

Using Eye Tracking to Inform on the Effect of Decision Strategies on Choice Modeling

Carola Grebitus*
Morrison School of Agribusiness
W.P. Carey School of Business
Arizona State University

Abstract

Both the private and public sectors often use discrete choice experiments (DCEs) to determine preferences, forecast decisions, and estimate willingness to pay. This research tests how complexity, in terms of the number of attributes and number of alternatives affects consumers' use of heuristics, which lead to selective information processing. Specifically, we analyze the effect of visual attribute and alternative non-attendance on respondents' choices in DCEs. The findings suggest that non-attendance can occur for single attributes and for entire alternatives. Furthermore, the results show that increasing alternative-based task complexity makes participants in DCEs less likely to ignore attributes, but instead make trade-offs among all attributes, which is not necessarily true for attribute-based task complexity. Finally, accounting for the visual attribute and alternative non-attendance in choice modeling influences the estimates.

Joint work with Jutta Roosen, Technical University Munich, Germany.

*Carola Grebitus is an Assistant Professor of Food Industry Management at the W. P. Carey School of Business at Arizona State University. Dr. Grebitus' research is focused on modeling consumers' food choices in general, and consumers' decision strategies in particular. She has worked extensively on determinants of consumer behavior, purchase decision making, and food quality from consumers' perspective. Her current research includes consumer preferences for local food, urban agriculture, and sustainable (food) products; willingness to pay for new technologies; and the influence of food labeling on purchase decisions. Furthermore, she investigates the role of social networks on healthy food choices and adoption of genomics. Also, she has conducted research using retail surveys regarding consumers' use of quality certification and country-of-origin information. In her research Dr. Grebitus applies a variety of methods ranging from auctions and choice experiments to eye tracking and taste tests. At ASU, Dr. Grebitus teaches courses in 'Food Product Innovation and Development' and 'Food Promotion and Advertising', with heavy emphasis on food retail.

