

1981

# Application of Behavioral Approaches to Child Rearing (Chapter 7 from The Human Reflex)

Rodger K. Bufford

*George Fox University*, [rbufford@georgefox.edu](mailto:rbufford@georgefox.edu)

Follow this and additional works at: [http://digitalcommons.georgefox.edu/gscp\\_fac](http://digitalcommons.georgefox.edu/gscp_fac)



Part of the [Psychology Commons](#)

---

## Recommended Citation

ISBN 9789991767680 Published by Harper & Row, New York, NY. Pages 155-173.

This Book is brought to you for free and open access by the Graduate School of Clinical Psychology at Digital Commons @ George Fox University. It has been accepted for inclusion in Faculty Publications - Grad School of Clinical Psychology by an authorized administrator of Digital Commons @ George Fox University. For more information, please contact [arolfe@georgefox.edu](mailto:arolfe@georgefox.edu).

## PART IV

### The Church and the Family: Practical Applications

## 7 Application of Behavioral Approaches to Child Rearing

As we begin our discussion of the normal socialization and educational processes for children, it is important to recognize that there is a fundamental similarity in the approaches that will be presented in this chapter and those in the preceding chapters. In Chapter 5, social influence was defined as including any condition in which one person is effective in programming the environment in such a way as to alter the behavior of another individual. Thus child rearing may be viewed as a specific area for the application of social influence.

From a behavioral perspective, the principles and techniques employed in child rearing are the same as those applied in behavior modification and behavior therapy. Is there, then, any important distinction between normal and deviant behavior from a behavioral perspective? The answer is both yes and no. The central issue is that of social deviance. If the child's current behavior has been labelled socially deviant, then the procedures for changing it are called behavior modification or behavior therapy. However, changing behavior that has not earned the deviancy label would not be called behavior therapy. For example, toilet training a two-year-old is an example of social education or social influence; but toilet training a six-year-old is behavior therapy. It is important to recognize that the behavioral techniques employed are essentially the same in both situations. Here again, we see the behavioral emphasis on the underlying functional similarity of normal and deviant behaviors.

Keeping in mind that the basic approaches are the same, this chapter will present some examples of behavioral approaches to training with normal children. Because the range of issues far exceeds what can be addressed here, this chapter will address: (1) the problem of goals in child development; (2) social development; (3) intellectual development; (4) emotional development; and (5) moral and spiritual development.

Another basic distinction is that the behavioral approach emphasizes the role of *learning* in the development of the child. This is to be contrasted with what has been termed the "developmental" approach, which emphasizes the role of biological processes in behavioral changes as the child grows older. In toileting behavior, for example, the developmental approach emphasizes the role of biological development in enabling the child to control the sphincter muscles, and thus make it to the bathroom before eliminating. By contrast, a behavioral approach stresses the role of learning in toilet training, emphasizing that the child must learn to recognize the internal stimuli of bowel and bladder pressure, learn to tighten the sphincter muscles when away from the "potty," and learn to relax them in the right location.<sup>1</sup>

Of course, from a behavioral perspective, it is recognized that a certain amount of physical development is necessary before the child can learn bowel and bladder control, and developmental approaches acknowledge that training plays a role. But the two approaches fall at opposite ends of a continuum in terms of their relative emphasis on the roles of learning and biological maturation.

Another area in which developmental and behavioral approaches clearly have different implications is in learning to read. The developmental approach stresses "reading readiness" as an important factor that must be present before attempting to teach a child to read, whereas the behavioral approach emphasizes that certain skills are required in order to learn to read, then suggests specific training techniques for developing the prerequisite skills. Here the contrast is stark: the developmental approach suggests that, as time passes, the child will acquire the necessary readiness; the behavioral approach advocates teaching those prerequisite skills in a systematic fashion.<sup>2</sup>

### THE PROBLEM OF GOALS IN CHILD DEVELOPMENT

As with any other area of behavior influence, child rearing involves the conscious or unconscious selection of a number of specific goals toward which the behavior influence process is directed. Many of these goals are clear and explicit, while others are much more difficult to identify. We want our children to have an education, to be able to read, write, do arithmetic computations, to spell, and so on; thus, in the United States, we support both public and private education on a massive scale. We want them to learn social behaviors ranging from appropriate toileting to table manners, social interaction skills, and so on. We may also want them to develop certain standards for their behavior, including moral and religious commitments. We want them to learn to control their emotional outbursts. All of these are goals of the educational process.

