Testing the Presumed Effects of Service Performance, Theme, Personalization, and Multisensory Appeal on Quality of Structured Experiences

Garry Ellis
Texas A & M University - College Station

Andrew Lacanienta
Texas A & M University - College Station

Patti Freeman
Brigham Young University - Provo

Brian Hill
Brigham Young University - Provo

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Testing the Presumed Effects of Service Performance, Theme, Personalization, and Multisensory Appeal on Quality of Structured Experiences

Introduction and Literature Review

Engaging, immersive, and absorbing experiences are the quintessential products of the hospitality, tourism, sport, and leisure industries. To fully succeed in these highly competitive industries, managers must know strategies they may employ to activate co-creation processes that yield quality experiences. In academic circles, the quest for identification and evaluation of such strategies spans well over 30 years: Holbrook and Hirschman described the “experiential aspects of consumption” in a 1982 paper in Journal of Consumer Research. An expansive body of literature has followed. Among many particularly insightful and influential contributions are Parasuraman, Zeithaml, and Berry’s (1985) research on service quality (SERVQUAL), Bitner’s (1992) construction of the “servicescape” concept, Pine and Gilmore’s (1999; 2011) identification of the emergence of an “experience economy,” O’Dell and Billing’s (2005) research on “experiencescapes,” and Prahalad and Ramaswamy’s (2004) work on co-creation experiences. Oliver’s (2010) compilation of research and theory about consumer satisfaction and the expansive body of literature on immediate experience (e.g., Ackerman, 1999; Csikszentmihalyi, 1975; Maslow, 1962) are also pivotal contributions to understanding tourist experience. Tourism scholars have organized much of this knowledge in books on the tourist experience (Morgan, Lugosi, & Ritchie, 2010; Prebensen, Chen, & Uysal, 2014; Williams & Buswell, 2003).

A technology for structuring point-of-service experiences is emerging from this body of research. One initiative directed at advancing a technology of experience is Ellis, Freeman, Jamal, and Jiang’s (2017) “Theory of Structured Experience.” That team of researchers integrated select portions of the body of knowledge, advancing a formal “Theory of Structured Experience” (TSE). TSE is an integration of SERVQUAL (Parasuraman et al., 1985), experience industry techniques identified by Pine and Gilmore (1999), and select knowledge from positive psychology and consumer behavior (e.g., Bryant & Veroff, 2007; Csikszentmihalyi, 1975; Jose, Lim, & Bryant, 2012; Kahneman, 2011; Maslow, 1962) and play (e.g., Ackerman, 1999; Ellis, 1973). TSE advances specific, formal propositions (Zetterberg, 1965) about how point-of-service encounters may be structured to facilitate co-creation of positive experiences (“deep structured experience”) among visitors. A key proposition of TSE is an interaction effect: a threshold of service quality performance must be exceeded in order for “experience structuring performance” (i.e., theme, personalization, multisensory engagement, and value-added take-away) to elevate the quality of a structured experience (Ellis & Rossman, 2008; Ellis et. al, 2017). TSE also includes propositions that positive relations exist among other indicators of experience quality: perceived value of time investment, delight and proclivity to promote the attraction. The purpose of this study was to evaluate these propositions. Specifically, we tested the following hypotheses using data we collected at an established tourist experiencescape, the Hawaiian Islands:

H1: Experience-structuring performance increase prevalence of deep experience only if service quality performance exceeds a certain threshold

H2: As prevalence of deep experience at an attraction increases, perceived value of time investment in that experience increases.
H3: As prevalence of deep experience at an attraction increases, delight increases.
H4: As perceived value of time investment and delight with an experience increase, proclivity to promote the attraction increases.

Method

Sample. Two teams of education tourists visited 23 attractions and tourism industry businesses on three Hawaiian Islands: Maui, Oahu, and Hawaii. One of the teams (n=4) evaluated the service quality performance and experience structuring performance at each site while the other team (n=14) responded to questionnaires measuring select facets of experience quality. The team that evaluated service performance and experience structuring performance was comprised of faculty members, and the other team was comprised of study-abroad students from a western university and three of the faculty members’ spouses. A total of 274 usable experience observations were obtained (Table 1), along with evaluations of service performance and experience structuring performance for each of the 23 attractions.

Measurement. Two sets of variables were measured. One set included five items to measure the service quality performance at the attraction. Items corresponded to Parasuraman et al.’s (1985) SERVQUAL dimensions: reliability, assurance, tangibles, empathy, and responsiveness. The other set of items represented techniques used by many successful organizations in the “experience industries” to structure experiences (Pine & Gilmore, 1999): theme, harmonizing positive cues, absence of negative cues, appeal to multiple senses, and provision of unanticipated value-added elements.

The four-member team evaluated each of the nine items using a magnitude scaling (Lodge, 1981) approach. This technique is derived from research in which evaluative descriptors (e.g., poor, good, bad, absolutely perfect) were calibrated to responses to psychophysiological intensity stimuli. As such, immediately following the experience at each of the 23 attractions, the evaluation team discussed each of the nine facets of performance of service and experience structuring until reaching consensus on the best among a set of descriptors. Scales created by summing scores on the two sets of items were found to be reliable. The five-item service performance scale alpha reliability coefficient was .90, and the alpha reliability coefficient for the four-item measure of performance in structuring was .80.

