

Videotape Modeling: A Method of Parent Education

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ABSTRACT

Within the area of parent training automated methods are coming into vogue. Many therapists are trying to make their training replicable by producing packaged visual aids. This paper summarizes the components of a parent-training program based on videotape modeling for which empirical support is available. The aspects discussed here include a rationale for the use of a videotape program as a method of parent training, the content of the videotape program, and guidelines for developing and using videotape modeling programs. In the face of continuing shortages of therapeutic personnel, techniques to increase the efficiency of training parents promises to be a valuable way to meet more of the community's therapeutic needs.

The majority of parent trainers rely on verbal training methods such as didactic lectures, prepared brochures, programmed texts and group discussions in their parent intervention programs. Unfortunately, research evaluating these verbal approaches has shown them to be somewhat unreliable for producing behavioral change in parents and children. Chilman (1973), in reviewing 16 studies using the group discussion method with disadvantaged families concluded that, discussion approach by itself offers little promise for reaching large numbers of low income families. Likewise O'Dell (1978) in his review of programmed texts, didactic lectures and other written materials summarized that there were few clear conclusions concerning the utility of verbal training methods in producing parent behavior change. It has been suggested by researchers who have studied these methods (Green, Budd, Johnson, Lang, Pinkton, & Rudd, 1976; O'Dell, 1978) that different types of parents have difficulty with verbal training methods because of deficiencies in their own reading level, education or general intellectual level. Indeed it may be difficult for psychologists or parent educators to verbally communicate to parents the effective qualities for responding to children without first directly modeling the skills for the parent. Consequently, there has been a recent increased emphasis on the use of performance training methods to increase the effectiveness of parent-education programs. Performance-training methods involve the direct manipulation of parents' behavior and include such methods as modeling, behavioral rehearsal, direct feedback, and videotape feedback.

This paper has three general aims. The first is to review briefly some of the current research on performance-training methods so as to provide evidence of the benefit of using videotape modeling for parent training. The second aim is to describe the guidelines for developing and using a videotape modeling program. The third aim is to describe the content of one such program which was developed and researched by the author at the University of Washington.

RESEARCH ON PERFORMANCE TRAINING TECHNIQUES

Direct Feedback

Initial studies of performance-training methods used controlled learning environments to give direct feedback to parents about the appropriateness of their behaviors towards their children. Frequently, these programs took place in laboratory settings with the therapist observing through one-way mirrors and directing the behaviors of the parents with various signaling devices (Bernal, 1969; Patterson & Brodsky, 1966; Wagner & Ora, 1970; and Wahler, Winkel, Peterson, & Morisson, 1965). Some have used the "bug-in-the-ear," a small one-way communication device to train parents in laboratory settings (Kogan, Wimberger & Bobbitt, 1969). The "bug" is worn by the parent while interacting with the child in a play room with the therapist observing through a one-way mirror. The therapist can speak directly to the parent through the "bug", giving immediate instructional feedback quickly and effectively in order to shape more desirable parent behavior. Research has shown that these immediate feedback procedures are effective in producing quick behavioral changes. However they are costly and time-consuming and it is not known whether the changes in behavior can be generalized beyond the laboratory setting.

Videotape Feedback

A major recent development in direct feedback procedures for improving parents' behavioral skills is through the use of videotape feedback. Typically, parents and other family members are videotaped while interacting with their children in problematic situations, and are then shown the tapes and instructed in how to improve their interactions. Bernal, in a series of studies (Bernal, 1969; Bernal, Duryee, Purett & Burns, 1968; Bernal, Williams, Miller & Reagor, 1972) and Goodwin and McCormick (1970) have reported that videotape feedback is a powerful intervention tool for improving parent-child interactions. As can be seen, however, individually made and individually used videotape material is costly, inefficient, and difficult to assess experimentally because of the unstandardized, varying-stimulus, exposure. Another difficulty is that these programs have been offered primarily to clinic parents with behavior disturbed children and rarely other populations. Therefore these individual videotape feedback programs are incapable of meeting the increasing demands for parent training programs in nonclinic populations. Nonetheless, the question that emerges from this research is, can parents achieve the same learning and behavior changes with a standardized videotape program? Can parents benefit from a vicarious training experience, that is, one that does not directly involve members of their own family? It could be postulated

that the parents would be less defensive watching other parents' videotapes rather than their own tapes and would have a chance to observe new behaviors not already in their repertoire so that the procedure might result in more significant effects. In addition, a standardized videotape program would have the added practical advantage of being cost effective.

