THE DEVELOPMENT AND GENERALIZATION OF DELAYED IMITATION¹

EUGENE E. GARCIA

UNIVERSITY OF UTAH²

An individual's behavior can be identified as imitative if it temporally follows the behavior of another individual and if its topography is controlled by the demonstrated behavior [Baer, Peterson, and Sherman (*Journal of the Experimental Analysis of Behavior*, 1967, 10, 405-416)]. This definition takes into account both temporal and topographical characteristics of the behavior in question. More recent research in the area of imitation has interpreted the temporal component of the above definition differentially by limiting imitation to those topographically similar responses occurring within 3, 5, or 10 sec after a model's demonstration. Yet, Gewirtz and Stingle (*Psychological Review*, 1968, 75, 375-397) pointed out that much of the imitation seen in young children is not of this immediate nature, but instead occurs sometime after a model's response. They further suggest that this type of imitative behavior can be characterized as a response class and is susceptible to development and modification as a function of consequences delivered to subjects contingent on this type of delayed responding. Four retarded children, three initially imitative and one nonimitative, were individually trained to imitate a number of motor responses in an immediate and a delayed fashion. Immediate imitation was defined as a response similar to a model's demonstration occurring within 5 sec after the model's demonstration; delayed imitation was defined as a response similar to a model's demonstration occurring more than 5 sec, but not more than 25 sec, after the model's demonstration. A reversal (ABAB) design was employed to examine the experimental development of a generalized delayed imitative repertoire. Untrained probe responses were demonstrated to subjects systematically through the ongoing training. Generalized immediate and delayed imitation were observed in each subject; this generalization was restricted to the type of imitation currently undergoing training. This development of a generalized imitation repertoire was observed in each subject. That is, these subjects imitated some responses that had never been specifically trained. More importantly, a training package consisting of prompting, fading, and consequences for delayed imitation functioned to develop generalized delayed imitation. These data exemplify a special case of generalization that was a function of the most recent training history of immediate or delayed imitation. The reversal design demonstrated that imitations of nontrained models were either delayed or immediate, depending upon which form of imitation was currently receiving training. Therefore, for each form of imitation trained, delayed or immediate, a corresponding response class was demonstrated. These data relate to data reported by Garcia, Baer, and Firestone (*Journal of Applied Behavior Analysis*, 1971, 4, 101-112). The association lies in the proposition that there are identifiable boundaries of generalized imitation and that these boundaries are functionally related to previous training histories.

DESCRIPTORS: imitation, delayed imitation, response class, generalization, children, retardates

¹The full text of this manuscript is deposited with the National Auxiliary Publications Service (NAPS). For copies, order NAPS Document #02835. Order from ASIS/NAPS Co., c/o Microfiche Publications, 305 East 46th Street, New York, New York 10017. Remit with order for each copy \$3.00 for microfiche or \$6.25 for photocopies. Make checks payable to Microfiche Publications. Thanks and appreciation are given to staffs of the Children's Behavior Therapy Unit, Salt Lake City, Utah, and the Utah State Training School, American Fork, Utah, for their continued support and cooperation.

²Department of Psychology, University of Utah, Salt Lake City, Utah 84112.

Received 11 December 1974.

(Final acceptance 10 March 1976.)