

A Flexible Specification for Modelling Discrete Choices for Heritage Attractions

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ABSTRACT: This paper presents a first attempt of systematically implementing a flexible specification in modelling discrete choice tourism data. The paper tests the restrictive assumption of the ‘independence from irrelevant alternatives’ property in these models and argues that flexible discrete choice structures, which are free of this assumption, should be employed. Testing for violations of the above property of standard logit models allows researchers to operationalise a more complex structure of consumer preferences. This bridges the methodological gap that exists amongst the discrete choice models. The paper advocates the use of McFadden’s (1974) random utility consistent nested logit model to examine stated preferences for heritage tourism participation in the island of Crete, Greece. Specifically, the study considers demand for two heritage resources in Crete, the Heraklion Archaeological Museum and the Knossos Palace.

The results from the empirical investigation suggest that accounting for the restrictive IIA property results in qualitatively more accurate results. The employment of flexible preference specification models indicates that tourists to Crete are willing to contribute a significant amount of money for improvements in the quality of information for both sites. Receiving information regarding these two attractions either prior, or during their trip to Crete will substantially improve satisfactions and therefore the chances of visiting them. Also, the comparison of elasticity estimates from the two discrete choice specification models indicates that the standard logit specification largely underestimates tourists’ sensitivity to entry fee changes. The direct elasticity estimates with respect to entry fees suggest that visitors to the Knossos Palace are much more sensitive to entry fee fluctuations compared to Museum visitors. Also, tourists make particular reference to demand management issues, arguing that a worsening in congestion levels in both attractions will affect negatively their satisfaction levels. However, the direct elasticity estimates show that in terms of congestion levels, overcrowding matters more to the Museum than it does for the Palace. The paper also draws attention to future policies designed to improve the quality of the heritage experience, by introducing audio-visual material to complement the presentation of exhibits in the two attractions.

KEYWORDS: Tourism, Crete, Heritage, Nested Logit

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