This paper describes the production of three 30-second prosocial television spots and the evaluation of the effects of these spots on children's behavior. The psychological process of observational learning was used to conceptualize the way television viewing influences children's behavior; the three stages of observational learning (exposure, acquisition, and acceptance) served as guides for the production and evaluation phases of this project. Five major principles were followed in planning the content for these spots: (1) the same theme was presented in all three spots, (2) situations were chosen to optimize immediate recognition and understanding by child viewers, (3) physical action was emphasized, (4) verbal statements were used to complement action and explicate both the conflict and solution, and (5) the positive consequences of the behavior to be modeled was accentuated. The rationale and research evidence to support the use of each of these principles was given. The spots were evaluated for the attraction they held for youngsters (exposure), the clarity with which they conveyed the intended message (acquisition), and the overt changes they produced in attitudes and behavior (acceptance). It was concluded that the approach described in this paper was a viable model for the production and evaluation of the whole range of television programming for children. (JMB)
Television and Social Behavior:  
A Prototype For Experimental Programming

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Throughout most of this century there has been increased concern over the impact of the mass media as an agent of socialization that supplants, in part, the influence of the family, school, and church. Focusing first on children's literature and then on the motion picture (Bogart, 1972; Maccoby, 1964), interest shifted in the 1950s to the medium of television, which was expanding at an almost unbelievable pace. It was apparent that television, unlike the movies, would be available to children day and night with the simple turn of the dial. And visual-audio display -- with the great variety of stimulation that it might present -- was thought especially compelling to the human being. Calls for programming that would fulfill the hope for the medium as a positive instrument in society began almost immediately. Although they sometimes were answered, television frequently lacked the overall quality that was hoped for and from the beginning contained a high incidence of aggressive and violent action.

Such content quickly attracted the attention of educators, parents, and researchers from various disciplines. An urgent need was felt to investigate the possible detrimental effects
of violent programming, and this effort consumed sizable time and resources. Little effort was expended, on the other hand, in delineating positive social content or the influence that the medium might have in inculcating socially desirable behaviors and attitudes. As a result, relatively little is known today about this very important aspect of the medium.

It is interesting to note in passing, a more general reason, too, for the lack of knowledge in the area. Overall, man's inclination to do good has not captured the curiosity of researchers to the extent that has his penchant to do evil. Thus, emphasis largely has been placed on what should not be done rather than on what should be done (Maccoby, 1968). Only in the last decade or so has a subtle change occurred, bringing with it better understanding of the development and elicitation of positive behaviors (e.g., Wispe, 1972). Although all the factors underlying this shift are not clear, one might suspect that in viewing a troubled world, researchers turned toward a more direct examination of the alternatives to antisocial, aggressive and violent strategies of human interaction.

Our own work over the last few years concerning the influence of entertainment television on children has focused primarily on trying to find out more about the medium and positive social behavior. We have examined whether, how much, and what kind of positive examples are presented to children -- and how they might affect the young (e.g., Spreafkin, Liebert & Poulos, 1975). Among the
specific projects has been a collaborative effort to design brief television messages for children that we believe serves the two-fold purpose of both presenting beneficial lessons and demonstrating the value of collaboration between child researchers and those involved in the production of programming. In painting a picture of this project, we would first like to briefly describe our overall framework.

**Conceptualizing Media Influences: Observational Learning**

An analysis of the effects of exposure to television entertainment can be approached from different vantage points, but we believe the most useful starting point is with the basic theoretical concept of observational learning. Observational learning involves those changes brought about in one person's (the observer's) behavior as a result of exposure to the actions of others (the models), either directly or symbolically through books, films, television, and the like. That children learn much about the world observationally need hardly be argued; from the adult's point of view perhaps one of the most endearing characteristics of the young is that they watch and imitate us. In the laboratory, the process of observational learning has been demonstrated for many different behaviors: for example, the acquisition of language (e.g., Bandura and Harris, 1967; Liebert, Odom, Hill, and Huff, 1969), of general rules (Zimmerman and Rosenthal, 1974), and of social behaviors such as sharing (e.g., Bryan and London, 1970; Poulos, and Liebert, 1972).
The three stages of observational learning

How exactly does observational learning take place? We conceptualize the process as involving three major stages (cf. Liebert, 1972, 1973): exposure, acquisition, and acceptance.

For observational learning to occur the observer must first be exposed to the specific acts or modeling cues embodied in someone else's behavior. True exposure obviously involves an active element; the child must attend to the model's action in the particular setting.

Exposure to a behavioral example does not, however, assure learning. The observer may simply fail to comprehend or process what is being shown. Then too, modeling cues may be misunderstood -- in which case something is learned, but exactly what might vary from child to child in idiosyncratic ways.

When we discuss what is being learned, we are talking about acquisition, the second stage of observational learning. The study of acquisition processes, including comprehension, interpretation, and storage, has begun to enjoy a central role in the work of researchers concerned with the larger phenomena of observational learning and it is an important key to the often remarkably complex and sometimes subtle effects of television.