As with deviant behavior, value or ethical issues arise about the goals of child rearing. These value issues lie at the heart of struggles over what textbooks should be used in public schools, what books may be placed in their libraries, whether evolutionary or creationist theories of origins may be taught, whether sexual education may be provided, the specific content that is to be presented, and so on. In our culture, there is considerable disagreement regarding the specific goals of education. The typical behavioral approach to the goals of child rearing is to discern the present community standards and practices in a certain area, then to adopt these as goals. From a biblical perspective, the first source of goals is that of biblical standards. However, in areas where the Bible is essentially silent, community standards may again become an important criterion; for example, since the Bible has little to say about formal education, a decision about how much education—elementary school, high school, college—a child should have must be made on other grounds.

In addition to the question of goals, it is important to keep in mind that the specific methods employed must also be considered as value-laden questions. For example, we may agree that education about sexual physiology is a desirable goal, but disagree about whether the use of sexually explicit films and video tapes is an acceptable method for teaching this content.<sup>3</sup>

As we examine the application of behavioral techniques to child rearing, then, it will be important to remember that ethical issues are involved in each decision about the goals and methods of child rearing. Biblical principles bear directly on some of these issues, but only obliquely, if at all, on others.

### **SOCIAL DEVELOPMENT**

To some degree, there is an overlap between social and moral behaviors. Here, however, we will concentrate on behaviors that are more clearly social in their characteristics. A wide range of behaviors fall into this class: dress, toileting, table manners, bodily hygiene, and so on. Three examples of social behavior will be presented to demonstrate the application of behavioral techniques in facilitating their development: toileting, dressing, and eating with a spoon.

#### **TOILETING**

It is generally agreed that some degree of biological development is needed before toileting behavior can be developed successfully. No amount of behavioral training is likely to produce bowel and bladder control in a six-week-old infant. By age two, however, most children have reached the necessary degree of biological development; from a behavioral perspective, once the child has reached this point, the major factor in determining when toileting behavior will be established is that of providing the necessary learning experiences.

Behavioral techniques for toilet training were initially developed for the treatment of nocturnal enuresis (bed wetting), encopresis (defecation in clothing), and for application in continence training with institutionalized psychotics and retardates.<sup>4</sup> The techniques, once developed, have been shown to be equally effective in developing toileting behavior in young children.

Traditional approaches to toilet training, as Ullmann and Krasner note, place their emphasis on "not soiling, on holding back, on not performing an act, rather than the performance of the act at the socially appropriate time and place."<sup>5</sup> A corollary of this is that such approaches tend to focus primarily on punishment as a

behavior management technique. Although punishment for soiling and wetting may be included in a behavioral approach, the principal factor in its success probably lies in the shift in focus from punishing these problem behaviors to establishing desired eliminative behavior by means of reinforcement. Actually, then, the behavioral approach combines elimination of wetting and soiling on wrong occasions with establishment of wetting and soiling on the right occasions—on the potty seat. Conceptually, we may think of it as an example of dealing with a problem behavior by establishing an incompatible and more acceptable alternative response.

The process of toilet training begins with teaching the child to sit on the potty seat. Some children learn this from observing older siblings or other children at the nursery, but—especially for first children—it may be necessary to systematically teach this performance. An easy way to begin is by making the training a social occasion. A parent and the child go together into the bathroom. The parent sits on the “big” potty and the child on the small potty; this step may be done fully clothed. One way to reinforce this is to read to the child for a few minutes, or to make it a kind of game. Thus the child is reinforced for sitting on the potty.

The second step is sitting on the potty with diaper removed. It helps to make certain that the potty seat is warm so that unnecessary discomfort is avoided.

