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ABSTRACT

This study assesses the effects of three kinds of verbal plans, temptation-inhibiting plans, reward-oriented plans, and task-facilitating plans, on children's resistance to temptation. Each plan was studied in an elaborated and an unelaborated form. Subjects were 70 four-year olds, 35 boys and 35 girls. The major piece of apparatus employed was a talking Clown Box. Each child was shown a pegboard task, and warned that the Clown Box might tempt him to stop working, thus ensuring that he would be allowed to play only with some unattractive toys rather than with some special ones. The children were instructed in group-specific verbalizations to be repeated to the Clown Box. The main dependent measure assessed the proportion of time spent working by each child. Subjects in the elaborated temptation-inhibiting and elaborated reward-oriented plan conditions worked for a greater proportion of the test phase than those in other plan conditions and than those in the control conditions. Whether or not a self-instructional plan will facilitate a young child's self-control depends on the substantive or content nature of the plan, and its level of organization of structure. (Author/JLL)

Self-Instructional Plans and Children's Resistance to Temptation[1]

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Presented at the Western Psychological Association, Los Angeles, California (April 8-11, 1976).

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In recent years, a great deal of research attention has been devoted to exploration of the idea that Miller, Galanter and Pribram proposed in their now classic book, Plans and the Structure of Behavior (1960). That idea, of course, was that in order to understand the patterning of a person's activities, one must understand the nature of that person's plans. The impact of plans on behavior has to date been studied most extensively and fruitfully in the realm of cognitive psychology and psycholinguistics. The implications of such an approach for the study of personality and social behavior are, however, no less intriguing; but they are only beginning to be explored (Hartig and Kanfer, 1973; Kanfer, Cox, Greiner and Karoly, 1974; Patterson and Mischel, 1975, 1976).

In attempting to analyze the influence of planning on social behavior, we have found it useful to make a distinction between the organization or structure of plans on the one hand, and their content or substance on the other. From a structural point of view, we have been interested in asking how the level of organization or degree of structure of a person's plans affects their ability to influence behavior in desired directions. In studying the substance of plans, we have been concerned with the ways in which their contents (i.e., their substantive nature) affect their ability to provide effective guides for behavior. The study we report today was conducted in an effort to begin an analysis of plans for children's self-control from these twin perspectives.

The general structural question that we were concerned with was:

To what extent does the success of plans in facilitating self-control depend upon their being elaborated in great detail in advance of the occasion for their execution? Is it essential that many details of a plan for self-control be specified in advance, if it is to have a beneficial impact on subsequent performance, or will a relatively unelaborated plan suffice? One aim of the study was to compare children's ability to utilize plans of varying degrees of elaboration in a resistance to temptation situation. Accordingly, some children were offered plans which specified exactly what verbalizations they should employ in order to facilitate their efforts at self-control in a subsequent test situation, while others were offered plans which specified the nature but not the specific contents of such verbalizations.

In an analysis of the effects of the substantive nature of plans on their ability to facilitate self-control, we were interested in the relative efficacy of plans which direct attention to different aspects of the self-control situation. In this study, we assessed the effects of plans which focused on three different aspects of the self-control situation: temptation-inhibiting plans, which directed the inhibition of attention to the temptation; task-facilitating plans, which directed attention to the task to be completed; and reward-oriented plans, which focused on the rewarding consequences of self-control. Based on the results of earlier work (Mischel, Ebbesen, and Zeiss, 1972; Mischel and Underwood, 1974; Patterson and Mischel, 1975, 1976), we expected that temptation-inhibiting and reward-oriented plans would facilitate children's resistance to temptation, but that task-facilitating plans would not.

To summarize our aims, then, we studied the effects of three dif-

ferent kinds of verbal plans--temptation-inhibiting plans, reward-oriented plans, and task-facilitating plans--on children's resistance to temptation. Each plan was studied in two forms. In the elaborated form, both the nature and actual contents of the plan were specified by the experimenter; in the unelaborated form, the experimenter specified the nature of the plan, but the subject was left to generate the particular words with which to execute the plan.

We ran two additional groups as controls. In one of these groups, the children were given an irrelevant verbal plan (a nursery rhyme to recite during the resistance to temptation test) to control for effects of verbalization per se. In the other, subjects were not given plans of any sort. Our dependent measures assessed the degree to which these plans facilitated subjects' continued work on a task in the face of attractive temptations to stop working.

The major piece of apparatus employed in this study was a "Clown Box". The Clown Box was a large white wooden box, with a life-size clown's face painted in bright colors on the front. There were toys inside of windows on either side of the Clown face, and a variety of lights on the box could be made to blink on and off. In addition, a speaker inside the Clown Box (and connected to a hidden tape recorder) made it seem that the Clown Box was able to "talk".

Our subjects were 70 four year olds, 35 boys and 35 girls, who attended a nursery school in the Palo Alto area. They were randomly assigned, ten to each condition within the 2 x 3 design, and 5 to each of the two control conditions. They were tested individually.