The third and final stage of observational learning is acceptance; does a child, having been exposed to modeling cues and having extracted information from them, now accept and assimilate the distilled content as a guide for her or his own subsequent actions?
Acceptance, of course, can take many forms. The simplest (and perhaps least common) manifestation of acceptance is to directly imitate or copy what one has seen or, conversely, to explicitly avoid performing a particular modeled behavior (that is, direct counter-imitation). The far more likely and complicated acceptance effects which occur in observational learning involve generalizations on conceptual dimensions as well as concrete physical ones. That is, we find imitation or counter-imitation along broad classes of behavior that are related to the original modeled situation.

Planning the Prosocial Spots

The project that we are describing today began when the communications branch of a large Protestant denomination, the United Methodist Church, approached us with the question: What positive steps can be taken to improve children's television? After considerable discussion, it became clear that production of actual television fare for broadcast use was ideal. Here we could involve the research team in a product which would be seen on the commercial airwaves, the success of which would demonstrate that prosocial television could be effective and that the researcher did indeed have something useful to contribute to the broadcaster. The general plan called for our assuming considerable responsibility in deciding the exact nature of the programming and in evalu-
ating it during production. Script writing, shooting of the scenes, and the technical aspects were carried out primarily by production people, with our consultation.

We elected to make 30-second public service announcements -- brief commercial-like spots, a certain number of which broadcasters are obliged to aire. We envisioned each spot as presenting an interpersonal conflict that could -- but does not -- result in aggression and/or violence. Instead, the television peer models were to act in a cooperative way that leads to a solution satisfactory to all parties. This theme, that troublesome interactions can be satisfactorily settled by positive means, was chosen because it is inherent in much human interaction throughout the lifespan.

Major principles and their translation. In designing these short messages, we drew on many concepts. Some of the decisions made can be singled out as particularly central. For example:

1. **The same basic theme is presented in all of the spots.**

Much basic research on observational learning suggests that even quite young children can abstract underlying principles from the behavior of others, and then apply these principles in new and diverse situations (e.g., Liebert and Swenson, 1971; Zimmerman and Rosenthal, 1974). Thus, the successful practice of cooperation was to be presented in all 3 stories, varying across situations, settings, and models. In this way, generalization was built in rather than merely hoped for.
2. Situations were chosen so as to optimize immediate recognition and understanding by child viewers. We reasoned that such presentations are likely to capture and hold attention and are likely to facilitate learning (cf. Lesser, 1970). Establishing relevancy immediately is also important because 30 seconds is inadequate for a gradual setting of the conflict.

3. An emphasis was placed on physical action. There was complete agreement that action is one of the important elements in capturing the young child's attention. We had seen this in our own work in analyzing attention to television programming, and reports from researchers involved with *Sesame Street* concur with the finding. For exposure as brief as 30 seconds, we reasoned that it might be particularly critical to capture attention in the beginning, and so all of the spots start with relatively high action.

4. Verbal statements are used to complement action and explicate both the conflict and solution. Labeling the positive behavior to which viewers are being exposed has been shown repeatedly to facilitate both learning and generalization of the lesson (e.g., Liebert and Allen, 1967; Liebert, Hanratty and Hill, 1969).

5. The positive consequence of the modeled behavior is accentuated. An enormous number of experiments have now shown that acceptance of a model's behavior is greatly facilitated when positive outcomes result, that is, when vicarious reward is part of the observational learning experience. Thus, in all of the spots cooperation leads to obvious satisfaction for the peer exemplars. They are smiling, enjoying their games, or satisfied with their work.
Using these and other guidelines, several potential storylines were conceptualized, scripted, and put into storyboard form. The storyboards thus created provided us a basis for recommending the filming of two of the spots and for completely rejecting one of them. A more appealing script was written for the third spot, and the three spots were then produced in a relatively finished form such that evaluation could begin.

Evaluating the Spots

Strategy. Evaluation of children's reactions to television programs designed for them has been the exception rather than the rule. Series pilots, which yield a measure of a program's appeal before a large commitment is made, are often aired for adult shows, but rarely for children's (Liebert, Neale, & Davidson, 1973). Testing, of course, lies at the heart of our work.

Our research effort specifically involves three separate prongs that follow directly from our theoretical model of observational learning. We evaluate the spots for the attraction they hold for youngsters (exposure), the clarity with which they convey the intended message (acquisition), and overt changes they produce in attitudes or behavior (acceptance). Within this framework our strategy involves testing each promising spot idea in a rough film version and altering it according to the results of this first, formative research; then we re-test to see if the alterations have been effective;
a final version is produced only after all test results are satisfactory. The original spots have fared differentially through this procedure but the success of the strategy can be illustrated by describing the research on The Swing, a spot that was first aired on network television in May, 1974, and has since appeared on all three major networks and numerous independent stations.

