ABSTRACT
FAST AND FRUGAL: AI AS A CUE IN HEURISTICS-BASED DECISION-MAKING

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Rapid advancement of Artificial Intelligence (AI) in health care necessitates deployment of timely and robust studies of its adoption and integration into clinical decision-making. Several theories about human decision-making can provide a framework to understand the role of AI in the human-machine cognitive space. This study applies the theory of heuristics-based decision-making, mainly one of its core heuristics, Take the Best heuristic, to contrasting the decision-making flow with only traditional cues and with AI included. A proposal for the AI cue to take the place of the determinant cue in the Take the Best decision-making flow is tested.

To enrich findings with a broader context, the study proceeds with applying the theory of planned behavior to understanding the role of factors which may influence the intention to use AI as a cue. The test is carried out using measurement items from three well-validated scales of assessing trust in AI in general and domain-specific settings.

Data are collected from participants in two markets differentiated on the status of adoption of AI in health care: mature (US) and emerging (India). This approach allows to uncover differences unique to each market and comparison of results.

Conclusions can be of value to clinicians who work with AI-augmented decision-making systems, administrators who are responsible for implementation and performance of AI technology in health care, and to developers of such solutions. The study seeks to contribute to the rich corpus of literature aimed at removing barriers to successful adoption and utilization of AI.