The Irrational but Predictable Consumer: Decision Making Based on Feelings Rather Than Facts

Herndon, Va. (Nov. 16, 2018) - Risk and benefit perceptions are crucial to people’s acceptance of a particular technology and therefore their willingness to become a consumer. It has been suggested that, due to resource restraints, consumers’ perceptions are frequently formed based on heuristics and biases, or other factors such as trust or affect. While some consumer behaviors may seem irrational, their actions are actually quite predictable based on heuristics.

Prior to the introduction of scientific risk analysis for the detection of toxicological risks, individuals relied on their senses to detect risks, a practice coined as ‘intuitive toxicology.’ Substances used in consumer products, such as food additives and cleaning products, are put through intensive risk assessment, but the processes are complex and there is some lingering controversy regarding the associated levels of uncertainty, with a lot of misinformation available on the internet on these allegedly dangerous chemicals. Consumers lack the resources necessary to judge the uncertainty and rely on heuristics and their trust in different potentially unreliable resources.

Angela Bearth, Ph.D., ETH Zurich, revisited work previously done on intuitive toxicology in her presentation, “Intuitive toxicology revisited: People’s understanding of toxicological principles and implications for the risk perception of chemicals.” Bearth related consumers’ knowledge about toxicological principles to their risk perceptions and preferences for a variety of consumer products (e.g., cleaning products, medicines, foods). The study confirms that consumers have very limited knowledge regarding the processes undertaken to ensure the safety of consumer products. An area of particular concern was misconceptions held regarding man-made versus natural chemicals.

Food technologies such as gene technology or meat cultured from stem cells can be perceived as unnatural and thus evoke feelings of disgust which will divert individuals from accepting the product. Michael Siegrist, Ph.D., ETH Zurich examined whether different food technologies evoke different levels of disgust. Participants responded to questions about a variety of new food technology applications - genetically modified meat, edible nanotechnology coating films, artificial meat and synthetically produced food additives. The study, “The impact of disgust on risk perception and acceptance of novel food technologies,” suggests that willingness to eat was negatively associated with disgust responses toward the technologies.
Gulbanu Kaptan, Ph.D., Leeds University, and her team of researchers examined the role of cognitive and affective judgements in food evaluations and eating decisions. Cognitive judgements were represented by concerns about food being nutritious and safe, whereas affective judgements were represented by ethics, craving and disgust. An online survey was conducted to determine how these attributes were related to food evaluations and eating decisions.

The results of the study, “The role of denotative and connotative judgements in food evaluations and eating decisions,” revealed that affective judgements were more strongly related to these evaluations and decisions. People generally liked and chose to eat foods with high ratings on the positive connotative attributes even if they believed they were not very nutritious, whereas they avoided foods with negative connotative judgements even if they were deemed nutritious and safe to eat. The study’s findings have implications for interventions that aim to change people’s eating habits.

These studies will be presented during the *Heuristics, Biases and Other Seemingly Irrational Factors in People’s Decisions Regarding Innovative Technologies, Foods and Other Consumer Goods* symposium, followed by a round table discussion, on Monday, Dec. 3 from 10:30 a.m.-12:00 p.m. at the 2018 Society for Risk Analysis (SRA) Annual Meeting at the New Orleans Marriott in New Orleans, Louisiana.

**Angela Bearth, Ph.D., ETH Zurich, will be available for media interviews at the 2018 SRA Annual Meeting. Please contact Melanie Preve at melanie@bigvoicecomm.com for all interview requests.**

###

**About SRA**
The Society for Risk Analysis is a multidisciplinary, interdisciplinary, scholarly, international society that provides an open forum for all those interested in risk analysis. SRA was established in 1980 and has published *Risk Analysis: An International Journal*, the leading scholarly journal in the field, continuously since 1981. For more information, visit [www.sra.org](http://www.sra.org).