Modeling Techniques

Certainly, social learning theorists have shown modeling to be an effective form of learning (Bandura, 1977). However, only in a very few studies has the effectiveness of using modeling as a method of training parents been measured. Mash (1973) used a live modeling procedure to train a group of three parents. A fourth parent who had previously undergone behavioral training for modifying child noncompliance served as a model by interacting with her child during each session. This modeling procedure plus group discussion of behavior modification principles and their application to children was associated with increase in child compliance in the clinic for all three children and in the home for two of the children. Problems with small sample size and possible recorder bias limit the interpretability of these data. Seitz and Terdal (1972) approached the problem behaviors of an overactive and noncompliant child by having the mother merely observe the therapist's interaction with the child. Prepost measures of the mother's behaviors showed she virtually eliminated her frequent use of criticism, threats and physical punishment and significantly increased her frequency of praise. A parent training program reported by Forehand and King (1977) using videotape modeling, role playing and direct parent shaping procedures reported success in altering the maladaptive interaction of noncompliant children and their parents.

Few studies have used videotape modeling uncontaminated from other techniques. Modeling has mostly been used to augment other training methods such as didactic or reading formats, role playing, and direct or videotape feedback (Forehand & King, 1977; Hanf & King, 1973; Mash, 1973; O'Dell, Mahoney, Horton & Turner, 1979; Patterson & Foregatch, 1979). The difficulty with this combined approach is that it is impossible to separate out the individual contribution made by the modeling technique. Perhaps modeling alone would have been as effective as all the other methods combined. Again, the combined approach is inefficient and incapable of meeting the increasing demands for parent-training programs.

Only two studies were found that directly assessed videotape modeling and compared the effectiveness of its use for parent education with other types of instructional techniques. Nay (1976) evaluated the comparative effectiveness of four instructional techniques in teaching parents to use the Time Out (TO) procedure: lecture, written presentation, videotape modeling, and modeling coupled with role playing. He found videotape modeling coupled with role playing to be superior to either written presentations or lecture, but not to videotape modeling alone. In a second study by O'Dell, et al. (1979), 60 parents were randomly assigned to one of the following training groups: written materials, written materials with individual check out, filmed modeling, filmed modeling with individual check out, brief live modeling with rehearsal, live modeling and rehearsal by the therapist who was especially trained in modeling and rehearsal procedures. The results of the various methods differed significantly immediately after the training. Filmed modeling with check out was superior to written materials or live modeling or rehearsal.

Results of these two studies suggest that film or videotape modeling may significantly enhance the effectiveness

of parent-training programs. There were, however, methodological and measurement problems which limited the interpretability of these findings. One of the main difficulties with these studies was that they focused only on parents' ability to eliminate a discrete set of deviant child behaviors by use of specific techniques (Time Out). The decrease of a child's misbehaviors does not necessarily denote that adaptive parent-child interactions were learned. No record was found of any study that assessed the effectiveness of a videotape modeling program in changing general parent-child interactions, behaviors, or attitudes, nor was any research found that focused on using this approach with non-clinic populations.

Emerging from this review of the literature, the author developed and evaluated a videotape modeling parent training program. The following section describes the content and guidelines for developing and using this videotape program. This description is intended to be useful for psychologists and other professionals who wish to develop their own videotape parent training programs.

Guidelines for Using and Developing a Videotape Program.

According to the literature on modeling (Bandura, 1977) the subject, in this case the parent, is more likely to imitate the behavior of the model if:

1. The subject has positive feelings about the model or perceives himself as similar to the model.
2. The subject observes the model receiving rewards.
3. The subject pays attention to the behavior of the model.
4. The subject is rewarded for modeling appropriate behaviors.

Consequently, in developing the videotape modeling program an effort is made to implement these criteria in order to enhance the modeling effects.

1. In order for parents in the program to relate positively to the models, they are told that the parent models in the videotapes are not actors but actual parents who have, in fact, attended a parenting course similar to the one they are taking. In addition the models selected for the videotapes are representative of white and black families, in all social classes, and include fathers as well as mothers. Parent models also have children of the same age as do the parents attending the program.
2. The parent models in the videotapes are frequently shown receiving praise from the therapist for appropriate parenting behaviors. In addition, the parent model is considered to have been rewarded when he or she is able to get from their child appropriate and pleasurable behaviors or a reduction in a child's misbehaviors.
3. In order to be sure parents watching the videotapes do not get distracted, their attention is directed to the models' behaviors in the following way. They are shown vignettes of parent models interacting with their children in appropriate and inappropriate ways. After each presentation of a particular parent-child vignette, the videotape is stopped and the parents are given a chance to report their observations and to "discover" the appropriate behaviors. If any disagreement occurs among the parents or if parents miss a crucial feature of the incident, the scene is replayed for further discussion. This contrast between the parental interactions presumed appropriate and those judged inappropriate serves to clarify and emphasize the desired behaviors.