While the four-member team evaluated service performance and experience structuring performance, the 14 members of the second team individually completed questionnaires designed to measure the quality of their individual experiences at the attraction, and their overall evaluation of that experience. Four measures were included: prevalence of deep experience during the visit, perceived value of time investment in the experience, delight with the experience, and proclivity to promote the attraction. Deep structured experience is defined as
Table 1

<table>
<thead>
<tr>
<th>Island</th>
<th>Site</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oahu</td>
<td>Swap Meet</td>
<td>13</td>
</tr>
<tr>
<td>Oahu</td>
<td>Dole Plantation Experience</td>
<td>12</td>
</tr>
<tr>
<td>Oahu</td>
<td>Iolani Palace</td>
<td>12</td>
</tr>
<tr>
<td>Oahu</td>
<td>Leonard's Bakery</td>
<td>12</td>
</tr>
<tr>
<td>Oahu</td>
<td>Pearl Harbor</td>
<td>12</td>
</tr>
<tr>
<td>Oahu</td>
<td>Polynesian cultural center – Luau</td>
<td>12</td>
</tr>
<tr>
<td>Oahu</td>
<td>Polynesian cultural center - Villages</td>
<td>12</td>
</tr>
<tr>
<td>Oahu</td>
<td>Snorkeling - Hanauma Bay</td>
<td>12</td>
</tr>
<tr>
<td>Oahu</td>
<td>Flight to Maui</td>
<td>12</td>
</tr>
<tr>
<td>Oahu</td>
<td>Polynesian cultural center - Night Show</td>
<td>11</td>
</tr>
<tr>
<td>Oahu</td>
<td>Surfing</td>
<td>11</td>
</tr>
<tr>
<td>Oahu</td>
<td>Haleiwa -Retail</td>
<td>9</td>
</tr>
<tr>
<td>Oahu</td>
<td>Diamond Head Hike</td>
<td>7</td>
</tr>
<tr>
<td>Maui</td>
<td>Haleakala National Park</td>
<td>14</td>
</tr>
<tr>
<td>Maui</td>
<td>Maui Ocean Center</td>
<td>14</td>
</tr>
<tr>
<td>Maui</td>
<td>Kona Coffee Experience</td>
<td>13</td>
</tr>
<tr>
<td>Maui</td>
<td>Flight to Kona</td>
<td>12</td>
</tr>
<tr>
<td>Maui</td>
<td>Scuba/Snorkel - Molokini Crater</td>
<td>12</td>
</tr>
<tr>
<td>Maui</td>
<td>Hula</td>
<td>10</td>
</tr>
<tr>
<td>Hawaii</td>
<td>Volcano National Park – Visitor Center</td>
<td>14</td>
</tr>
<tr>
<td>Hawaii</td>
<td>Tropical Botanical Garden</td>
<td>13</td>
</tr>
<tr>
<td>Hawaii</td>
<td>Volcano National Park – Lava Tub</td>
<td>13</td>
</tr>
<tr>
<td>Hawaii</td>
<td>Volcano National Park – South Island Trail</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>274</strong></td>
</tr>
</tbody>
</table>

A state of effortless concentration during which individuals lose (a) their sense of time, (b) their thoughts about themselves, and (c) awareness of their problems. Participants have a genuine interest in the activity in which they are involved and a strong desire to continue doing that activity. (Ellis et al., 2017, p. 9)

We used a graphical approach to measuring prevalence of deep structured experience (Ellis, Freeman, Jiang, & Lacanienta, 2018). Research participants were presented with a formal definition of the concept and then asked to indicate instances during a structured experience in which they were “in” that state. In a previous study, participants used paper and pencil to draw lines inside a rectangle, whose end points represent the beginning and end of the structured experience (Ellis et al., 2017). Participants are free to draw lines as long or short as needed to represent their experiences, and they may draw as many lines as they wish. DSE prevalence is the percentage of time a behavior is present (Suen, 1990). Because data for this evaluation were gathered on cell phones, drawing lines was not possible. Instead, four rows of ten fillable squares were presented to represent each quarter of the structured experience. Evaluators could select as
many squares in as long a sequence as they wished to represent their experiences during each quarter.

Perceived value of time investment was a five-item item scale. The alpha reliability coefficient was .94. Delight, prevalence of deep structured experience, and proclivity to promote the attraction were single-item measures that have been successfully applied in previous research (Ellis, Taggart, Martz, Lepley, & Jamal, 2017).

Procedure. Two teams of evaluators were formed. Both teams traveled together to visit 23 attractions and tourism businesses on three Hawaiian Islands. The charge of one of the teams was to evaluate the service quality performance and the performance of each site in using experience structuring techniques. That team was comprised of three professors and one doctoral student, all familiar with the literature on SERVQUAL and immediate experiences.

