THE EFFECT OF TASK CONTENT ON PERFORMANCE IN PROBABILISTIC INFERENCE TASKS

by

Lars-Erik Warg

Doctoral dissertation to be publicly examined in Hörsal 1, HSC, Uppsala University, on April 22, 1983, at 10 a.m., for the Degree of Doctor of Philosophy.

ABSTRACT


The purpose of the present thesis was to investigate the effect of task content on performance in probabilistic inference tasks which involve uncertainty. A series of empirical studies were conducted within the general framework of Social Judgment Theory (SJT), which stems from the work of Egon Brunswik. Before the three empirical studies are summarized, the framework is briefly described, and the possible effects of task content are discussed as well as the results of earlier studies concerned with effects of task content on performance in inference tasks.

The results from the empirical studies showed that (i) meaningful task content has a facilitating effect on performance in probabilistic inference tasks and that on a formal level of description, the effect is due to that content provides information about the function forms of the cue-criterion relations and the relative weights of cues, (ii) subjects tend to follow a strategy suggested by content, at least so long as the outcome feedback values do not deviate too much from the expected values, (iii) subjects can perform well in tasks with incongruency between content and actual ask structure by redefining the task so that they can make use of their old knowledge, (iv) the knowledge applied by subjects in content tasks can be causally organized, and (v) effects of predictability and function forms obtained in studies employing abstract tasks are valid also in tasks with content.

Finally, it is suggested that some research efforts in the future should be directed at the following topics: investigating the frequency of causal organization of knowledge, exploring the limits for the effect of task content pointed to in the present thesis, and finally, trying to find out how subjects choose combination rules in different content tasks.

Lars-Erik Warg, Department of Psychology, University of Uppsala, Box 227, S-751-04 Uppsala, Sweden.