The third step is to initiate elimination on the potty. Several factors can help with this. Perhaps the most important is to place the child on the potty seat at times when elimination is very likely (e.g., just after getting up from a nap). The parent *tells* the child he wants him to wet in the potty. The child can observe another child doing so, or the parent can model the performance by sitting on the toilet in much the way the child is expected to sit. The parent tells the child he will get a goodie when he wets in the potty. All of these things will help to produce the first success. The parent should make a big deal about the results: “You’re a good boy, I’m proud of you; you wet in the potty!” Then the parent should give the child the promised goodie.

After a few successes, the child may actually beg for the chance to go to the potty, or request goodies after tiny dribbles. Things are going well as this point. The parent should tell the child he will

get a goodie when he has a *big* wet—or a bowel movement. The parent should then give goodies and praise only following wets of more than three or four ounces.

The next step is to eliminate accidents, to teach the child to go to the potty every time he needs to eliminate. The parent should begin by saying, "Tell Daddy when you need to go to the potty"; and, "Wet in potty is good; wet in panties is *no!*" This should be continued following each episode, emphasizing good or bad performance, for several days, especially if the child is quite young. During this process, the child is learning to recognize the signals of pressure in the bladder, to tighten the sphincter muscles when he is not in the bathroom, and to relax and let the urine flow when on the potty.

The procedures we have just described are highly effective for most children, and on most occasions. However, it may at times be more fun for the child to continue playing then to go to the bathroom on a given occasion; thus occasional accidents may still occur even after several weeks or longer. Under these conditions, addition of a specific punishment procedure for wetting may be helpful. Interruption of play is generally a punishing event in itself. Thus the parent can take the child away from whatever activity is ongoing, tell him: "You wet your panties; wet in panties is *no!*" Then put the child on the potty seat for a few minutes. An additional step to further insure the aversive nature of this interaction is to give a "stand-up" bath. Take the child's soiled pants off, stand him up in the tub, and wash him with uncomfortably cool water. Then dress the child and permit him to resume play activities.

It is important that the aversive procedure just described be carried out as a routine procedure, each time, and in a matter-of-fact way. The child needs to know that the parent is displeased, and that these events happen when he wets. Once the procedure is over, however, it is important for normal social activities to resume. For older children, an alternative to the stand-up bath routine is to have the child strip, bathe, and wash out the soiled clothes.

These procedures emphasize bladder training. Bowel training is a bit more difficult and thus takes a bit longer, but follows the same basic principles.<sup>6</sup>



**DRESSING**

Learning to dress without assistance is a fairly complicated performance, which involves putting on several pieces of clothing. Thus learning to dress needs to be approached in a systematic fashion. Behavioral psychologists have learned that often the most effective way to teach a complicated performance is to begin by teaching the *last* step in a complex sequence, then working backwards to the initial step (a process called chaining). In dressing, the parent begins by dressing the child almost completely. The final step is placing the second arm through the sleeve of the shirt. The parent guides the arm into the opening, then allows the child to extend it on through. This can be made into a game: "Where's your arm? Did you lose it? Oh! There it is," the final comment coming as the child's hand appears out the sleeve in the desired way.

The second step is to allow the child to do the same with both arms. Then the parent holds the sleeve opening in a convenient place, allowing the child to insert her arm and push it through. Gradually, the child is allowed to take more initiative in locating the sleeve opening. Then she is taught to pull the shirt down off her head after the parent has placed it halfway over. Eventually, the child is taught to gather the shirt, find the head opening, and put it on entirely. Throughout this process, the social interactions of making it a game generally should be enough reinforcement to establish the initial responses.

Once the child has learned to put on the shirt, the parent may use the Premack Principle\* to reinforce putting it on. For example, "Get your shirt on, then you can eat." Here eating reinforces getting dressed.

The next step might be to teach putting on pants. First, the parent places the child's legs in the pants and pulls the pants up most of the way. Then say, "Let's see if you can pull your pants up," or some similar statement. The parent allows the child to do it, then praises: "Good girl! You pulled up your own pants!" Next,

---

\* The Premack Principle involves requiring the child to complete some unpreferred activity before permitting a more desirable one.

the pants are left further down. The parent then puts only one leg in, holding the pants to help the child insert the second leg. Next, the child is allowed to insert the first leg, while the parent holds the pants so that they are right side front, and the leg opening is convenient. The next step is to allow the child to guide the pants onto her own legs. Finally, the child is taught to locate the front of the pants, place them properly, and insert her legs.

