

Assessing Screening and Evaluation Decision Support Systems: A Resource-Matching Approach

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Abstract

This research explores how consumers utilize online decision aids with screening and evaluation support functionalities under varying product attribute-load conditions. Drawing upon resource-matching theory, we conducted a 3x2 factorial experiment to test the interaction between decision aid features (i.e., low versus high-screening support, and aids with weight assignment and computation decision tools) and attribute-load (i.e., large versus small number of product attributes) on decision performance. The findings reveal that: 1) where the decision aids render cognitive resources that match those demanded for the task environment, consumers will process more information and decision performance will be enhanced; 2) where the decision aids render cognitive resources that exceed those demanded for the task environment, consumers will engage in less task-related elaboration of decision-making issues to the detriment of decision performance; and 3) where the decision aids render cognitive resources that fall short of those demanded for the task environment, consumers will either employ simplistic heuristic decision strategies to the detriment of decision performance, or invest additional effort in information processing to attain a better decision performance, if they perceive the additional investments in effort to be manageable.