

Modification of Mothers' Behaviors and Attitudes Through Parent Education Based on Videotape Modeling

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American parents today are worried and uncertain about how to bring up their children. They wonder whether they are doing a good job as parents, yet are unable to define what a good job is. The modern family finds itself, due to the high mobility of our society, isolated from the traditional sources of childrearing advice and assistance previously provided by relatives and close friends. More families are living among neighbors with whom no adequate rapport has been established or in homogenous age groupings within communities among neighbors who are also inexperienced parents and lack the ability to assist each other in childrearing. Additional factors contributing to childrearing difficulties experienced by the modern family are the stresses of divorce, working mothers, and single parent families. Increasing numbers of parents are seeking out psychological services and parent training programs to help them feel more competent in relating to and in providing direction for their children.

Background

A diversity of parent-training methods have emerged. Parents have been trained individually and in groups, both in the home and in the laboratory, by means of didactic lectures, assigned readings, programmed materials, group discussions, videotape

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feedback, video and audiotapes, films, live modeling, and role playing. Most programs have used a combination of these methods or techniques. Most have been inefficient and costly and have been available only to clinic parents with disturbed children. Little research has been done to help sort out which of these training techniques is most effective in changing particular behaviors or attitudes in parents or children.

Also such research as has been conducted with non-clinic populations has usually been geared to evaluate effectiveness in terms of changes in parents' attitudes rather than in terms of behavioral changes. The validity of using this approach is open to question because of the subjectivity of the attitudinal measures and because studies have shown that changes in attitudes do not necessarily reflect changes in behaviors (Freeman, 1975; Stearn, 1971). Few parenting studies have evaluated their programs in terms of professional time and expense involved. Research is needed into effective parent-training programs which do not deal exclusively with severe and unusual problems but investigate ways of helping large numbers of normal parents with troublesome everyday situations for the purpose of improving parent-child relationships and preventing individual problems from occurring in the first place.

One method of training parents that has potential for an efficient, cost-effective program is to use a standardized videotape modeling program. Research on live modeling (Mash, 1973), individual videotape feedback (Goodwin & McCormick, 1970), and audiotape modeling (Twentyman & Martin, 1973) has shown modeling to be a powerful agent to enhance the effectiveness of parent-education programs. Certainly, social learning theorists have shown modeling to be an effective form of learning. Research on the effectiveness of parent-education programs based on parents' vicarious learning through videotape modeling is, however, scarce. Only two studies (May, 1976; O'Dell, Mahoney, Horton, and Turner, in press) were found that assessed the effectiveness of standardized videotape modeling programs, but these studies focused only on teaching clinic parents a specific set of target behaviors. No research was found that measured the effectiveness of a videotape program designed to alter the general attitudes and behaviors of parents when interacting with their child nor was any research found that focused on using this approach with normal populations.

Purpose

Therefore, the purpose of the study was to evaluate the effectiveness of a standardized videotape modeling program in changing mothers' attitudes and the general ways in which they interact with their children.

The specific goals of the study were:

- (1) to examine the effect of the program on the mothers' attitudes of confidence, acceptance, trust, understanding, and causation (5 subscales of Parent Attitude Survey).
- (2) to examine the effect of the program in changing the mothers' behaviors.
- (3) to examine the effect of the program six-to-eight weeks after termination of the program.

Method

The participants in the study were 35 middle-class mothers of children ages three to five years who responded to an invitation to participate in a parent-education program. Mothers were randomly assigned to one of two experimental groups. Group A (n=16) received the educational program first and Group B (n=19), a delayed treatment control group, received the educational program six weeks later.

Baseline behavioral, attitudinal, social, and demographic data were collected on all the mothers. Parental attitudes were assessed by the Parent Attitude Survey (PAS) developed by Hereford (1963). The mothers' baseline behaviors were obtained by videotaping them playing with their children. The 30-minute videotapes were analyzed in 40-second segments by the Interpersonal Behavior Construct Scale (IBCS). The IBCS constitutes a detailed checklist of 42 behavior transactions which was developed by Kogan and Wimberger (1964) to accommodate a range of important parent-child interactions. There were four videotape coders who had been trained in the use of IBCS by the author of the instrument and had had four to six years of experience in coding. Throughout the study they were given training sessions to maintain their observer accuracy. Each videotape was analyzed independently by two coders, and continuous rater agreement checks were made throughout the data collection period. Average agreement levels of 95-98 percent (agreements divided by total ratings) were maintained by the coders. The videotapes which the coders analyzed were counter balanced in order to eliminate systematic coder bias in a particular treatment group. Coders were neither informed as to whether the tape they were analyzing was one from the experimental group or from the waiting-list control group nor as to the purpose of the study.

After the initial Time I baseline data collection, Group A mothers attended a series of four weekly two-hour videotape modeling sessions, while Group B mothers received no treatment. After the program was completed, all subjects were retested on all measures to determine Time II scores. Mothers in Group B then received the program, while Group A received no further treatment. All subjects were again retested at Time III, to

determine in; thate posttreatment results for Group B and six week follow-up data for Group A. Two months later the mothers evaluated the training program by means of an extensive questionnaire.