Throughout the process of learning to put on pants, social encouragement should provide the necessary reinforcement. Once the child has learned to put on her own pants, the Premack Principle may again be applied to encourage dressing herself before some desired activity.

The same procedures may be employed in teaching the child to put on other articles of clothing. The important point to remember is that the child must be taught each response in a systematic way, encouragement and reinforcement must be provided frequently and generously during the learning process, and reinforcement is still required to maintain the responses once the child has learned them.

Throughout the process of learning to dress herself, the child need not experience any punishment. It may be carried out as a positive and pleasant social interaction between the child and the parent. The child enjoys it as she learns, develops a sense of accomplishment, and comes to love and appreciate the parent even more because the parent comes to elicit positive emotional responses in the child through being associated with pleasant experiences.<sup>7</sup>

#### EATING WITH A SPOON

The procedure for teaching a child to eat with a spoon has similarities to the procedures for dressing. The first step is to give the child the spoon and allow him to hold it in his hand. Special spoons, which facilitate placing the bowl in the mouth and keeping the bowl horizontal when grasped by a child's hand, have been developed; these spoons simplify the process, though they are not necessary.

Once the child will hold the spoon in his hand, the next step is to teach him to place the spoon in his mouth. A small bit of food is placed on the spoon, and the child's hand is guided almost to the

mouth. A slight movement by the child easily gets the spoon into the mouth, and food in the mouth reinforces the movement. Once the child is able to get the spoon into the mouth, the parent gradually provides less and less guidance. Initially, the hand is guided until the spoon almost touches the lips; then it is left a mere inch away; gradually the distance is lengthened until the child is able to raise his hand successfully from dish to mouth and insert the food. Throughout this process, care must be taken not to move too slowly or too rapidly. Repeated failures suggest that progress has been too fast; impatience on the child's part suggests going too slowly. The best strategy is to move fairly rapidly, backing off a bit if repeated errors begin to occur.

Three precautions must be taken. First, the child must be moderately hungry; this insures that food in the mouth will be reinforcing. Second, it is wise to use a food that the child clearly enjoys. Third, it helps to use a food that sticks to the spoon, thus reducing the risk of dropping.

Once the child has learned to carry food to his mouth, the next step is to teach the child to pick up food with the spoon. Again, start by guiding the child's hand, then releasing the assistance at the last moment. If training has gone well to this point, little effort will be required for the child to learn to pick up such foods as apple sauce, mashed potatoes, pudding, and the like.

Learning to use a fork, picking up other foods, and so on, require the same procedures, but should go quite rapidly once the basic steps have been successfully completed.

## **INTELLECTUAL DEVELOPMENT**

Perhaps the central element in intellectual behavior is the development of speech and language. Intellectual development progresses from the first rudimentary concepts of mother and father as distinct persons to the learning of differential equations, abstract philosophical concepts, or composition of a symphony. Intermediate levels of intellectual behavior include learning to speak, to read and write, learning numerical concepts, and so on. Here we will focus on initial language development and color naming as examples of early intellectual performances.

**LEARNING TO TALK.**

Studies of the development of language have shown that all children with normal capabilities begin to vocalize at about the same age, and with the same sounds. The gradual development of the full range of speech sounds of which the human voice is capable unfolds in a predictable time sequence. These developments seem to be largely the result of biological processes. But learning takes over once the child begins to vocalize, influencing the particular sounds that the child continues to make, the frequency with which they are made, and the occasions on which they occur.<sup>8</sup>

The child's initial vocalizations begin around the middle of the first year. Such sounds as "aaa," "baa," and "maa" are among the first to emerge. At the outset, these responses are probably maintained by the natural pleasure or reinforcement gained from the production of a sound, including the feel of the resonance in the mouth and throat, proprioceptive stimuli due to movement of the vocal apparatus, hearing the sounds produced, and so on. As the parent begins to respond to the sounds, however, they gradually come under control of the parent's social presence and the consequences that the parent provides.

