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# The Cognitive-Affective Relationship of Tourists to a Heritage Site: The Case of Petra

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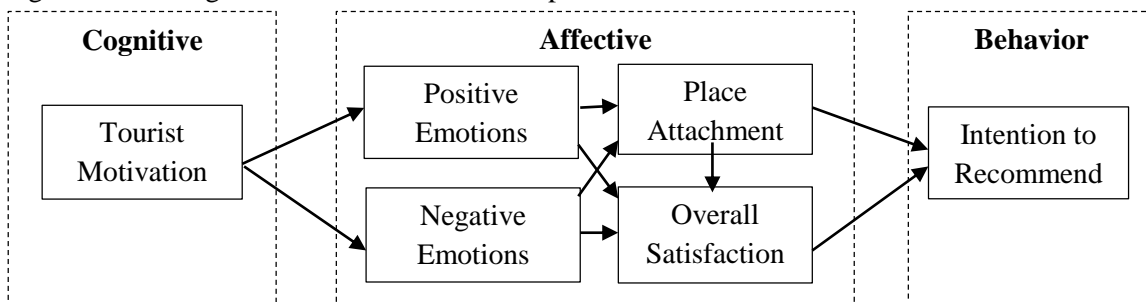
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# The Cognitive-Affective Relationship of Tourists to a Heritage Site: The Case of Petra

## Introduction

Extant studies suggest that tourists develop both cognitive and affective relationships to places (del Bosque & San Martín, 2008). The objective of this study is to evaluate a theoretical model that postulates the cognitive-affective relationship that tourists develop with a heritage site has an impact on intended behavior. Using the case of the UNESCO World Heritage Site (WHS) of Petra, the relationships between tourist motivation, positive and negative emotions, place attachment, overall satisfaction and intention to recommend the site are assessed (see Figure 1). Petra is a historical and archaeological site located to the south of Amman (capital of Jordan). The site is famous for its exceptional carved mountains, vast ecological diversity, sandstone geo-logical formations, and is the most visited tourist attraction in Jordan (Department of Antiquities, 2015). Due to its unique historical and archaeological significance, Petra is recognized as a UNESCO WHS since 1985. The study contributes to both the tourism literature by showing the applicability of the cognitive-affective-behavior model in a heritage tourism context; providing empirical evidence that both positive and negative emotions imbue heritage experiences; and emotions contribute to both place attachment and overall satisfaction. These relationships have managerial implications for marketing both destinations and heritage sites.

Figure 1: The Cognitive-Affective Relationship Model



## Literature Review

The role of emotions in shaping place experiences is relatively well examined in the tourist literature (Prayag *et al.*, 2013). Emotions are determinants of tourist satisfaction (del Bosque & San Martín, 2008; Faullant *et al.*, 2011; Prayag *et al.*, 2015). Place attachment has emerged as an important concept in heritage experiences (Gu & Ryan, 2008; Prayag *et al.*, 2013). Visitors' attachment may lead to different behavioral outcomes such as word-of-mouth (Chen, *et al.*, 2014; 2015) and repeat visitation (Hwang *et al.*, 2005). Previous research on tourists' experiences at heritage sites examines tourists' motivation, perceptions, (Poria *et al.*, 2004) and attachment (Biran *et al.*, 2011). In general, the key reasons driving people to visit tourism destinations include: escape, relaxation, novelty, socialization, self-development and learning (Beh & Bruyere, 2007; Crompton, 1979; Li & Cai, 2012; Ryan & Glendon, 1998; Yoon & Uysal, 2005). Prentice (1993), in research dealing with heritage consumers, suggests a similar dimensionality while Moscardo (1996) emphasizes two main motivations in heritage site visits: educational and entertainment/social. Although recent studies (e.g., Hixon *et al.*, 2011) have shown a positive correlation between motivation and place attachment, the relationship between motivation and attachment calls for further examination in the heritage tourism context.