The other team was comprised of undergraduate students and spouses of the professors. This second team was charged with evaluating the quality of their individual experiences at that site. The teams visited the sites on the same occasion, and evaluations occurred immediately following the conclusion of the visit to the site. The team that evaluated service quality performance and experience structuring performance collaborated and reached consensus on all performance scores (100% agreement). The other team completed their evaluations independent of all others. Evaluations were recorded using the web-based survey application, Qualtrics.

Table 1 lists the attractions and businesses visited, per island. That table also reports the number of experience observations recorded at each attraction of business. That number varied due to a variety of random causes, such as illness, travel delays, and others.

Data Analysis Procedure. Data were analyzed through linear modeling and were summarized in a path model representing relationships proposed by the theory of structured experiences (Figure 1). Because the sample of experience observations is embedded within individuals (i.e., the 14-member team), all coefficients were estimated using mixed modeling (hierarchical linear modeling) procedures.

Results

Results are summarized in Figures 1 and 2. As Figure 1 shows, the hypothesized interaction effect was supported (\( b_{SQ \times S} = .24, t = 3.79, p < .001 \)). The Theory of Structured Experience proposes that the structuring performance elevates prevalence of deep experience only at levels exceeding a service quality performance threshold. To confirm that the interaction was consistent with this hypothesis, a plot was constructed of regression of deep experience on structuring performance at both high (+2 standard deviations) and low (-2 standard deviations) levels of service performance. As shown in Figure 2, the slope given high service quality performance was positive (.77) and the slope given poor service quality performance was negative (-.34). The “threshold,” or point at which the relation between of deep structured experience and experience
structuring is zero was approximately one half standard deviation below the service quality performance mean (i.e., $z = -0.58$).

As the data in Figure 1 show, all other hypotheses derived from the theory of structured experience were supported. Prevalence of deep experience was a significant predictor of perceived value of time investment ($b=0.39$, $t=6.17$, $p<0.001$) and delight ($b=0.42$, $t=7.55$, $p<0.001$). Perceived value of time investment ($b=0.44$, $t=7.09$, $p<0.001$) and delight ($b=0.34$, $t=5.06$, $p<0.001$) were significant predictors of proclivity to promote the attraction. Estimates of percent variance explained ranged from .16 to .60.

Figure 2: Relation between prevalence of deep experience and quality of structuring performance at good (+2 standard deviations) and poor (-2 standard deviations) levels of service quality performance.
Conclusion and Discussion

The purpose of this study was two fold: 1) to test the proposition that a service quality performance threshold must be exceeded in order for experience quality performance to elevate the quality of a structured experience (Ellis & Rossman, 2008; Ellis et. al, 2017), and 2) to test hypothesized relationships among indicators of quality experiences. Results indicate, as hypothesized, that service quality must be established before experience structuring performance can facilitate high levels of deep structured experience. In fact, as indicated in Figure 2, if service quality is poor, adding experience structuring elements such as theme, multi-sensory engagement, or memorabilia may yield a lower prevalence of deep structured experience.

The causal model in Figure 1 shows a clear pattern of significant effects of service quality, structured experience quality, and their interaction effect on deep structured experience. Prevalence of deep structured experience, as hypothesized, leads to greater levels of perceived value and delight, resulting in an increase in proclivity to promote the attraction. This causal sequence provides support for the propositions of the Theory of Structured Experience. These results underscore the importance of quality structured experiences during structured experiences at attractions.

The results have management implications. Due to the increasingly competitive market of structured experiences, it is important to intentionally design and manage attractions to yield high quality experiences. If managers are committed to high service quality it is beneficial to include theme, multi-sensory experiences, personalization, and lagniappe (value-added take-aways). On the other hand, if a management team is not committed to high service quality they are better off not trying to stage these artistic experience elements during their service offering. Doing so will only decrease the quality of visitors’ experiences.

Limitations and Future Research

This study is not without limitations. Although the data collection strategy differed from the more conventional survey method, it is important to note that the design is still correlational; no experimental manipulation of the presumed causes occurred. Generalizability of results may be limited. Our team from which experience data were gathered was largely female (93%). The average age of this team was approximately 29 years. Thus, the sample is not representative of other populations of education tourists (Adwar, 2014), but it is a reasonable approximation of the age of education tourists. Similarly, the team that evaluated the service quality and experience structuring performance per site was comprised of three members older than 50 years old and one member in his 20’s. Three of the four were male. Perhaps service quality performance judgements vary by age or sex. The strong regional focus of the Hawaiian Islands and island related attractions might also constrain generalizability of results to other tourism destinations.

Further scrutiny of propositions within the Theory of Structured Experience is warranted. Future research might explore how certain emotions are related to, describe, and precede engagement, immersion and absorption experiences. Additionally the memorability of experiences is
increasingly important in a day and age where everything is electronically documented or remembered online via social media. What is it about certain experiences that create an episode or long-term memory within a person? Memory researchers have consistently found that experiences recalled most frequently are emotional in nature (Davis & Schwartz, 1987; Dudycha & Dudycha, 1933; Kihlstrom & Harackiewicz, 1982; Waldfogel, 1948). Such memories are characterized as episodic or autobiographical memory as compared to semantic memory (Tulvig, 1979). Future research might examine episodic memory and what experience characteristics relate with memorability of said episodes.
References