Most of us have observed the social response of parents and others to a child's first vocalizations. The enthusiastic responses of hugging the child, cooing to it, and so on generally strengthen the child's vocal performances. As vocalization increases, the child gradually comes to make recognizable sounds such as "ma ma ma" and "da da da." Because saying "da da da" in Father's presence gets a more enthusiastic response than it does in his absence, it gradually becomes stronger when Father is present, and thus comes under discriminative control of his presence. The same happens with saying "ma ma ma" when Mother is present. Through selective reinforcement, these performances are gradually refined to the point where the child says "dada" and "mama" consistently in the presence of the appropriate parent.

As the child gradually comes to make a wider variety of vocal sounds, these in turn can be developed and brought under control of various objects and events in the environment by the same shaping and selective reinforcement processes that developed saying Dada and Mama. In this way the child begins to learn the words

for common objects and simple actions. "Baba" and eventually "bottle" come to replace crying as a means of getting a bottle because they are much more effective in getting the desired reaction from the parent. The child gradually learns to say "ball," "book," "read," "go," "out," and so on, because these common daily objects and events are important to the child, and labelling them speeds getting what the child wants. In this sense, speech produces strong reinforcement for the child.

Further elaboration of the spoken vocabulary continues through this process. When the child prefers milk to juice, and Mom finally catches on, she says "Oh! You want milk. Can you say milk?" If she waits for the child to try, then gives the milk following a good effort, the process of learning to say "Milk" is expedited. And so it goes. As long as the child lives in a setting in which spoken requests produce faster and more consistent responses than cries or grunts, articulate speech is continually strengthened and elaborated.

#### COLOR NAMING

Most children experience a fair degree of difficulty in learning to "know" their colors. The basic reason for this is that most objects that the child normally deals with differ not only in color but in other ways such as shape, texture, weight, and other qualities. Because of this, the child may fail to attend to the correct aspect of the stimulus object, thus making mistakes about colors.

The process of learning to recognize colors may be conceptualized as concept learning.\* The child must learn to ignore all properties but differences in color, and also learn the points on the color spectrum which divide various colors from each other. The most effective way to accomplish this is to teach colors using objects that are identical except for their color; these may be blocks, pieces of construction paper, and so on. The important point is that they be identical except for their colors.

In one family, a set of plastic bowls was used; learning colors was structured as a game. The parent sat down on the floor with the child, the plastic dishes, and a few raisins. The dishes were hidden behind the parent's back. The game began. The red dish

---

\* Concept learning is discussed in more detail in Chapter 8.

was placed in front of the child. "This is Red. What color is this?" If the child said, "Red," the parent said, "Good girl." A raisin was given. Then the blue dish was brought out. "This is blue. What color is this?" Again, correct color naming was followed by praise and a raisin. Red and blue were then alternated in a randomized sequence. If the child responded correctly, praise and a raisin were given. If an error was made, the child was told: "This is blue. What color is this?" A correct response was praised, but no raisin was given.

Once the child consistently got red and blue correct, the next step was to add another color, yellow. "This is yellow. What color is this?" When yellow was introduced, the errors on red and blue increased suddenly, but quickly disappeared again with the correction procedure described above.

Addition of further colors after red, blue, and yellow had less and less effect on correct responses for colors previously learned, and also were more quickly learned by the child. The reinforcement procedure was continued, but raisins were gradually given less often.

The procedure just described was used with a highly verbal two-year-old. The game was played for a few minutes immediately before supper, with the father doing the training. After the first couple of days, he was greeted at the door with requests to "play our game." In just a few days, the child was correctly labelling the color of cars passed on the street, items of clothing, and so on.<sup>10</sup>

### **EMOTIONAL BEHAVIOR**

Emotional behavior, as we have seen, is respondent. This section will discuss some of the processes by which emotional behavior develops, and will address some of the complex interrelationships between operant behavior and emotional respondent behavior.

The newborn infant displays two basic emotional response patterns: distress and delight. A distress pattern consists of crying, thrashing about, turning red, arching the back, and changes in breathing rhythm. A delight pattern includes smiling, gurgling and cooing, and relaxed bodily posture.