## Method

Tourist motivation was measured using eleven items ( $\alpha = 0.73$ ) representing four dimensions (see Table 1) on a seven-point scale (1 = Not at all, 7 = Very Much). Fifteen positive ( $\alpha = 0.93$ ) (Hosany & Gilbert, 2010) and five negative emotions ( $\alpha = 0.86$ ) (Hosany & Prayag, 2013) were measured on a seven-point scale (1 = Not at all, 7 = Very Much). Place attachment was measured using eight items ( $\alpha = 0.89$ ) (Prayag & Ryan, 2012; Williams & Vaske, 2003; Yuksel *et al.*, 2010) on a seven-point scale (1=Strongly Disagree, 7=Strongly Agree). Both overall satisfaction ( $\alpha = 0.74$ ) (Faullant *et al.*, 2011; Hosany & Prayag, 2013; Prayag *et al.*, 2013) and intention to recommend ( $\alpha = 0.91$ ) (Grappi & Montanari, 2011; Prayag *et al.*, 2013) were measured using three items each on seven-point scales. International tourists were approached at the visitor centre in Petra and only those who had already completed their visit of the site were selected for the survey. Of the 350 surveys distributed, 297 were completed. The sample had a slightly higher percentage of female respondents (54.7%), a good distribution of age groups (e.g., 8-24 years old - 16.5% and 55 years old and above - 19.2%), and was well educated (e.g., postgraduate degree completed-24.6%). A high percentage of the sample was Europeans (43.2%), travelling mainly with their partner (22.9%) or friends (34.7%). The two-step procedure (CFA + SEM) recommended by Anderson and Gerbing (1988) was used to analyze the data.

## Findings

CFA results showed adequate fit of the measurement model ( $\chi^2/df = 1.91$ , CFI = .914, TLI = .902, RMSEA = .056) after three motivation items, one positive and negative emotion each, and one item of satisfaction were deleted. All remaining items loaded substantively on their respective constructs (std.  $\beta > 0.5$ ). Average variance extracted (AVE) and composite reliabilities (CR) were above 0.5 and 0.7 for all constructs, establishing convergent validity. Discriminant validity was examined using the Fornell and Larcker (1981) method and the results suggested strong discriminant validity. Tourist motivation and place attachment were modelled as second-order constructs. Results for the structural model ( $\chi^2/df = 1.96$ , CFI = .91, TLI = .91, RMSEA = .057) showed adequate fit. All of the hypothesized paths, except for two, were significant (see Table 1). The model explained only 31% of the variance in intention to recommend but 70.1% and 36.8% of the variance in place attachment and overall satisfaction respectively.

Table 1: Structural Model Results

Structural Paths	Std. $\beta$	Structural Paths	Std. $\beta$
Escape & Relaxation → Tourist Motivation	.79**	Place Identity→ Place Attachment	.91**
Self-Development→ Tourist Motivation	.77**	Place Dependence→ Place Attachment	.78**
Learning→ Tourist Motivation	.20*	Positive Emotions → Place Attachment	.76**
Socialization→ Tourist Motivation	.69**	Negative Emotions → Place Attachment	.25**
Tourist Motivation → Positive Emotions	.53**	Place Attachment→ Satisfaction	.43*
Tourist Motivation → Negative Emotions	.33**	Satisfaction→ Intention to Recommend	.51**
Positive Emotions→ Satisfaction	.22 n.s.	Place Attachment→ Intention to Recommend	.09 n.s.
Negative Emotions→ Satisfaction	-.36**	**p < 0.001, *p < 0.05, n.s. = not significant	

## Conclusion

For heritage sites, positive word-of-mouth from current visitors is necessary to ensure long-term viability and success. From a theoretical perspective, it seems that despite the site fulfilling some visitor motives, the affective aspects (positive emotions and attachment) were unable to generate positive word-of-mouth directly or indirectly. The positive emotions felt do not also contribute to satisfaction. Managers and employees at Petra should improve on-site experiences to generate both positive emotions and place attachment.

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