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Title: The Role of Environmental Attitude in a Nature-Based Festival: The Case of Bryeong Mud Festival

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This paper will best fit under the theme “**market and marketing research**”.

## Introduction

Extant research on festivals has been largely associated with economic, social or cultural influences on communities; however, recent scholarship is beginning to focus on environmental issues particularly, as they relate to nature-based festivals (Lawton, 2009; Lawton & Weaver, 2010; Singh, Slotkin, & Vamosi, 2007). Festival visitors involved in the consumption of a staged experience (Sternberg, 1997) will have different experiences at various types of festivals based on the featured setting, themes, and program content, as well as, visitors' environmental attitude; all of which can play an important role in evaluating the attributes of nature-based festivals. The purpose of this study is threefold: to examine the interrelationships between festival quality, perceived value, satisfaction, and behavioral intention in a nature-based festival; to investigate the environmental attitude of festival visitors by using the 6-item New Environmental Paradigm (NEP); and, to understand the role of environmental attitude on the structural relationships among determinants predicting festival visitors' behavioral intention through a multi-group analysis.

## Literature review

Scholarship on consumer behavior and services marketing suggests that *quality*, *perceived value*, and *satisfaction* are primary constructs explaining consumers' decision making processes (Anderson & Sullivan, 1993; Bignie, Sanchez, & Sanchez, 2001; Cronin & Taylor, 1992; Cronin, Brady, & Hult, 2000; Oliver, 1980). Tourism researchers who have empirically examined the relationships between the three antecedents (*i.e.*, quality, perceived value, and satisfaction) and behavioral intention have concluded that the evaluations of quality affect tourists' perceived value and satisfaction, which lead to their behavioral intention (Baker & Crompton, 2000; Lee et al., 2008; Petrick, 2004; Petick & Backman, 2002). Bagozzi's (1992) framework of "appraisal-emotional response-coping" provides theoretical justification for these causal relations between festival quality, perceived value, satisfaction, and behavioral intention by consecutively linking cognitive evaluation to affective responses and behavioral intentions.

By confirming that the direct model outperformed the competing models, Cronin et al. (2000) proposed that each factor (quality, perceived value, and satisfaction) has a direct effect on behavioral intention. Thus, in a nature-based festival, it is also assumed that quality, perceived value, and satisfaction have a direct effect on behavioral intention. As a result, the hypotheses below assume the direct effect of quality, perceived value, and satisfaction on behavioral intention:

- H1: Festival quality positively influences perceived value.*
- H2: Festival quality positively influences satisfaction.*
- H3: Perceived value positively influences satisfaction.*
- H4: Festival quality positively influences behavioral intention.*
- H5: Perceived value positively influences behavioral intention*
- H6: Satisfaction positively influences behavioral intention.*

The New Environmental Paradigm (NEP) scale, developed by Dunlap and Van Liere (1978), has been widely used as a measure of an individual's environmental attitude. Considering the characteristics of a nature-based festival (*i.e.*, festival setting, theme, and program content), the strengths of determinants predicting behavioral intentions may differ by visitors' environmental attitude. Thus, it is assumed that the relative impact of determinants predicting behavioral intention may vary depending on visitors' response to the NEP scale:

*H7: Relative impacts of determinants predicting behavioral intention may vary depending on visitors' environmental attitude.*

## **Methodology**

A questionnaire was designed to obtain data on the: socio-demographic characteristics of festival visitors; quality, perceived value, satisfaction, and behavioral intentions associated with the Mud Festival; and, visitors' environmental attitude. The four latent variables (quality, perceived value, satisfaction, and behavioral intentions) in the proposed framework were measured with multiple items (Churchill, 1979). Following the recommendation of previous researchers (see Lee & Mjelde, 2007; Shin, 2001) the six-item NEP scale was deemed appropriate for measuring the environmental attitudes of Korean participants (Dunlap & Van Liere, 1978).

