A DYNAMIC MIXED MODEL WITH INTERACTIONS BETWEEN TOURISTS' POST-TRAVEL EVALUATION AND THREE STAGE CHOICES BASED ON PROSPECT THEORY

Lingling WU¹, Junyi ZHANG²

 ¹ Doctoral Candidate, Graduate School for International Development and Cooperation, Hiroshima University, 1-5-1 Kagamiyama, Higashi Hiroshima, 739-8529, Japan E-mail: wuling1017@gmail.com
² Professor, Graduate School for International Development and Cooperation, Hiroshima University 1-5-1 Kagamiyama, Higashi-Hiroshima, 739-8529, Japan E-mail: zjy@hiroshima-u.ac.jp

The purposes of this study are: (1) to jointly represent tourist's three interrelated choice (i.e., whether to travel (tourism participation), destination choice, travel mode choice) and post-travel evaluation (i.e., satisfaction based on 5-point scale); (2) to analyze tourist's temporally interrelated behavior by incorporating the influences of previous satisfaction with tourism activities as well as state dependence. In order to examine the correlation between tourist satisfaction and three choice aspects, a mixed modeling approach is adopted by introducing a common error term into each utility function. The concept of prospect is further used to represent asymmetric influence of satisfaction and dissatisfaction on the next visit. A case study is conducted using a web-based retrospective panel data of monthly tourism behavior collected in the year 2010 (1,253 valid samples, 12 waves (i.e., months)).

Key Words : Monthly tourism behavior; post-travel evaluation; integrated modeling; prospect theory; dynamic analysis