The Swing opens with a boy and girl, approximately 8 to 10 years of age, running across a field to reach a swing on a playground and beginning to struggle over it, each claiming first rights. After a moment during which battle seems inevitable, one of the youngsters produces the insight that they should take turns and, significantly for the example, suggests that the other child go first. The last seconds show each of the children taking her or his turn, joyfully swinging through the air with the help of the other. In the background an adult is pushing a youngster on another swing, providing a slightly different example of positive social behavior.

Overall research on this spot involved initial tests of attention, comprehension, and acceptance — slight revisions to increase dramatic and esthetic appeal — and then final tests of attention and comprehension. I will describe what we consider our major evaluations.

Exposure to self-controlled attention. The Swing's power to hold attention was undertaken by inviting 4- to 9-year-old boys and girls (our target audience) to watch regular television entertainment programming in our laboratory.
The material viewed was altered slightly so as to be interrupted by *The Swing* and commercial spots that we had selected. To control for possible artifacts, half or the children watched one show and half another; the location of *The Swing* within each also was systematically rotated.

While the children watched television, a concealed videotape camera was used to monitor and record their faces, and this information was multiplexed with the material the children actually watched to produce a split-screen recording. Thereafter, pairs of trained observers separately but simultaneously rated the amount of attention that each child gave to any bit of programming, as shown on the video record. These data allowed us to make a direct comparison of *The Swing* with two other spots for product commercials. Our results showed that *The Swing* more effectively captured the attention of the full range of children for whom it was intended; it is not simply that the other two spots were watched less (although on the average they were) but rather that -- probably unknown to their creators -- the other spots successfully reached only a sub-group of their intended audience. (See Figure 1). The prosocial *Swing*, in contrast, not only did not turn children away but appeared to interest them uniformly when presented in the way in which it would appear on broadcast television, against the background of entertainment shows and product commercials.

**Acquisition.** The purpose of evaluating acquisition simply is to ascertain that children do indeed understand the lesson being presented. Our measure consisted of showing *The Swing* on a television monitor to 4- to 9-year-old children.
and interviewing them about its content. It was necessary from our point of view, that the specific setting of the spot, as well as the primary message, be understood. Youngsters thus were asked to cite the most important thing about the story, the location and activity depicted, the actual conflict, and the resolution of the problem. Overall comprehension averaged 93% with a range of 85 to 100% for the various questions. Figure 2 shows the average percent of correct answers for each question asked. It also shows the average comprehension for another potential spot (56% overall) Tin Can Alley; based on this evaluation we recommended a re-shooting of the spot.

The commercial spot in Figure 2 is a children's food product commercial that, like our spots, contains a storyline; overall comprehension was 67%. These latter results provide striking evidence for the need for adequate evaluation of understanding by youngsters of even the very short messages that are presented on television.

Acceptance. To evaluate the effects of The Swing on behavior, boys and girls from the second and fourth grades of a public school were given the opportunity to view twice consecutively either The Swing or one of two children's commercials. They then played a game in which they could earn points in order to win a prize; the larger the number of points, the better the prize. The game was designed so that cooperation could facilitate both children earning points.
The choice was thus to cooperate for mutual benefit or "fight it out" to assure one's own positive outcome, a choice not unlike the one faced by the exemplars in The Swing.

The mean number of seconds of cooperation and competition was calculated for children who saw The Swing and for those who saw the commercials. (See Figure 3). The Swing group cooperated for an average of 151 seconds and competed for an average of 146 seconds; youngsters who had viewed commercials cooperated for 89 seconds and competed for 207 seconds, on the average. Watching The Swing clearly made cooperation a more likely outcome.

A Final Comment.

Using the identical model and strategy, we are now testing another version of the spot mentioned earlier (Tin Can Alley), as well as a completely new third spot. This report, then, is a progress report rather than a definitive statement. Overall, though, we believe that the framework that we have adopted is leading to valuable information about the effectiveness of the spots, and that it is a viable model for the production and evaluation of the whole range of television programming for children.
References


Bogart, L. Warning: The Surgeon General has determined that TV violence is moderately dangerous to your child’s mental health. *Public Opinion Quarterly, 1972, 36, 491-521.*


The percentage of time girls and boys of different age groups attended the Swing and two commercial spots.

Figure 1

Percent of Time Attending

- 4-6
- 7-9

Commercial Spot 1

Commercial Spot 2

Girls

Boys
Percentage of comprehension for the string another prosocial sport, and a commercial sport.

Resolution of problem:
- Conflict point
- Focal activity
- Location
- Most important idea

The Swing

The Can Alley

Percent Correct Answers

I
II
III
IV
The mean number of seconds that children who watched the Swing and commercial spots cooperated and competed in a game subsequent to the viewing experience.

Figure 3

Mean Number Of Seconds

0 50 100 150 200 250

Cooperation

Competition

The Swing

Commercial Spots