The process of emotional development from the initial two reaction patterns of distress and delight begins almost immediately;

within a few months, the child displays varied forms of emotional responses that are under control of an increasingly diverse range of stimulus events. As this process develops, new stimuli come to elicit emotional responses and the responses themselves become more elaborate and differentiated through the development of operant components of the emotional response complex.<sup>11</sup>

#### CRYING

At birth, although it is difficult to be certain, crying is probably a purely respondent behavior. The overall complex appears to be elicited by a fairly limited range of stimuli, which include hunger and pain.

As the child develops, new stimuli develop the capacity to produce the crying respondent (through the process of classical conditioning). Objects or events associated with hunger, pain, or other discomfort come to produce the same emotional respondents that the actual experience of hunger and pain initially produced. For example, when a child normally experiences becoming unpleasantly cold during the bathing routine, taking off the clothes for a bath may come to elicit crying. Similarly, a child who has been stuck with the pin a few times during the diaper changing routine may soon begin to cry whenever placed on the changing table.

Although it is initially respondent, emotional behavior quickly comes to include a variety of operant components, primarily through accidental reinforcement of operant behaviors that tend to accompany unpleasant emotional respondents. These emotional respondents affect the condition of the child in such a way as to alter the probability of a wide range of subsequent behavior; such changes were earlier defined as setting events.

One of the effects of unpleasant emotional respondents is the triggering of chemical changes in the body, including the secretion of various hormones, which prepare the body for emergency actions such as fight and flight. In the presence of these physiological changes, the probability of a variety of high magnitude and high intensity operants is greatly increased. When such responses occur, they are often reinforced by various events in the environment. A child who rolls on a toy in the crib, experiences pain, and cries aloud, may be negatively reinforced for crying by mother coming and removing the toy, thus easing the pain. Alternatively, the child

may thrash about—rolling off the toy in the process—and thus be reinforced for thrashing about. In each case, the operant performance is strengthened through the elimination of a painful stimulus.

These principles have some very important practical implications. The mother who responds quickly to her child each time it cries, and more quickly to loud than to soft cries, may inadvertently strengthen crying in this fashion. She may soon discover that her child cries a great deal, and tends to cry in a loud and unpleasant fashion. The child is reinforced by the mother's response, while the mother is (negatively) reinforced by the cessation of crying. Such a pattern therefore tends to perpetuate itself.

Avoiding the pattern of crying just described is challenging, but possible. Briefly, the child's major means of communication initially is by means of cries. Further, it is important for the parent to respond quickly when the child is hurt or in immediate need. But the tendency to cry at other times can be minimized by avoiding reinforcement of such crying.

During the first few months, it is probably well to respond to all cries. However, by four to six months the parents can begin to distinguish different types of cries: pain, hunger, boredom, and so on. At this point, the parents should continue to respond promptly to indications of pain (when in doubt, they should respond as if pain were the problem); other types of cries may be responded to more selectively. The child who awakens and promptly begins to cry may have this pattern weakened through extinction if the parent goes to the child only when crying becomes soft, or when there is a pause in the cries. With crying weakened, the child may begin to coo, gurgle, or make other pleasant sounds. This is the ideal time to go to get the child; doing so will strengthen these pleasant vocalizations. A second approach that may facilitate this process is to provide crib toys so that the child may engage in crib play when it awakens. This should increase the probability of more desirable performances upon awakening, and is an example of setting the occasion for more desired performances.

#### PLEASURABLE EXCITEMENT

Like crying, the pleasure response pattern at birth is probably largely or entirely respondent. Pleasurable responses also become elaborated through the combined processes of respondent and oper-



ant conditioning. Initially, being warm, having the stomach comfortably filled, and being held and cuddled are probably the principal stimuli that produce the pleasurable response pattern. The presence of mother or father, the sight of the bottle, the feel of blankets and clothing, and other stimuli associated with these pleasant events come to produce some of the same emotional respondents through the process of classical conditioning.<sup>12</sup>

Operant components of the pleasurable response pattern develop in much the same way that operant crying develops. The general physical arousal associated with these emotional responses will again have the setting event effects of increasing the probability of a variety of operant performances: reaching and grasping, movements of the arms and legs, cooing, gurgling, and vocalizing. If food is given, a blanket wrapped around, or hugging and cuddling follow such performances, they will be strengthened. Eventually, the typical childhood pattern of jumping up and down, waving the arms, and rapid loud vocalization that characterizes excited anticipation may develop.

