded 12. Thus, each treatment condition (M, MF, MFC) subsumed more than one training group. In total, there were 10 training groups subsumed under three treatment conditions. Each group met once a week for two hours over a period of 10 weeks. All groups were trained by the same trainer.

Hypotheses

Three research hypotheses were tested.

H_1 It was hypothesized that Parents who had participated in the human relations training program would communicate significantly higher levels of EWG to Subjects than Parents who had not been so trained.

H_2 It was hypothesized that Parents who had participated in the human relations training program would effect significantly greater positive changes in Subjects' behaviour than Parents who had not been so trained.

H_3 It was hypothesized that relative to the Control Group, treatment focus would produce differential results, with Experimental Group 3 (MFC) producing the greatest positive change in the dependent variables, Experimental Group 2 (MF) the second greatest change, and Experimental Group 1 (M) the third greatest change.

Analysis of Data

Pearson product-moment correlations were calculated in order to determine the reliability of raters and coders. Ebel's (1951) intraclass correlation coefficients were also calculated for raters, and percent agreement on act-by-act comparisons were calculated for coders.

A one-way fixed effects analysis of variance design was applied to posttest data to test for significance of differences between groups on each dependent variable. Since the random assignment of families to treatment and control groups was considered to have equated the groups on the dependent variables, pretest scores were not covaried. A one-way analysis of variance verified that there were no significant differences between groups on any of the dependent variables prior to the training program.

Following a significant F-ratio, comparisons between all possible pairs of group means were made using the method developed by Scheffé (1953). Since the research hypotheses were directional, and because the Scheffé method is a conservative procedure for testing nondirectional hypotheses, a significance level of alpha $< .10$ was selected.

RESULTS

Correlations between raters for Empathy, Warmth and Genuineness were greater than the .80 reliability criterion. Two exceptions appeared on pretest Empathy scores where correlations ranged from .45 to .70, and on posttest Genuineness scores, where correlations ranged from .76 to .91.

With the exception of Behaviour Cateogory IV: Anxiety and Distress Behaviour (pretest) and Behaviour Category V: Negative Dependent Behaviour (posttest), correlations between the three coders were all greater than the .80 criterion reliability. Correlations ranged from .41 to .99 for Behaviour Category IV, and from .38 to .95 for Behaviour Category V.

Ebel's (1951) intraclass correlations for pre- and posttest Empathy, Warmth and Genuineness data were all greater than .80.

The percentage of complete agreement between the three coders on act-by-act comparisons ranged from 58 to 96, with a mean of 79 for pretest data, and from 65 to 92, with a mean of 83 for posttest data.

Posttest means and standard deviations for each experimental group on each dependent variable are reported in Table 1.

Analysis of variance results revealed significant differences on four dependent variables: Empathy ($F = 10.82$, $p < .01$), Warmth ($F = 5.45$, $p < .01$), and Genuineness ($F = 7.95$, $p < .01$) of Parents, and Positive Assertive Behaviour ($F = 4.77$, $p < .01$) of Subjects.

Comparisons between group means are reported in Table 2.

Results for Parental Empathy, Warmth and Genuineness indicate that the M, MF, and MFC groups all differed significantly from the control group. However, the three treatment groups did not differ significantly from one another on any of these variables. It appears that the training program was an effective method of increasing Parents' ability to communicate EWG, but the focus of training did not produce a differential effect.

Comparisons between group means for Subjects' Positive Assertive Behaviour revealed a significant difference between the control and MFC groups, and between the MF and MFC

TABLE 1
Post-test Means and Standard Deviations

Variable: \ Group:	Control $\bar{x}$	SD	Mother $\bar{x}$	SD	Moth.-Fath. $\bar{x}$	SD	Moth.-Fath.-Child $\bar{x}$	SD
Empathy	1.13	.18	1.56	.35	1.72	.40	1.81	.40
Warmth	2.11	.78	2.86	.55	2.67	.43	2.87	.57
Genuineness	2.19	.63	3.05	.42	2.81	.46	2.91	.54
Fr. & Coop. Bhv.	.50	.06	.50	.06	.53	.07	.46	.08
Pos. Assert. Bhv.	.28	.07	.31	.07	.30	.07	.37	.08
Pos. Affect. Bhv.	.04	.04	.03	.02	.01	.01	.04	.05
Anx. & Distress Bhv.	.03	.04	.04	.04	.06	.07	.02	.02
Neg. Dep. Bhv.	.11	.03	.10	.06	.08	.04	.08	.04
Unfr. & Uncoop. Bhv.	.04	.04	.03	.04	.02	.02	.02	.02