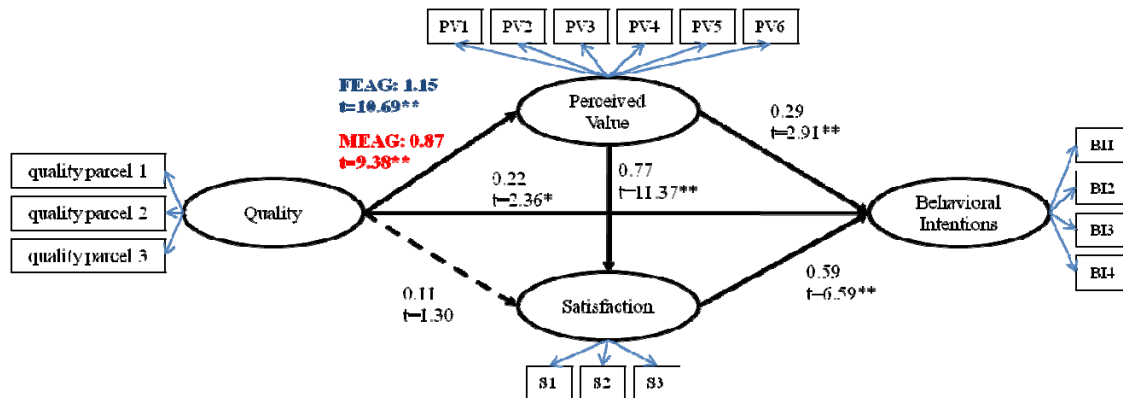
This study was undertaken at the Boryeong Mud Festival, which is a renowned nature-based festival that is annually held in South Korea. This festival represents the most popular nature-based mega-event in South Korea (Lee, Lee & Choi, in press). It falls within the category of nature-based festivals due to its use of natural resources in its setting, theme, and program. An on-site intercept survey was used with visitors who attended the 12<sup>th</sup> Boryeong Mud Festival from July 11<sup>th</sup> to 19<sup>th</sup>, 2009. A total of 612 visitors were contacted, however 87 of them had yet to experience the festival at the point of intervention. Excluding the visitors who refused to participate in the survey (83 visitors), the current study recruited 442 willing visitors (83.6% response rate). In the process of data refinement, 41 questionnaires were eliminated either due to a large portion of missing data or inconsistent responses. A total of 10 questionnaires were excluded because the respondents had not completed the six NEP items. In total, 392 cases were considered in this study.

## **Results and discussion**

In order to test the proposed hypotheses, a series of analyses was conducted using SPSS 17.0 and LISREL 8.7. Using a multi-group mediation analysis, the impact of visitors' environmental attitude on the interrelationships between quality, perceived value, satisfaction, and behavioral intention was examined. In order to conduct the multi-group mediation analysis, the NEP scale was used to divide visitor groups based on their environmental attitude. It is noticeable that there were few respondents who, overall, have low environmental attitude. Thus, based on the distribution of the NEP scores and the precedent set by Lee and Mjelde (2007), visitors were divided into a favorable environmental attitude group (FEAG: n=157, 40.1%) and a moderate environmental attitude group (MEAG: n=235, 50.9%). In order to examine the equivalence of factor loadings and the structural relations in the two groups, a sequential process was adopted (see Joreskog's (1971) hierarchy). The final model is shown in Figure 1 (chi-square=413.15, df=213, NNFI=.945, CFI=.953, RMSEA=.050).

First, the direct effects of quality on perceived value and the direct effect of perceived value on satisfaction for both FEAG and MEAG were statistically significant. Thus, H1 and H3 were supported. However, the direct effect of quality on satisfaction was not significant. This result failed to support H2. This result explains the role of perceived value as a mediator linking quality and satisfaction. Consistent with previous literature (Baker & Crompton, 2000; Cronin et al., 2000; Lee et al., 2008), all three determinants (quality, perceived value, and satisfaction) had a direct effect on behavioral intention; thus, H4, H5, and H6 were supported. Finally, the two

group-mediation analyses found that the strength of the path from quality to perceived value was statistically different in FEAG and MEAG. Quality for FEAG had a stronger impact on perceived value than it did for MEAG. As a result, H7 was supported. In the case of FEAG, 59% of perceived value, 74% of satisfaction, and 76% of behavioral intention was explained. For MEAG, 40% of perceived value, 61% of satisfaction, and 61% of behavioral intention was explained. In general, the results suggest that endogenous constructs explained more of the variance in the FEAG model.



\*:  $p < .05$ ; \*\*:  $p < .01$

Figure 1. Final Model

## Conclusion

The objective of this study was to extend festival research by examining the role of environmental attitude on individuals' perception of and satisfaction with one of the most popular nature-based festivals in South Korea, the Boryeong Mud Festival. First, this study identified five quality factors of a nature-based festival: festival program, information service, festival product, convenient facilities, and natural environment. Second, the structural relations between quality, perceived value, satisfaction, and behavioral intention were examined. Third, festival visitors' environmental attitude was documented with the six-item NEP scale and they were divided into two groups (FEAG and MEAG) based on their environmental attitude. Fourth, using a multi-group analysis, this study found that visitors differently perceive of the experience in a nature-based festival depending on their environmental attitude.

From a marketing perspective, the results of this study can be instrumental for festival organizers, particularly those associated with nature-based festivals. For example, improvements tied to experiential quality with natural resources and the environment will result in positive outcomes of perceived value and satisfaction, which may lead to retention or expansion of tourists (Baker & Crompton, 2000). Additionally, being cognizant of the fact that environmental attitudes affect visitors' perception, festival organizers should reinforce the necessity of incorporating ecological messages within promotional efforts. Nature-based festival organizers should keep in mind that natural resources and the environment play an important role in visitors' experiences in festival settings. Given that visitors to the Boryeong Mud Festival had a relatively positive environmental attitude, they may not be satisfied with their experience without seeing legitimate sustainable programmatic efforts tied to the environment.

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