Initially, the excited pattern will occur only in the presence of very specific stimulus events, but—by classical conditioning—other stimuli will also come to produce the response pattern. Thus the child who has developed a pattern of spoken language may show the characteristic excitement response when told, "We're going to the zoo tomorrow."

As with crying, it is possible to influence the manner in which the child expresses pleasurable excitement through careful management of the reinforcement conditions that the child experiences. The parent who consistently has the child sit down and wait quietly before handing out the cookies will develop a child who shows excitement in more subdued ways than the parent who hands out the cookies while the child clamors for them, thus (inadvertently) reinforcing clamoring.

The principles inherent in these examples apply to the whole range of emotional responses. Although emotions are conceptualized as essentially respondent in nature, operant components quickly become intermingled in the behavioral complex. Consequently, emotional elaboration must be conceptualized as a two-part process, including the development of new eliciting stimuli that have the capacity to produce emotional respondents and the

parallel development of operant performances that are influenced partly by the setting event properties of the emotions and partly by the consequences that the operants encounter.

### **MORAL AND SPIRITUAL DEVELOPMENT**

*Moral behavior may be defined as behavior that conforms to a standard of right and wrong.* For purposes of this discussion, we will conceptualize *spiritual behavior as behavior that conforms to the standards for right and wrong that derive from some religious system.* Such behaviors as prayer and worship conform to the standards of right and wrong of particular religious groups. Hence they may be conceptualized as moral within this definition. But standards of right and wrong are not limited to religious traditions. They may also be derived from prevailing social-cultural practices in a given place and time.

From a behavioral perspective, moral behavior is believed to develop in the same ways that other forms of behavior develop: through the principles of respondent and operant conditioning. Positive moral behaviors, then, are established through shaping, reinforcement, and establishment of stimulus control, while immoral behaviors are weakened or eliminated by means of punishment procedures and the various alternatives.

Toilet training may be conceptualized as moral behavior in this sense. The process of toilet training presented earlier essentially involves a systematic teaching approach for establishing control over eliminative behavior in such a way as to bring it into conformity with the prevailing standards of toileting behavior.

Because most of our standards of right and wrong deal with prohibitions, much of moral and spiritual development tends to be focused on the elimination of undesirable performances. The behavioral approach suggests that the establishment of an incompatible social response may be an important alternative to using punishment to weaken responses that violate moral standards. Also, this or other procedures may be a useful adjunct to punishment of an undesired response even where punishment is required. Sharing and cooperation are examples of positive social responses that are incompatible with the immoral responses of fighting and selfishness.

Sharing and cooperative performances are difficult to develop, partly because they involve reduction in immediate reinforcement. The procedure for establishing these performances may be approached through the simultaneous use of a punishment procedure for engaging in fighting and selfish behaviors, and the use of shaping and reinforcement techniques to establish sharing performances.

When Johnny and Billy both wanted the same toy, a squabble or fight used to be the typical result. After a few fights, Johnny learned that Billy usually won, thus Johnny began to give Billy whatever he demanded. As a result, Billy was becoming a bully. In an effort to halt this pattern, their mother decided to punish fighting, and to make an effort to teach cooperation. Fighting was defined as hitting, kicking, shoving, and scratching. If either Billy or Johnny engaged in these performances they were sent to their room for ten minutes; they had to remain quiet for a minimum of five minutes before being allowed out. Prior experience had shown that this procedure was effective as a punishment for these boys.

Establishing cooperation was a bit more difficult. Mother began by suggesting: "Boys, why don't you share the truck? Johnny, you could drive it around the room two times, then Billy could have a turn to go two times." She would then stand and observe while the boys attempted to carry out the suggestion, giving further suggestions as needed. If the boys refused to share, Mother picked up the truck and said: "If we can't share, I guess I'll have to put the truck away for a while." Then she would do so.

