How Slider Scales Change Willingness-to-Pay: Recalibrating the Mental Number

ABSTRACT:

Although it is assumed that buyers’ willingness-to-pay (WTP) should be invariant to response format, we show that WTP values can change systematically depending on response format. Relative to textboxes, slider scales elicit more extreme WTP responses. This effect of response format varies for ascending versus descending numeric formats. For ascending numeric formats where buyers’ WTP values are higher than the starting price (e.g., eBay), a slider scale elicits higher WTP values than a textbox. However, for descending numeric formats where buyers’ WTP values are lower than the starting price (e.g., Priceline) a slider scale elicits lower WTP values. This effect is due to the differences in calibration of the mental number line used to judge numeric values. When people use a textbox to submit responses, they calibrate the mental number line with respect to the starting point of the scale. In contrast, when using slider scales, their calibration is influenced by the visual distances of their response from both endpoints of the scale. This can change the perceived magnitude of WTP values. A WTP value that is evaluated as far enough from the starting point for a textbox format might not be considered far enough on a slider scale.

KEYWORDS: pricing, contingent valuations, numerical cognition, response format, mental number line