

Exploring Individual Decision Making Processes and the Role of Information Structure in Promoting Uptake of Energy Efficient Technologies

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Abstract : The current research applies decision making theory in order to address the problem of increasing uptake of energy-efficient technologies in the market place, where uptake is currently slower than one might predict following rational choice models. Specifically, in two studies we apply the alignable/non-alignable features effect and explore the impact of varying information structure on the consumers' preference for standard versus energy efficient technologies. As researchers in the Interdisciplinary centre for Storage, Transformation and Upgrading of Thermal Energy (i-STUTE) are currently developing energy efficient heating systems for homes and businesses, we focus on the context of home heating choice, and compare preference for a standard condensing boiler versus an energy efficient heat pump, according to experimental manipulations in the structure of prior information. In Study 1, we find that people prefer stronger alignable features when options are similar; an effect which is mediated by an increased tendency to infer missing information is the same. Yet, in contrast to previous research, we find no effects of alignability on option preference when options differ. The advanced methodological approach used here, which is the first study of its kind to randomly allocate features as either alignable or non-alignable, highlights potential design effects in previous work. Study 2 is designed to explore the interaction between alignability and construal level as an explanation for the shift in attentional focus when options differ. Theoretical and applied implications for promoting energy efficient technologies are discussed.

Keywords : energy-efficient technologies, decision-making, alignability effects, construal level theory, CO2 reduction

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