4. The parents attending the videotape program do not have the opportunity to directly practice under supervision what they observe on videotapes and therefore they receive no direct reinforcement or feedback from the educator. However, parents are given a homework assignment to play for 10 minutes a day with their child in order to practice the skills they have learned in the program. The play periods are designed to minimize the possibility of negative exchanges and maximize the possibility of positive exchanges between parent and child. It is felt that parents are reinforced in these play periods by seeing improvements in their children's behaviors. In addition, because these parents are watching the program in groups, the resulting expressions of support and enthusiasm by other parents act as powerful reinforcements.
5. Finally, in order to further generalization of the effects of the videotape program to home settings, the educator helps the parent groups discuss how the techniques demonstrated by the model on the videotape might apply to their own situations. This results in the parents becoming active participants in the educational process, thus facilitating learning. The group process cannot be minimized; the group is a source of extensive ideas and abundant social reinforcement for every parent's achievements.

Content of the Videotape Material

Some researchers would argue that it is the content of the program rather than the technology employed that is the crucial variable. Certainly it is difficult to separate out the message from the medium. It becomes, therefore, important for parenting programs to carefully spell out the program content as well as the technology. The question can be posed, what are we trying to teach parents? While there are probably no universal prescriptions for effective parenting, there seem to be some generalizations which can be made for determining relevant content of parent-education programs, based on what we know about the effects of parents on children and the converse, the effects of children on parents. Ainsworth, Bell & Slayton, 1974; Bandura, 1976; Baumrind, 1975; Mussen, 1967, Radin, 1976; Schaffer & Emerson, 1964, and others seem to indicate that the most effective parents are those that are nurturant, positive, and loving with their children, who are sensitive to the individuality of their children, who have developed reasonable expectations for their children and who have developed effective behavioral management skills. Baumrind's data (1975) suggest that socially competent children are more likely to come from families that are "authoritative" rather than "authoritarian" or "permissive." Authoritative parents are those who are sensitive to their children's needs and capabilities and who guide or direct their children in a rational manner and encourage independence.

The "content" of parent programs has been broadly categorized by Tavormina (1974) in two main areas: the reflective approach and the behavioral approach. The reflective parent education model is an expressive therapy approach with emphasis on feeling, parental awareness, acceptance of feelings and communication skills. It uses a group discussion model with the agenda of the group often decided by the parents themselves. This reflective approach has been described by Ginott (1965) and Gordon (1970) and Dreikurs and Soltz' (1964) parent education programs.

The second main content approach is behavioral counseling which attempts to eliminate cognitive variables and place its emphasis on actual observable behavior and the environmental contingencies that maintain certain behavior

patterns. Behavior modification approaches to training have now been described by many authors such as Becker (1971), Krumboltz and Krumboltz (1972), and Patterson and Guilford (1968). In contrast to the reflective approach, the behavioral tradition gives little attention to the expression of emotional and verbal communication, assuming for the most part that positive emotional or attitudinal changes follow describable changes in behavior produced by contingency management procedures.

There is no clear evidence from studies comparing the effectiveness of the two theoretical approaches (Anchor & Thomason, 1977; Johnson, 1970; Rinn & Markle, 1977; Schofield, 1976; Tavormina, 1975) to state that one approach is superior or inferior to the other. One of the problems seems to be that each of the content approaches uses different criteria for measuring effectiveness of programs. Generally behavioral approaches are conducted with clinic populations and assess changes in child behaviors such as hitting and noncompliance, while reflective approaches are conducted with nonclinic populations and assess change in attitudes and emotional-verbal communication of parents. It would seem that parents need to have competency in both areas, that is, to be able to help a child behave and to communicate with their child.

Therefore, based on this review of the literature, a videotape modeling program was developed by the author which combined communication approaches and behavioral principles and illustrated concepts such as nurturance, sensitivity, authoritative style, individual differences in children, and behavioral management skills through videotape vignettes of parents and children interacting. These videotape vignettes were organized and presented in four different videotape programs comprising the following topics:

- 1) Effective Play Techniques
- 2) How to Set Limits
- 3) Ways of Handling Misbehavior
- 4) Communication and Feelings

A script was written to go with the videotape vignettes so that the same program could be replicated by others. The following is a description of the content of these four videotapes.

