Models of Sequential Evaluation in Best-Worst Choice Tasks

by

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Abstract

We examine the nature of best-worst data for modeling consumer preferences and predicting their choices. We show that, contrary to the assumption of widely used models, the best and worst responses do not originate from the same data-generating process. We propose a sequential evaluation model and show that later choices have systematically larger coefficients as compared to earlier choices. We also find the presence of an elicitation effect that leads to larger coefficients when respondents are asked to select the worst alternative, meaning that respondents are surer about what they like least than what they like most. Finally, we investigate global inference retrieval in choice tasks, which can be represented by the central limit theorem and normally distributed errors, versus episodic retrieval represented by extreme value errors. We find that both specifications of the error term are plausible and advise to use the proposed sequential logit model for practical reasons. We apply our model to data from a national survey investigating the concerns associated with hair care. We find that accounting for the sequential evaluation in the best-worst tasks and the presence of the scaling effects leads to different managerial implications compared to the results from currently used models.