Treatment

A standardized parent-training program based on videotape modeling was developed for the purpose of providing parents with a broad base of knowledge and skills in ways of interacting and communicating with their children and in handling their children's behavior problems. The videotape vignettes showed examples of a wide variety of positive and aversive parent-child interactions commonly witnessed in clinic and nonclinic referred families. For example, videotape vignettes were shown of parent models who were nurturant, playful, and sensitive to the individuality of their children, in contrast to other vignettes of parent models who were rigid, controlling, and concrete with their children. Other vignettes showed parent models who were able to give clear, direct rules and messages in a consistent manner such that the result was child compliance. These vignettes were again contrasted with others of models giving vague, indirect, negative, and inappropriate suggestions or demands. Vignettes were also shown of parent models giving their children positive attention and praise for appropriate behavior and effectively ignoring misbehavior while contrasting vignettes showed ineffective models who inadvertently reinforced their children's misbehavior.

Results

Baseline Differences

No significant baseline differences existed between Group A and Group B with respect to any of the demographic variables such as maternal age, education, socioeconomic status, child's sex, the number of mothers who had received some type of prior parent education, or type of parenting problem faced.

The average mother in the study was 33 years old with college education and two children. The sample's socioeconomic status ranged from lower middle to upper middle class; only three mothers were single parents. The average age of the treated child was four years, and there was a greater percentage of boys than girls.

All baseline dependent measures were subjected to one-way analyses of variance to test for differences between Group A and Group B. No systematic differences on the criterion measures existed between groups at the commencement of the study.

Changes After Treatment

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To test the hypothesis that there would be beneficial changes in the mothers' attitudes and behaviors as a result of the parent program, analysis of covariance statistical procedure was carried out with Time II data. This statistical analysis using the pretest scores as covariate, was selected to remove the bias introduced by differences in initial scores among subjects. Subsequently, paired t-tests were performed to compare change in Group A from Time II to follow-up Time III data collection and to evaluate whether the program's effects were replicated with Group B at Time III.

Analysis of covariance statistical procedure revealed that at Time II, Group A mothers had statistically significant attitudinal and behavioral changes when compared with Group B waiting-list control mothers. Attitudinal data revealed that Group A mothers felt significantly more confident in their parenting abilities $F(1, 32) = 3.89, p < .05$ and significantly more trusting in their children $F(1, 32) = 4.9, p < .03$, than did Group B mothers at Time II. No significant treatment effects were noted for the other attitudinal subscales of understanding, acceptance, and causation.

Behavioral data revealed a statistically significant increase in mothers' positive affect behaviors $F(1, 32) = 18.97, p < .001$, a significant decrease in mothers' dominance behaviors, $F(1, 32) = 50.42, p < .001$, a significant decrease in nonacceptance behaviors $F(1, 32) = 30.82, p < .001$, and a significant decrease in lead taking behaviors $F(1, 32) = 18.80, p < .001$.

Group A mothers smiled and praised their children significantly more; took the lead less; watched their children more; contradicted, intruded, and corrected less; were less domineering; less critical; and were more accepting and positive than Group B mothers when responding to their children. Five out of six summary variables for Group B mothers showed significant changes in the predicted direction at Time II. Only Group A mothers' negative affect behaviors did not change in the predicted direction, and these behaviors had a very low frequency of occurrence at baseline testing. The program's effectiveness on mother attitudes and behaviors were subsequently replicated with Group B mothers at Time III for all five summary variables. Follow-up assessment showed that Group A mothers' behavioral and attitudinal changes continued to be maintained six-to-eight weeks posttreatment.

Evaluation two months after Time III data collection in both groups indicated that parents continued to perceive positive changes in themselves as a result of their participation in the videotape modeling program. The most frequently listed change reported by the parents was increased confidence and improved relationships with their children.

Implications

This study is the first study to evaluate the effectiveness of a standardized videotape modeling program in changing mothers' attitudes and behaviors toward their children. This study provides much needed research in the application of social-learning theory to parent training and in the evaluation of programs for educating parents by objective assessment of behaviors and attitudes. A significant feature of this program is that mothers were able to learn how to change their behaviors without being given the opportunity to practice the methods learned during treatment and without direct feedback. The potential use of this type of program by nurses and other health care professionals to disseminate information about parenting to the general population has importance as a procedure to improve parent-child relationships, to enhance the confidence of parents, and potentially to prevent maladjustments from occurring in the first place. The instructional method used in this study also has implications as a prevention mode! which is "packageable," efficient, cost-effective, and can be provided to large numbers of parents with a minimum of professional time while yielding important results. The need to provide the modern parent with information about childrearing is especially important given the societal problems which are developing due to increased mobility of families, economic and social stresses, isolation of families, and lack of traditional family supports.

These results suggest that a videotape modeling parent-education program is a powerful tool for intervention and instruction.

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