Videotape Programs

1. Effective Play Techniques

This videotape demonstrates how to effectively play with a child. Parent models are shown following the child's lead, activities, and ideas at his developmental level, in contrast to other models who rush, structure, and compete with their children and expect them to perform tasks beyond their developmental age. Parent models are also shown participating in a role play and the fantasy world with their children in a delightful enjoyable manner, in contrast to parent models who are rigid, controlling, and concrete in their play with children. Discussion and observation of these videotape vignettes focus on children's different capacities, temperaments, and personalities for the purpose of increasing the parents' sensitivity to the children's individuality and to help them form reasonable expectations for their children.

Other videotape vignettes illustrate how parents can foster independence in their children by encouraging them to work out their own ideas and decisions, instead of asking them questions or giving them directions and commands. These vignettes are contrasted with other examples of parent models who give too much help or make so many corrections that the children become dependent, inadequate, and non-creative.

The parents attending this videotape program are asked to practice these play techniques every day with their children for 15 minutes at home. The purpose of the play periods

is to increase the positive exchange between parent and child and to make parents more aware of their children's individuality. The play periods provide a non-threatening atmosphere in which the child can express himself without threat or coercion and can initiate social interaction and share in controlling his environment. The parents in turn model for the child acceptance and appreciation of the child's ideas and rules of play.

This videotape program focusing on play is shown first in order to lay the foundation for positive parent-child interactions. The principles modeled on the videotapes are similar to concepts described by Axline (1969) in her writings on play therapy, but with the parent as the play therapist.

2. Limit Setting

This second program changes the focus from the play situation where the child makes the choices to other situations where parents must do the directing or limit setting. Vignettes in this program illustrate how parents can give clear, direct rules and messages to children in a consistent manner such that the result is child compliance. Examples of parent models giving vague, indirect, and negative suggestions are contrasted with parent models who state clearly and positively what they want their child to do. Examples of parents who are overcontrolling or who make many inappropriate demands on their children are contrasted with examples of parent models making age-appropriate demands. Parent models who are arbitrary and authoritarian are compared with parent models who use reason and consider the child's needs and developmental abilities. The concept of "democratic" or "authoritative" childrearing is specifically discussed and illustrated with videotapes. In addition, models illustrate how to follow through with demands through the use of labeled praise, warnings, and distractions. The concept of being consistent but not too inflexible or insensitive is discussed and illustrated with videotapes.

3. Handling Misbehavior

This third videotape illustrates effective behavior-management skills that parents can use when a child does not comply with a rule or misbehaves. Videotape models demonstrate how parents can be effective reinforcing agents by increasing the frequency and range of social rewards. Vignettes are shown of parent models giving their children positive attention and praise for appropriate behaviors and ignoring their inappropriate behaviors. Videotape models who effectively handle misbehavior through the use of "ignore" or "time out" are contrasted with models who are ineffective and inadvertently reinforce misbehavior. In addition, videotape vignettes of children modeling their parents' behaviors are shown. After showing these vignettes, the parents attending the training program are helped to discuss how some of the techniques demonstrated might apply to their own situations. Parents are asked to think about and discuss the kind of everyday behavior they model for their children. In this way videotape programs help to bridge the gap between abstract concepts such as positive and negative reinforcement, extinction, and modeling and their concrete application.

4. Communication and Feeling

These videotape vignettes illustrate how to communicate verbally and nonverbally to a child such positive feelings as acceptance, enjoyment, and interest. Examples of parents who are accepting and show enthusiasm for what their child is doing are contrasted with examples of parents who are criticizing, questioning, and disapproving. The effect that these parental behaviors have on their children's behaviors is vividly illustrated; for example, angry disapproving parents are shown with rebellious children and positive parents with self-confident and creative children. Vignettes

also illustrate how to communicate with a child without the use of questions, corrections, or demands. Parent models demonstrate how to use descriptive commenting, a method whereby the parent describes what it is the child is doing as he or she plays. This verbalization has the effect of showing the child that the parent is interested in his or her play, thus building the child's self-confidence as well as language skills. Parents are also shown how they can anticipate and avoid conflict with their children. Several vignettes show how a parent who is sensitive to a child's temperament can intervene and prevent a child from becoming frustrated and angry. Videotape vignettes also show models who demonstrate good empathic listening skills and who are able to accept their children's feelings and help them to express them in words. These vignettes are contrasted with other vignettes of parent models who interrupt, do not listen to their children, and disallow expression of "bad" feelings. Finally, the videotapes illustrate the effectiveness of using physical warmth with children.

