

Coherent but arbitrary: understanding ordering effects in health preference elicitation tasks

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Abstract

Stated preference studies consistently find both sensitivity of responses to irrelevant anchors and evidence of rational responses (using data quality checks). These apparently inconsistent results may be explained by the coherent arbitrariness hypothesis where people develop coherent valuations of goods, but their initial valuations are sensitive to anchors. We present a novel experiment to test the coherent arbitrariness hypothesis. Data are from a discrete choice experiment (DCE) eliciting public preferences for the management of three symptoms of increasing severity: diarrhea, dizziness and chest pain. Respondents completed the same DCE tasks for each symptom, but were randomly assigned to three different experimental conditions that differed in symptoms order. We find that preferences are coherent, with willingness to pay (WTP) increasing with symptom severity. We also find evidence of arbitrary preferences and anchoring effect. Respondents are willing to pay more to manage a milder symptom if preceded by a more severe symptom and lower if preceded by a less severe symptom. Respondents are more likely to manage a milder symptom when preceded by a more severe symptom and less likely to manage it when preceded by a less severe symptom. We find relatively fewer ordering effects in attributes' marginal sensitivities among respondents choosing to manage the symptom (conditional sample). This study confirms that absolute valuation of goods may be affected by anchoring effects, though there is weaker evidence of such effect on relative (attributes' preferences) sensitivities. Researchers should consider the potential impact of anchoring effects on individuals preferences estimates especially when they estimate and compare willingness to pay values across different choice contexts.

Key words: Stated preferences, Ordering effects, Coherent arbitrariness; Anchoring