The effect of having a child serve as a rule-following model for other children on the model's own subsequent rule-following was investigated in a resistance to deviation situation. A total of 45 middle-class boys in grades 1 and 2 were randomly assigned to one of three experimental conditions following instruction not to touch a set of attractive but prohibited toys. In the model condition, boys performed as models of resistance to deviation before a TV camera for children at another school. In the no model condition, boys were told they would serve as models for others but, through a mechanical failure, were unable to do so. Control subjects were not told they were to be models. When alone with the prohibited toys, boys in the model condition touched less often and for less time than did boys in the control condition. Boys in the no model condition did not touch significantly less than control subjects. Further, model boys touched less quickly than no model and control subjects. Finally, boys in the model condition spontaneously reproduced the idiosyncratic resistance behaviors they modeled more than boys in the other conditions who also practiced this behavior. Thus, having a child serve as a model of good behavior for other children appears to be an effective disciplinary technique that avoids some of the undesirable side effects associated with punishment, such as increases in the child's aggression, resentment and alienation. (Author/MS)
The Effect of Serving as a Model of Self-Control on Subsequent Resistance to Deviation in Children

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Abstract

The effect of having a child serve as a rule-following model for other children on the model's own subsequent rule-following was investigated in a resistance to deviation situation. First- and second-grade boys who were told they would serve as self-controlling models for others and who actually served in this capacity touched prohibited toys less than did boys who were not told they would serve as models. Boys told they were to serve as models but who were prevented from performing did not deviate significantly less than boys who were not so informed. Having children serve as rule-following models for others is suggested as an effective, non-punitive technique to increase their self-control.
Serving as a Model

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The Effect of Serving as a Model of Self-Control on Subsequent Resistance to Deviation in Children

The effectiveness of punishment as a means to induce self-control in young children has been the concern of much research (e.g., Walters and Parke, 1967). In general, while punishment has been found to lead to immediate suppression of unwanted behavior at the time of its administration, its effectiveness in inducing self-control in children following its administration has been questioned. While the provision of rationales for resisting deviation has been shown to increase the likelihood of self-control following punishment (e.g., Parke, 1969), alternative, non-punitive techniques of increasing the child's self-control have been the focus of most recent research. A number of investigations have demonstrated that exposure to a resisting (i.e., self-controlling) model can increase resistance to deviation in observing children (e.g., Wolf and Cheyne, 1972; Perry, Bussey, and Perry, 1975; Toner, Parke and Yussen, 1977). Further, Bosserman and Parke (1973) have demonstrated that if the child is given the responsibility of enforcing a rule for other children by punishing them for their violations, he will subsequently be less likely to deviate from the rule himself when unsupervised.

The present study investigated the effect of having a child serve as a rule-following model for other children on the model's own subsequent rule-following. Being imitated can be reinforcing for young children (e.g., Fouts, Waldner, and Watson, 1976) and prior role playing of prosocial behaviors has been found to increase a child's subsequent helping and sharing behavior (Staub, 1971). It was thus predicted that young boys who demonstrated resistance to touching a set of attractive but prohibited toys to others would
themselves be less likely to touch the prohibited toys when alone.

Method

Subjects

The subjects were 45 boys drawn from first- and second-grade classes in a middle class elementary school in Charlotte, North Carolina. The children ranged in age from 73 to 94 months with a mean age of 81.8 months. All subjects were white and estimated to be of normal intelligence. The sample was evenly divided into three experimental groups and tested individually by a white, female undergraduate student who served as the experimenter.

Procedure

For all conditions, the experimenter and each individual subject entered a room in a mobile research trailer parked at the school. The experimenter directed the child to be seated at a table upon which were a plastic robot, a large, empty water pistol, an egg timer, a seaplane, and a cement truck. Each child was told, "Don't touch the toys that are on the table."

In two of the experimental conditions, the child was then instructed to hold his hands out, palms forward toward the toys, as if to signify "stop", and he was told that, when he exhibited this behavior on cue, the experimenter would turn on a hand-held television camera and broadcast his picture so that the child would help the experimenter "teach some children at another school not to touch these toys."

In the model condition, the subject demonstrated the "stop" behavior on cue and was told that his picture was being seen at the other school. Children in this condition, therefore, were told they would serve as models and, further, believed they actually served as models of self-control for other
In the no model condition, after being told that he would be a model, the subject was informed that, due to some mechanical failure and through no fault of his own, his picture would not be seen by other children so that he no longer had to play out the scene.

Boys in the control condition were never told they were going to serve as models for others. These boys merely demonstrated the "stop" behavior at the experimenter's request.