TABLE 2
Comparisons between Experimental Group Means

Comparison	Empathy F-Value	p	Warmth F-Value	p	Genuineness F-Value	p	Pos. Assert. Bhv. F-Value	p
C-M	3.67	.02	4.03	.01	6.80	.01	.35	.79
C-MF	6.94	.01	2.23	.10	3.53	.02	.06	.98
C-MFC	9.14	.01	4.10	.01	4.76	.01	3.98	.01
M-MF	.52	.67	.27	.85	.53	.66	.11	.95
M-MFC	1.23	.31	.00	1.00	.18	.91	1.98	.12
MF-MFC	.15	.93	.28	.84	.09	.96	3.05	.04

groups. There were no significant differences between the C, M and MF groups. The findings suggest that human relations training is associated with an increase in Positive Assertive Behaviour only when Subjects are involved in the training.

DISCUSSION

The results indicate that regardless of treatment focus, the human relations training program was an effective method of increasing Parents' interpersonal skills. Experimental group Parents were able to respond to their children in the posttest situation at significantly higher levels of empathy, warmth and genuineness than Control group Parents. If the objective of family counselling is to change system relationships and communication patterns along specified dimensions, then the training program used in this study is an effective method of achieving specific outcomes.

The primary purpose of training was to help personality disordered pre-adolescent boys; therefore, the ultimate criterion of effectiveness was the extent to which training produced positive changes in Subjects' behaviour. Of the six dependent variables which focused on Subject behaviour, one measure (Positive Assertive Behaviour) reached significance at the .01 level of confidence. For this variable, treatment focus was an important factor. When compared to Control Subjects, only one Experimental Group (MFC) showed a significant difference in Positive Assertive Behaviour.

Taken together these findings indicate that Parents can be trained to communicate higher

levels of EWG, and treatment focus, while not a significant variable in training Parents, does significantly affect treatment outcomes for Subjects. It may be further concluded that change in Parents' behaviour brought about in response to training is not functionally related to the behaviour changes observed in the personality disordered Subjects. If a causal relationship existed between Parents' EWG and change in Subjects' behaviour, the increased Positive Assertive Behaviour observed in the MFC Subjects would have been observed also in the M and MF Subjects since there were no significant differences between treatment groups on measures of EWG. Thus, while Parental Empathy, Warmth and Genuineness were found to be positively correlated with Postive Assertive Behaviour of Subjects ($r = .47$, $p < .01$; $r = .32$, $p < .01$; $r = .27$, $p < .05$), a causal relationship cannot be inferred from the data.

The findings raise questions with respect to the specific aspects of training that produced the singular change observed in the MFC Subjects. A critical factor is clearly participation by Subjects. However, on the basis of available data, it is impossible to identify conditions within the training situation which brought about the increased assertiveness in the personality disordered Subjects. Process studies of training sessions are required to isolate the critical training elements.

In evaluating the results, it is important to consider the standardized setting in which observations of Parents' and Subjects' behaviour were made. Because of the circumscribed and controlled nature of the laboratory setting, it is not possible to know the degree to which Parents used their newly acquired interpersonal communication skills in their day-to-day interactions with their children. Nor is it possible to determine the extent to which the positive assertive behaviour of the MFC Subjects generalized to every day social settings. To answer these questions it would be necessary to design a study which would permit naturalistic observations of behaviour in a wide variety of social settings.

The findings are sufficiently encouraging to warrant further investigation in this area. Research is required which extends the training model to include an increasing number of significant others, thereby effecting changes in larger, more inclusive interpersonal systems. Experimentation with various combinations of significant others at different stages of child development may optimize treatment effects at various ages and in various family situations.

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