Modeling Attention in Choice

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Paper from the 49th Annual EMAC Conference, Budapest, May 26-29, 2020.

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Abstract

Even though both experimental and market data show behavioural departures from standard rational choice theory, it still governs some of the most widely used decision making models in economics and marketing. These behavioural departures, if not accounted for, can negatively affect the inference gleaned from the data and consequently the marketing actions based on it. There are different streams of research trying to overcome this issue: marketing literature that suggests methods to improve the experimental data collection (e.g. Ding et al., 2005), psychology literature that provides process-based decision models as an alternative to classical economics models (e.g. Ruan et al., 2007), and economics literature that tries to model the choice behaviour with limited attention (e.g. Caplin et al, 2019).

We believe that in order to achieve the goal of developing a comprehensive framework that facilitates better inference from choice data, we need to draw on all the aforementioned streams of literature. This special session will be a step in this direction.

In the first presented paper, "Bridging between Hypothetical and Incentivized choice" by Arash Laghaie and Thomas Otter, a framework based on the dependent Poisson race model (DPRM) is developed, that by accounting for cognitive effort/attention, parsimoniously bridges between hypothetical and incentive-aligned discrete choice experiment data for the purpose of conserving on data collection effort and cost, however, in keeping with the goal of predicting to incentivized choices.

The second paper, "Lottery rewards in incentive-aligned choice-based conjoint studies" by Narine Yegorian, explores ways to improve incentive-aligned discrete choice experiments by ensuring truth-telling while retaining the feasibility of the experiment.

The third paper, "Goal-Driven and Stimulus-Driven Attention in Multi-Attribute

Choice: Insights from an Eye-Tracking Experiment" by Martin Meissner, Josua Oll, and Alexander Bassen, investigates the interaction of goal-driven (top-down) and stimulus-driven (bottom-up) attention in multi-attribute choice tasks. They manipulate bottom-up processes by changing the visual salience of stimuli and use eye tracking to measure attention. The empirical results suggest that bottom-up processes can prime top-down processes.

The discussant, Thomas Otter, will then talk about avenues for further research that integrate developments in theory and methods with experimental findings, in order to build more externally valid choice models in marketing.