Effects of a model's experience on children's imitation

ROBERT M. LIEBERT and MARY K. ALLEN, *Vanderbilt University, Nashville, Tenn. 37203*

This study investigated the effects of a model's prior experience on children's imitation of her preferences in a choice situation. Only the preferences of an experienced model were imitated beyond chance, and the amount of imitation tended to increase as the amount of experience increased. These results are consistent with an informational analysis of imitative behavior.

An informational analysis of the effects of modeling cues (Allen & Liebert,² in press) implies that increasing a model's prior task-relevant experience will increase the likelihood of imitation by a novice observer. Allen and Liebert, investigating the effects of such experience on children's adoption of a modeled self-reward standard, found that the manipulation influenced self-reward only for relatively high substandard scores. The purpose of the present experiment was to further examine the experience hypothesis using a different task and three levels of experience. Moreover, in order to test the additional hypothesis that an inexperienced model will be almost entirely ineffective in a simple choice situation, a no-model control group was also included.

METHOD

The Ss, 32 eight- and nine-year-old boys from a public school in the Nashville area, were randomly assigned to one of four treatments: high-experience/modeling, moderate-experience/modeling, no-experience/modeling and no-experience/no-modeling. The same adult female was both E and model.

The task was a "duck-hunting game" which required each player to select a target duck, a hunting hat, and a dart gun from among four targets (increasing arithmetically in size), four hats (ranging in color from light to dark brown), and four guns (ranging in color from white to dark gray). Each S was told that he was to wear a special hunting hat while playing the game and that he could wear any one of the hats, use any one of the guns, and shoot at any one of the targets. Next, the relevant treatment was introduced and the S was left alone to shoot six darts at the target of his choice.

To manipulate experience level, the E employed the following statements: (1) None—"I have only been working with this game for a week and I don't know how children play it." (2) Moderate—"I have been working with this game for about a month, and most of the children wear the DARK BROWN hat, use the WHITE gun, and shoot at the SMALLEST target." (3) High—"I have been working with this game for over a year and I have shown it to hundreds of children. Almost all of them wear the DARK BROWN hat, use the WHITE gun, and shoot at the SMALLEST target."

In the three modeling groups, the E attributed to herself one of the levels of experience and then performed the game, wearing the dark brown hat, using the white gun, and shooting at the smallest target. In the no-modeling condition, she described herself as inexperienced (see Statement 1) and did not perform or in any way indicate her preferences.

An unseen O recorded the hat, gun, and target chosen initially by each S, as well as any changes made in the course of the game. The items in each set were assigned scores ranging

Table 1
Mean Imitation Scores in all Groups

Modeling	Experience	Mean Score
Absent	None	7.50
Present	None	7.06
Present	Moderate	9.10
Present	High	9.88

from 4 for the selection modeled to 1 for the most dissimilar item. A mean score was obtained for each of the sets, the sum of these means providing the S's imitation score. Note that perfect imitation would be reflected in a score of 12 whereas, assuming that the alternatives were equally attractive, chance matching would yield a score of 7.5.

RESULTS AND DISCUSSION

The mean imitation scores obtained in each treatment group are presented in Table 1. A one-way analysis of variance performed on these scores yielded a significant effect for treatments ($F = 3.14$, $df = 3/28$, $p < .05$). Recalling that random choosing would yield a score of 7.5, examination of the data indicates that the mean score obtained in the no-experience/no-modeling group is no greater than would be expected by chance. A comparison made between this group and the no-experience/modeling group revealed no difference between them ($t = .53$); also no difference was found between the moderate-experience/modeling and high-experience/modeling groups ($t = .62$). Therefore, collapsing across these pairs of treatments, a comparison was made between the combined experience and no experience groups. This comparison indicated that the presence of experience produced significantly more imitation of the model's choices than did absence of experience ($t = 3.02$, $p < .005$, one-tailed).

These results are consistent with Allen and Liebert's heuristic informational analysis (in press). As anticipated, modeling cues were found to be most effective when offered by a highly experienced model, slightly less effective when presented by a moderately experienced agent, and least influential when an inexperienced model was employed. In many studies of imitation mere observation of a model's behavior, regardless of whether he avowed experience, has been sufficient to promote emulation of his actions (see Flanders, 1968). However, it is plausible that, in the absence of any statement by the model, Os assume (and behave as if) the model is at least somewhat knowledgeable about the task. Further research is planned to examine this intriguing issue.

REFERENCES

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NOTES

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2. Allen, M. K., & Liebert, R. M. Children's adoption of self-reward patterns: Experience and incentive level. Unpublished manuscript, Vanderbilt University, 1968.