All subjects in all conditions demonstrated the "stop" behavior six times in the presence of the experimenter with the boys in the model condition believing that the last three times they performed the "stop" behavior, they were being televised.

As a test of rule-following, children in all conditions were told to remain in the room while the experimenter went to her car, promising to return. The experimenter left the testing room, closed the door, and observed the child through a one-way vision screen for ten minutes. The child's levels of deviation from the toy-touching prohibition and demonstration of the "stop" behavior were recorded. Three deviation measures were obtained: (1) the total number of times that the child touched the toys, (2) the total number of seconds that the child made contact with the toys, and (3) the time in seconds that elapsed between the experimenter's exit from the room and the child's first deviation. The total number of times that the subject demonstrated the "stop" behavior with his hands during this 10 minutes period was also recorded.

When the observation period was over, the experimenter returned to the room, knocking on the door prior to entry. Once inside, she talked briefly
with the child and then, after asking each child to keep secret the details of their interactions, she escorted him back to his school room.

Results

The means for the three measures of deviation and for the number of times the "stop" behavior was demonstrated by the boys in each experimental condition are depicted in Table 1.

A one-way analysis of variance test was performed on each of the four dependent variables and significant findings were subjected to the Newman-Keuls post-hoc comparison technique.

The manipulations of the present study resulted in significant differences between the three experimental groups in number of deviations from the prohibition ($F (2,42)= 4.58, p < .02$), duration of deviation ($F (2,42)= 5.42, p < .01$), latency to first deviation ($F (2,42)= 7.65, p < .002$), and number of "stop" behaviors ($F (2,42)= 11.44, p < .002$) demonstrated by the boys when they were alone with the prohibited toys.

Boys in the model condition touched the prohibited toys less often ($p < .05$) and for less time ($p < .01$) than did boys in the control condition. Boys in the no model condition touched somewhat less often and for somewhat less time than control subjects but these differences failed to reach statistical significance. Further, boys in the model condition waited longer before deviating than did no model and control subjects, $p < .01$ for both comparisons. Finally, boys in the model condition demonstrated the "stop" behavior more
times when alone than did boys in the other two conditions, \( p < .01 \) for both comparisons.

**Discussion**

Children who served as models of self-control for other children demonstrated more self-control themselves in a subsequent test of resistance to deviation than did children who did not have this opportunity. Merely informing the young child that he will have the responsibility of serving as a model without permitting him to serve in that capacity resulted in some increase in self-control when compared to children who were not so informed. However, the present study clearly demonstrated the importance of actual service on the child's subsequent behavior. Together with the results of previous investigations of the effect of self-controlling models on the behavior of observing children, the present study extends the beneficial impact of the peer modelling technique to the model himself.

In an attempt to assess the impact of the experience of serving as a rule-following model on non-middle class children, disadvantaged first- and second-grade boys were tested in a follow-up study using the procedures of the present investigation. Serving as a self-controlling model had no impact on the subsequent resistance to deviation of these children. Thus, the procedure may not be appropriate for all children and it must be assessed with children of various backgrounds to determine its feasibility as a technique to increase their self-control.

Since there are no punitive aspects in the procedure of having the child serve as a rule-following model, this technique may avoid some of the undesirable side effects associated with punishment, such as increases in the child's
level of aggressiveness, and his resentment of and alienation from the disciplinary agent (Parke, 1972). Finally, the present study is a further demonstration of the efficacy of employing disciplinary techniques which take advantage of the child's developing cognitive and linguistic capabilities.
References


Child Development, 1972, 43, 1429-1436.
Footnote

A version of this paper was presented at the Biennial Conference of the Society for Research in Child Development, New Orleans, March 1977. Requests for reprints should be sent to Ignatius J. Toner, Department of Psychology, University of North Carolina at Charlotte, Charlotte, North Carolina 28223.
Table 1

Means of Deviation Measures and "Stop" Behavior for Boys in the Three Experimental Conditions (N=45)

<table>
<thead>
<tr>
<th>Measure</th>
<th>Model</th>
<th>No Model</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Deviations</td>
<td>1.9</td>
<td>5.8</td>
<td>8.5</td>
</tr>
<tr>
<td>Duration of Deviation (secs.)</td>
<td>4.7</td>
<td>30.0</td>
<td>49.5</td>
</tr>
<tr>
<td>Latency to First Deviation (secs.)</td>
<td>449.2</td>
<td>189.5</td>
<td>206.3</td>
</tr>
<tr>
<td>&quot;Stop&quot; Responses</td>
<td>3.8</td>
<td>0.4</td>
<td>0.3</td>
</tr>
</tbody>
</table>