Program Evaluation

The evaluation of this videotape modeling program is only briefly summarized here because a more detailed description of the evaluation study has been reported elsewhere (Webster-Stratton, 1980). Thirty-five mothers and children, aged 3-5 years were randomly assigned to either a treatment or a waiting list control group. Mothers in the experimental group attended the videotape modeling sessions described in this article. Mother and child baseline behaviors were obtained through videotapes of them playing with their children, and were then analyzed in detail by raters according to the Interpersonal Behavior Construct Scale (Kogan & Gordon, 1975). Results showed clear cut behavioral changes in experimental mothers when compared to control mothers. There was a significant decrease in mothers' leadtaking behaviors, nonacceptance behaviors and dominance behaviors and a significant increase in mothers' positive affect behaviors. Behavioral data revealed a corresponding change in children's behaviors. There was a significant decrease in children's negative affect behaviors and submissive behaviors and a significant increase in children's positive affect behaviors when experimental group of children were compared to the control group. Also results showed that mothers in the experimental group perceived significantly fewer and less intense behavior problems than the control group as measured by the Eyberg Child Behavior Inventory. Two months later, follow-up assessment indicated that the children's behaviors continued to improve. The study was subsequently replicated with the control group. Follow-up evaluations further indicated that the parents continued to perceive positive changes in themselves and their children as a result of their participation in the videotape modeling program. In fact, the program seemed to have bolstered the self-esteem of parents. The most frequently listed changes among parents was increased confidence in their role as parent.

Conclusions

The videotape modeling program described in this article is based on sound learning theory and has the advantages of mass dissemination and low training cost per individual. Automated techniques provide a flexible method for treatment because they can portray a variety of modeling sequences that might be difficult to consistently create within the live modeling situation. In addition, videotape scenes provide a convenient way to present multiple models while using a minimum of model's time which can then be used repeatedly with a variety of parent groups. This program has

the potential to be offered to nonclinic as well as clinic populations. Hence parent education based on videotape modeling represents an important technological advancement in applied service and provides a tool for creative programs.

For those who are interested in developing videotape modeling programs for parents, many aspects and decision points need consideration. Few clear guidelines are available to indicate what model characteristics facilitate modeling treatment effects for parents. This videotape modeling program used multiple models who had children the same age of those parents attending the program. Vignettes were always shown first of the models behaving inappropriately followed by the appropriate vignettes. These guidelines for a videotape program are necessarily speculate, since research on the use of videotape modeling with parents is scarce. Future research needs to compare videotape programs that use (i) single versus multiple models from a variety of ethnic backgrounds, (ii) that show only appropriate vignettes and no contrasting inappropriate examples, (iii) that compare standardized videotape modeling programs with parents seeing their own personal videotapes, (iv) that use videotape with group discussion versus videotapes with no discussion and (v) that use videotape with individual feedback versus no individual checkout. Finally, more research is needed to assess the efficacy of videotape modeling compared to live modeling and other treatments such as rehearsal and group discussion.

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Socioeconomic Status: Effects on Parent and Child Behaviors and Treatment Outcome of Parent Training¹

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ABSTRACT

The present study was undertaken to address two questions concerning clinic-referred mother-child pairs. These were: Do lower class parents differ in their interactions with and perceptions of their children from middle and upper class parents; and are lower class parents and their children less responsive to treatment than middle or upper class parents and their children? Thirty-one mother-child pairs served as subjects and were divided into low, medium, and high socioeconomic groups with nine, ten and twelve subjects, respectively. Treatment consisted of teaching the parents to use social reinforcement and time out techniques. Both observational behavioral data and parent questionnaire data were obtained pre and post treatment. The pre treatment data revealed no significant differences among groups. The analysis of the treatment outcome data revealed changes in the desired direction for all dependent variables. Furthermore, all socioeconomic groups demonstrated similar changes for all outcome measures. The implications of the findings are presented.

In a recent article concerning the relationship between social class and the delivery of services to clients of different socioeconomic status, Hargis and Blechman (1979) reported that psychologists who train parents as therapists for their own children have typically ignored lower class clients. As a result, we have little data on the effects of socioeconomic status on parent-child interactions in clinic-referred samples and on the outcome of parent behavioral training. The purpose of this study was to address the following two questions with clinic-referred mothers and their children. Do lower class parents differ in their interactions with and perceptions of their children from middle and upper class parents? Are lower class parents and their children less responsive to treatment than middle class parents?

Although there has been much written about the effects of socio-economic status on the interactions of parents and their nonclinic children (e.g., Sears, Maccoby, & Levin, 1957), few studies have utilized behavioral observations to reach conclusions. Walters, Conner, and Zunich (1967) observed the interactions of lower class mothers and their children in a study designed to parallel a study by Merrill (1946)