A second aspect of the procedure was to provide some additional reinforcement for sharing and cooperation. When the boys were playing well together, mother would come in and comment: "Johnny and Billy, I am really proud of you. You are doing such a nice job of sharing." Sometimes she would invite the boys to come and have a drink of juice or some cookies as well. In this fashion, the natural reinforcement of cooperative play was augmented by the reinforcement of Mother's attention and the explicit use of food as a reinforcement.

Although the procedure just described seems to be quite simple, it will need to be expanded through applying the same approach to a variety of other situations: conflict about the basketball, squabbling over who plays first in a game of checkers, clearing the table

after dinner, and so on. As the basic procedures of suggesting cooperative modes of interaction, reinforcing cooperation, and punishing fighting are repeatedly applied, a pattern of cooperative responding will gradually develop. Eventually, cooperation should begin to generalize to new situations.

In this context, a few comments on the implications for a biblical perspective may be helpful. There is a tendency to view biblical teachings on moral behavior as essentially a list of restrictive prohibitions. To a certain degree, this view is legitimate. But if we are to take seriously the interpretation of the Old Testament Law that Jesus gave, we must recognize that the central emphasis of biblical teaching is on positive social behavior: love God, and love your neighbor as yourself.<sup>13</sup> Given this emphasis, procedures for developing positive moral behaviors such as those just described for the development of cooperation and sharing should become the major focus of biblically oriented moral and spiritual training rather than the application of punishment for transgression of prohibitions. The behavioral approach, then, suggests a needed shift in the emphasis in the way many within the Christian community have approached the problem of developing biblical morality in their children.

Finally, a biblical perspective on moral development suggests that there are some innate tendencies God has placed in human beings through creation, which predispose us to be concerned about moral issues, and which may further interact with our experiences in significant ways. The biblical documents fail to shed much light on the precise extent or form these tendencies might take, however.<sup>14</sup>

## NOTES

1. More developmental approaches are illustrated by: Mollie S. Smart and Russell C. Smart, *Children: Development and Relationships* (New York: Macmillan Co. 1972) and George Kaluger and Meriem Fair Kaluger, *Human Development: The Span of Life* (St. Louis: The C. V. Mosby Company, 1974).
2. Arthur W. Staats, *Child Learning, Intelligence and Personality: Principles of a Behavioral Interaction Approach* (New York: Harper & Row, 1971).
3. For a discussion of some of the ethical issues involved, see: Rodger K. Bufford, "Ethics for Mass Application of Behavioral Control," in *Modifying Man; Implications and Ethics*, ed. Craig W. Ellison (Washington, D.C.: University Press of America, 1978)

4. For a brief overview, see Leonard P. Ullmann and Leonard Krasner, *A Psychological Approach to Abnormal Behavior*, 2d ed. (Englewood Cliffs, N.J.: Prentice-Hall, 1975), pp. 498-501.
5. *Ibid.*, p. 500.
6. These procedures are adapted from approaches such as that of Nathan H. Azrin and R. M. Foxx, "A Rapid Method of Toilet Training the Institutionally Retarded," *Journal of Applied Behavior Analysis* 4 (1971): 89-99.
7. See Sidney W. Bijou and Donald M. Baer, *Child Development II: Universal Stage of Infancy* (New York: Appleton-Century-Crofts, 1965), pp. 31-54 and 168-177.
8. *Ibid.*, pp. 158-167; Harry Munsinger, *Fundamentals of Child Development*, 2d ed. (New York: Holt, Rinehart, and Winston, 1975), pp. 193-222; Arthur W. Staats, *Child Learning*, pp. 53-171.
9. For a discussion of concept learning, see: J. R. Millenson, *Principles of Behavior Analysis* (New York: Macmillan Co., 1967), pp. 287-330.
10. Sidney W. Bijou, *Child Development III: The Basic Stage of Early Childhood* (Englewood Cliffs, N.J.: Prentice-Hall, 1976). Arthur W. Staats, *Child Learning*; Wesley C. Becker, "Teaching Concepts and Operations, or How to Make Kids Smart," in *An Empirical Basis for Change in Education*, ed. Wesley C. Becker (Chicago: Science Research Associates, 1971).
11. Bijou and Baer, *Child Development II*.
12. *Ibid.*, pp. 122-141.
13. Matt. 12:28-31.
14. See Rom. 1:18-32.