Attribute prioritization in choice experiment pre-design: suggested method and application to solid waste management service improvement

ABSTRACT

Most valuation problems on environmental resources possess huge list of choice-influencing attributes than the parsimony requirement of choice experiment (CE) would accommodate. As such, design-attribute determination which entails selecting the most appropriate sub-set of the entire list constitutes the first step in CE. It is based on the assessment of attributes' relative importance in interview with stakeholders. The complexity of coding and generating themes under this method limits the coverage of opinion survey on attributes' relative importance to small sample. Since average opinion is based on small sample, the risk of observing attribute non-attendance which is a recent problem in CE will be higher. Against this background, the present study suggests an alternative quantitative method of assessing attributes relative importance at the predesign stage of CE. Based on an application to solid waste management service improvement, the method was found to be simple and applicable to large sample. Since the method allows survey of opinion coverage on attributes' relative importance to large samples, we recommend its application to reduce the risk of attribute non-attendance.

Keyword: Attribute non-attendance; Attribute relative importance; Discrete choice experiment; Solid waste management