Expectancy of Success on Sex-Linked Tasks

Ian D. McMahan
Brooklyn College of the City University of New York

College subjects undertook nine cognitive tasks with different perceived sex linkages, stating their expectancy of success prior to each task and attributing causality for their perceived performance following each task. As hypothesized, two components were present in the overall sex difference in expectancy of success, even when differences in actual task performance were statistically controlled. One component was attributable to a general tendency of females to state lower expectancies; the other was a function of the accord between the perceived sex linkage of the task and the subject's sex. The attribution data suggest that females tend to be more external for success and more internal for failure than males.

Expectancy of success is a central construct in the three best-known current approaches to achievement behavior: achievement motivation theory (Atkinson & Feather, 1966), Rotter's (1954) social learning theory, and attribution theory (Weiner, Frieze, Kukla, Reed, Rest, & Rosenbaum, 1971). The existence of systematic sex differences in expectancy of success is therefore of considerable theoretical as well as practical interest. Such differences are well documented. A series of studies by Crandall (1969) indicated that females held lower expectancies than males for a variety of tasks and at various ages from elementary school to college. Other investigators have reported similar sex differences on tasks as diverse as marble dropping (Montanelli & Hill, 1969), verbal intelligence tests (Brim, Glass, Neulinger, & Firestone, Note 1), and anagrams (Feather, 1969).

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2 Correspondence should be sent to Ian D. McMahan, Department of Psychology, Brooklyn College, Brooklyn, New York 11210.
In other studies, however, this sex difference was not evident. Feather (1967) found no sex difference in expectancy on a letter substitution task, and Feather and Simon (1971), in a replication of Feather (1969), did not find the sex difference obtained in the earlier study. Stein (1971) asked sixth and ninth graders for their expectancies in various skill areas and found sex differences only on mechanical skills, and only among lower-SES (socioeconomic status) subjects. And McMahan (1973b), in a study of sixth-grade, tenth-grade, and college subjects, found no sex difference in expectancy on an anagrams task, but strong differences on a simple addition task. These results and the apparent discrepancies among them raise two questions: (1) Why are the expectancies of females sometimes lower than those of males and sometimes not? (2) What theoretical account can be advanced for the existence of such differences at all?

In response to the first question, McMahan (1973b) suggested that an important and frequently overlooked factor may be the perceived sex linkage or sex-stereotyping of the task. For example, Stein, Pohly, and Mueller (1971) told sixth graders that the same tasks measured skills appropriate to boys, girls, or both, and found high success expectancies on sex-appropriate tasks, moderate expectancies on neutral tasks, and low expectancies on sex-inappropriate tasks. A person's overall expectancy of success on a given task may be the sum of various expectancies at different levels of generality, a view similar to that advanced by Rotter (1954). These component expectancies may include a belief that males are more likely to succeed on cognitive tasks generally than are females; a belief that one sex tends to perform better than the other on particular classes of tasks; perceptions of one's individual competence or incompetence at tasks in general; and perceptions of one's competence or incompetence at a given class of tasks. The first two beliefs are assumed to be general social cognitions; and the latter two, more idiosyncratic inferences from individual experience. One implication of this set of assumptions is that the greater the novelty of the task, the greater the influence of the social beliefs on an individual's expectancy. If the task is perceived as female-linked (i.e., as a task on which females perform better on the average than males), this belief would work against the more general belief in greater male competence to produce little or no overall sex difference in expectancy; for a male-linked task, the two beliefs would sum to produce large sex differences in expectancy.

A study by McMahan (1976) demonstrated that male and female college students reliably agree that various cognitive tasks favor one sex or the other. In general, males are believed to perform better on arithmetic, mechanical, and spatial tasks; and females are believed to perform better on verbal tasks. These beliefs are quite similar to the perceived sex-appropriateness of tasks (Stein, 1971) as well as to empirical sex differences in performance (Maccoby & Jacklin, 1974). The view advanced in this article is that these beliefs, and the more general belief in greater male competence, affect a person's expectancy of success independently of components of expectancy derived from previous experience.