Upon entering the experimental room, the child was shown a task which involved putting a large number of pegs into a pegboard. The experimenter

explained that she would have to leave the room, but that the child could work on the pegboard task while she was gone. The child was introduced to the Clown Box and warned that the Clown Box might tempt him to stop working. The child was told that if he worked on the task the entire time that the experimenter was gone, and did not pay attention to the Clown Box, then he would be allowed to play with some special toys and with Mr. Clown Box upon the experimenter's return. If, however, he paid attention to the Clown Box and did not finish the task, he would only be allowed to play with some unattractive, broken toys when the experimenter returned. All children promised to try to work hard and to ignore Mr. Clown Box.

If the child had been assigned to a self-instructional plan condition, the experimenter introduced the plan by saying, "Let's try to think of something you could do to keep working, and not let Mr. Clown Box slow you down...I know what you can do." If the subject had been assigned to the elaborated temptation-inhibiting plan condition, she continued:

"When Mr. Clown Box says to look at him and play with him,

then you can just say "no, I'm not going to look at Mr. Clown Box." These instructions were elaborated and repeated in a standard way. The plan was introduced in the same way for the elaborated reward-oriented group, except that they were instructed to say, "I want to play with the fun toys and Mr. Clown Box later." Again, the introduction was the same for those in the elaborated task-facilitating plan condition, except that they were told to say, "I'm going to look at my work."

If the subject had been assigned to the unelaborated temptation-inhibiting plan condition, he was told:

"When Mr. Clown Box says to look at him and play with him, then you can just think of something to say out loud that will help you not to look at Mr. Clown Box. You can say anything you want that will help you not to look at Mr. Clown Box."

In the unelaborated reward-oriented plan condition, the plans were introduced in the same way, except that the subject was told to "think of something to say out loud that will remind you of what you get to play with if you finish your work". Again, the introduction was the same for those in the unelaborated task-facilitating plan condition, except that they were instructed to "think of something to say out loud that will help you to keep looking at your work".

In the irrelevant plan condition, the introduction was the same, but children were asked to recite the nursery rhyme: "Hickory, dickory, dock; the mouse ran up the clock." during the time that the experimenter was out of the room. In the no plans condition, the experimenter gave no instructions about what to say.

The test phase began as the experimenter made her exit, leaving the child to work on the task. Thirty seconds after the experimenter's exit, the Clown Box began a standard routine--lights turning on and off, and "talking" to the child--which was designed to tempt the child to stop working. The Clown Box routine continued throughout the six minute test phase, and was always identical, regardless of the child's actions.

The main dependent measure assessed the proportion of time spent working by each child, in the face of the Clown's temptations. These data are shown in Figure One, and may be summarized easily. Subjects in the elaborated temptation-inhibiting and elaborated reward-oriented plan conditions worked for a greater proportion of the test phase than those

in other plan conditions ($p < .01$) and than those in the control conditions ($p < .01$). In other words, the children's ability to sustain goal-oriented work was facilitated only in the temptation-inhibiting and reward-oriented plan conditions, and only when these plans were fully elaborated. The same pattern of findings emerged when data for amount of work completed were examined.

These findings provide clear evidence that the effectiveness of a task-relevant plan for self-control depends upon its specific content. Our results suggest that the cognitive activity underlying resistance to temptation in this situation is probably not the direction of attention to the task per se, but rather the active suppression of attention to the temptation or the direction of attention to rewarding consequences of continued work. These results, then, contribute to our understanding of the cognitive factors which facilitate children's efforts to maintain self-control.

Our results also point to the importance of specifying many, if not all, details of a plan in advance if the plan is to be successful in facilitating young children's self-control. Although the children in this study made good use of the elaborated plans, they seemed unable to employ the unelaborated plans to any advantage. In other words, whether or not a particular self-instructional plan will facilitate young children's self-control evidently depends not only on the substance or content of the plan, but also on the extent to which the exact words with which to execute the plan have been specified.

In conclusion, then, the results of this study demonstrate from two different perspectives the importance of a plan's "fit" with the cognitive and situational circumstances in which it must be implemented. In the

first place, out results confirm that, if it is to be successful, a plan's cognitive focus or content must be appropriate to the demands of the situation in which it is to be employed. Beyond this, our results indicate that the success of a plan also depends upon its having been elaborated fully enough in advance to ensure its smooth execution when the need arises. Thus, whether or not a particular self-instructional plan will facilitate young children's self-control evidently depends not only on the substantive nature or content of the plan, but also on its level of organization or structure.

References

Hartig, M., & Kanfer, F. H. The role of verbal self-instructions in children's resistance to temptation. Journal of Personality and Social Psychology, 1973, 25, 259-267.

Kanfer, F. H., Cox, L. E., Greiner, J., & Karoly, P. Contracts, demand characteristics, and self-control. Journal of Personality and Social Psychology, 1974, 30, 605-619.

Miller, G. A., Galanter, E., & Pribram, K. H. Plans and the structure of behavior. New York: Holt, Rinehart and Winston, 1960.

