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IMPROVING HUMAN PERFORMANCE IN DYNAMIC TASKS THROUGH DEBRIEFING

Abstract:

Debriefing, a special kind of learning aid, is the processing of simulation-based learning experiences. Debriefing improves the decision makers' performance in dynamic tasks, however, its impact on the decision making process is understudies. By incorporating the two types of debriefing, (i) outcome-oriented and process-oriented, in the design of a simulation-based interactive learning environment (ILE), this study provides an empirical, laboratory-experiment-based evaluation of the effectiveness of debriefing on decision process in dynamic tasks. We develop and use a comprehensive model consisting of four evaluation criteria: task performance, structural knowledge, heuristics knowledge, and transfer learning. We find that the subjects provided with process-oriented debriefing performed better on structural knowledge and transfer learning. Contrary to the hypotheses, subjects provided with outcome-oriented debriefing on task performance, and both the groups performed equally on heuristics knowledge.

Keywords:

Decision making; debriefing; task performance, dynamic tasks; simulation-based learning;

JEL Classification: A00