Performance as a Source of Perceived Control

Florentius Chan  
University of California-San Francisco

Joseph Karbowski  
Virginia Polytechnic Institute and State University

Richard A. Monty  
Aberdeen Proving Ground

Lawrence C. Perlmuter  
Harvard School of Dental Medicine and VA Outpatient Clinic

The purpose of this experiment was to examine the effects of choice and environmental control on the development of the perception of control. The results showed that the perception of control develops from an opportunity to make choices. More deliberate (slower) decisions resulted in an increase in the perception of control, and these perceptual effects generalized to a dice-throwing task over which no choice was possible. A model was examined which assumes that subjects monitor their own behavior with the result that more thoughtful decisions lead subjects to infer higher levels of control.

Previous research has shown that children, adults, and elderly individuals who were provided with an opportunity to exercise some choice on a learning task performed better than those who had no such opportunity (e.g.,

---

1A portion of these results was presented at the annual meeting of the South Eastern Psychological Association, 1983. This research was supported in part by the VA Medical Research Services, the U.S. Army Human Engineering Laboratory, and Grant AGO 2300 from the National Institute on Aging. Appreciation is expressed to Kathleen Flannery for her assistance with the preparation of this paper and for her helpful comments.

2Address all correspondence to Lawrence C. Perlmuter, Harvard School of Dental Medicine, 188 Longwood Avenue, Boston, Massachusetts 02115.
Brigham, 1979; Fleming & Lopez, 1981; Perlmuter, Monty, & Kimble, 1971). To account for these findings, Perlmuter and Monty (1977) proposed that providing subjects an opportunity to choose may result in an increase in the perception of control, which in turn heightens their motivation, resulting in improved performance. To test this hypothesis a study was conducted by Perlmuter, Scharff, Karsh, and Monty (1980), in which subjects who exercised choice on a paired associate task were found to respond faster on a subsequent reaction time task than those in a comparison group that had no choice on either task. Presumably, exercising choice on one task enhanced motivation, which, in turn, was reflected in faster reaction times on a subsequent and unrelated task.

Perceived control may be strengthened when choices are made from among relatively similar options that are at least moderately desirable (Perlmuter & Monty, 1977). By contrast, when the pair of options are dissimilar with respect to desirability, the requirement to choose may diminish the perception of control (Monty, Geller, Savage, & Perlmuter, 1979; Savage, Perlmuter, & Monty, 1979; Steiner, 1979). Harvey and his associates (Harvey & Harris, 1975; Harvey & Jellison, 1974; Harvey & Johnston, 1973) studied the determinants of perceived choice (control) and found that it is not the mere act of choosing that leads to the development of perceived control, but rather that the development of perceived control is dependent upon such variables as the length of the decision latencies, uncertainty of outcome, meaningfulness of choice, and number of options.

One purpose of the present experiment was to study the relationship between response latencies and the perception of control. It was anticipated, on the basis of previous research (e.g., Chan, 1983), that when subjects are provided with an opportunity to choose, longer decision times should contribute to an increased perception of control. Implicit in this prediction is Chan's notion that subjects monitor or are incipiently vigilant to the duration of their decision processes. Moreover, subjects may evaluate their performance and draw inferences regarding its effectiveness (Chan, 1983).

A phenomenon that is similar to choice, in terms of its motivational consequences, has been labeled environmental control (Perlmuter & Chan, 1983; Revesman & Perlmuter, 1981). Operationally, environmental control is characterized by allowing a subject to exercise a modicum of control over nonaversive environmental stimuli. In one such study (Chan, 1983), subjects were permitted to select a response word to be learned to a stimulus. Each stimulus, along with a pair of responses, was presented on a screen. When subjects announced their desired response word, causing the screen to blank immediately (Control condition), decisions were made significantly faster than in a condition in which the materials remained displayed for a