Mischel, W., Ebbesen, E. B., & Zeiss, A. Cognitive and attentional mechanisms in delay of gratification. Journal of Personality and Social Psychology, 1972, 21, 204-218.

Mischel, W., & Underwood, B. Instrumental ideation and delay of gratification. Child Development, 1974, 45, 1083-1088.

Patterson, C. J., & Mischel, W. Plans to resist distraction. Developmental Psychology, 1975, 11, 369-378.

Patterson, C. J., & Mischel, W. Effects of temptation-inhibiting and task-facilitating plans on self-control. Journal of Personality and Social Psychology, 1976, 33, 209-217.

Footnote

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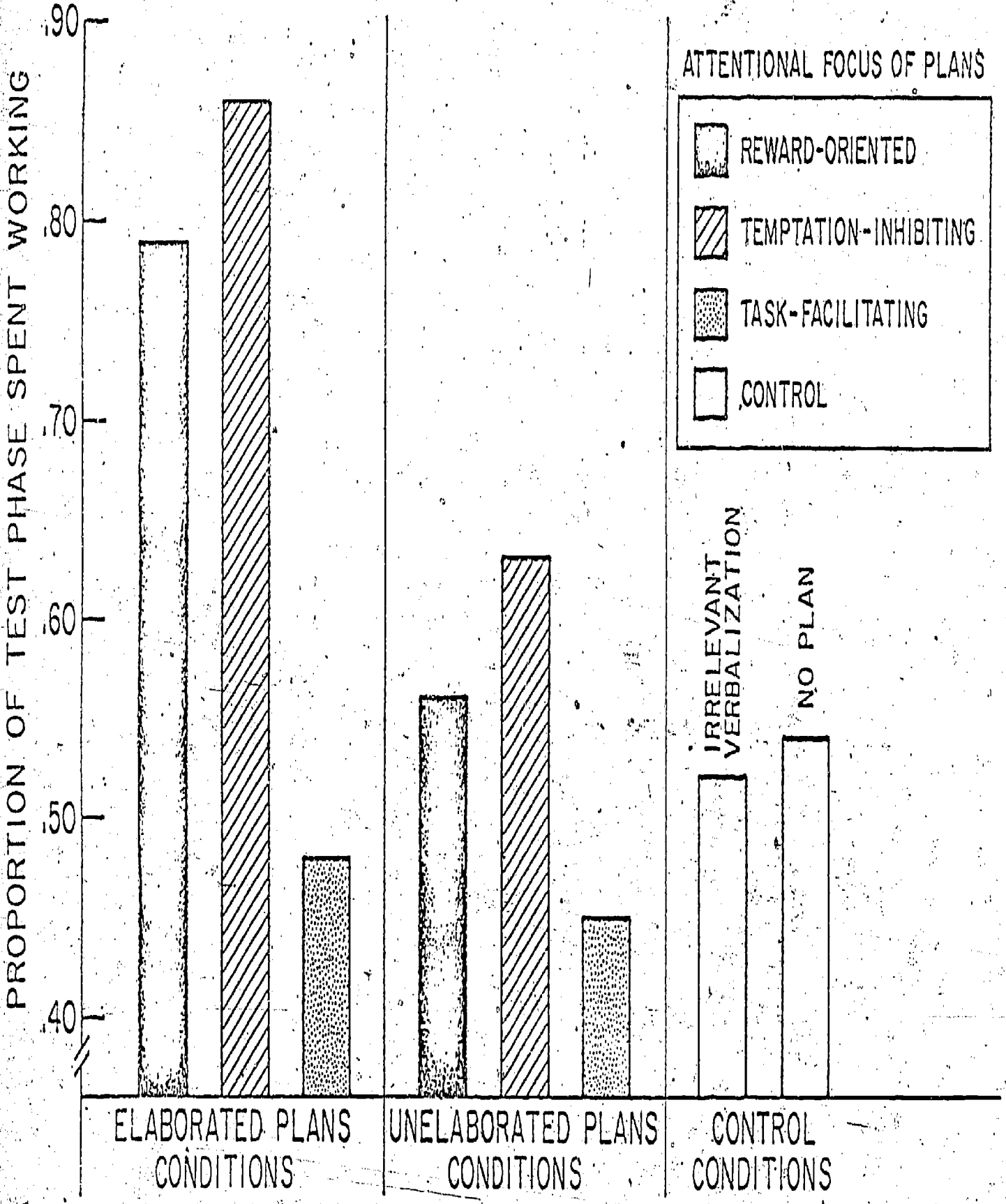
PROPORTION OF TEST PHASE SPENT WORKING
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ATTENTIONAL FOCUS OF PLANS
REWARD-ORIENTED
TEMPTATION-INHIBITING
TASK-FACILITATING
CONTROL
IRRELEVANT VERBALIZATION
NO PLAN
ELABORATED PLANS CONDITIONS
UNELABORATED PLANS CONDITIONS
CONTROL CONDITIONS

Figure 1