Quo Vadis Servicescapes Research?  
A Critical Review and Empirical Investigation  
of an Integrative Conceptualization

Abstract
Through a critical literature review, the current study uncovers important contradictions in the theoretical conceptualizations that have been proposed and tested within the servicescapes literature. Drawing from the appraisal of emotion theory and the affect infusion model, we develop and empirically test an integrative conceptualization on the effects of servicescapes on customer behavior across both utilitarian and hedonic service contexts. Results support the suggested conceptualization while also uncovering customers’ familiarity with the servicescape as a critical but neglected moderator that can account for much of the conceptual contradictions in the extant servicescapes literature.

Keywords: Servicescape, customers, emotions, quality, satisfaction, familiarity

Track: Services Marketing
1. Introduction

Marketing literature extensively documents the significant effects of the servicescape on customers’ responses and service-related behaviors (c.f. Bitner, 1992). However, the level of understanding of the mechanisms underlying such effects and subsequently the ability to provide managers with reliable predictions as to the likely effects of servicescapes on customer behavior is hampered by the ambivalence with which servicescape research has treated the relationships among servicescape stimuli, psychological reactions (emotional and cognitive), and customer responses. To address this issue, the present paper seeks to demonstrate the conceptual contradictions in the servicescape research through a critical literature review of empirical studies that have appeared in premier marketing journals. In addition, the paper proposes a theoretically-driven conceptualization for the relationship between servicescape stimuli and psychological reactions, and empirically assesses the robustness of this conceptualization across utilitarian and recreational service contexts.

2. A Critical Review of the Theoretical Conceptualizations in Servicescape Research

The influence of physical store environment on customer behavior has instigated significant academic interest, which has led to a large number of research endeavors looking into different aspects of this phenomenon. In an effort to reflect on the ground covered, two review papers have attempted to take stock of the progress in this field. Turley and Milliman (2000) reviewed, compared, and contrasted the accumulated body of knowledge on customer-related atmospheric effects. Their review, however, only looked at those studies that attempted an experimental manipulation of atmospheric variables and had a clear emphasis on retail environments and not service establishments. They concluded that much of the research in this area has been atheoretical descriptions of effects, without much effort devoted to explaining, predicting and controlling the behavior of customers. They also identified the need for a more ‘macro’ level theory that would explain how customers process and evaluate the entire atmosphere, moving beyond the very common in the literature isolated study of the effects of single environmental elements, in order to shed light onto which elements are the most salient to customers when they form their approach-avoidance evaluations.

Mari and Poggessi’s (2013) literature review looked for themes and topics in a set of selected papers in the servicescapes literature; categorized the articles into classical studies, new insights (e.g. congruity and multiple cues effects), and emerging trends (e.g. the virtual servicescape and the ‘dark side’ of the servicescape); and identified research paths for future studies. However, their analysis does not go any further than that; they do not explore whether or not the various studies they included in their analysis yield consistent findings or consist of conflicting conceptualizations. Overall, their classification is useful, but the scope of their paper did not include any effort towards identifying and explaining complexities or incongruent findings.

To build upon these efforts and to overcome their limitations, the present study compiles an exhaustive set of papers empirically examining the role of shopping environment in customer behavior that have appeared in highly ranked marketing journals. Using a set of related keyword queries (such as “atmospherics,” “servicescape,” and “shopping environment”), in EBSCO Business Source Complete, the search looked into a period of 40 years, from 1973 (Kotler’s seminal paper) through to 2013. In total, 92 papers were identified, including 18 normative or review papers and 74 empirical papers (please see Table 1 for a sample of studies due to size limitations - the complete table is available from the authors).
A careful inspection across these studies reveals critical omissions and contradictions across the conceptualizations proposed so far in the literature. In particular, of the 74 studies presented, 11 do not incorporate either emotional or cognitive customer responses at all (i.e. behaviorists). Fifteen studies include emotional reactions only (emotionalists), whereas 20 examine cognitive reactions only (cognitivists). Of the remaining 28 studies incorporating both emotional and cognitive reactions, half propose that environmental stimuli affect simultaneously emotional and cognitive reactions (i.e. undefined), while the other half demonstrate a non-simultaneous effect of environmental stimuli on emotional and cognitive reactions. Finally, of those latter studies, five report a causal effect from emotional to cognitive reactions (i.e. primacy of emotions), whereas nine studies report exactly the opposite direction in causality (i.e. primacy of cognitions). Most importantly, none of the studies in Table 1 provide any solid theoretical explanation beyond the mere reference to the general SOR framework, either for the occasional omission (in part or in full) of psychological reactions (i.e. emotional and cognitive), or for the proposed hierarchy of the effects of the servicescape on these psychological reactions (i.e. under what circumstances emotions precede cognitions and vice versa).

However, such contradictory conceptualizations cast doubts on our accumulated knowledge regarding the effects of servicescapes on customer behavior, since studies employing none or just one type of psychological reactions (i.e. either emotional or cognitive) are most likely misrepresenting the actual effect of servicescape on customer responses. Moreover, the fact that a significant number of studies provide empirical support for directly opposing conceptualizations on the relationship between emotional and cognitive variables, questions the validity of these conceptualizations and blurs the true nature of the relationship between the variables mediating the effects of the servicescape on customer behavior.

3. An Integrative Conceptualization of Servicescape Effects on Customer Behavior

According to the appraisal theory of emotions (c.f. Lazarus, 1991), once the individual receives a stimulation, the only cognitive process intervening between the stimulation and the emotional episode caused by such stimulation is the appraisal of the stimulation based on its relevance to the individual’s mental readiness and motivation (Moors, 2009). The outcome of the appraisal is the discrete emotion that the individual experiences. For example, while both anger and guilt are emotions with a negative valence, a bank customer will experience anger during an unsuccessful encounter with a teller if the customer notices the teller was not listening carefully. By contrast, a customer will feel guilty if s/he realizes that s/he did not speak sufficiently clear. In both cases, the bank customer appraises the situation (i.e. my fault or the teller’s fault) before the particular type of emotion is designated. Importantly appraisals should be distinguished from higher order cognitive processes, such as evaluations of service quality, since appraisals, most of the times, take place instantaneously at a subconscious level (Storbeck & Clore, 2007). As such, the appraisal theory of emotions rules out the possibility of elaborate cognitive processes mediating between any kind of stimulation and emotional responses.

Hypothesis 1: Emotional reactions mediate the effect of the servicescape on customers’ cognitive reactions.
<table>
<thead>
<tr>
<th>Study</th>
<th>Contexts</th>
<th>Methods</th>
<th>Stimuli</th>
<th>Organismic Responses (Mediators)</th>
<th>Responses (Outcomes)</th>
<th>Moderators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grove and Fisk (1997)</td>
<td>tourist attractions</td>
<td>survey</td>
<td>other customers</td>
<td>◆</td>
<td>◆</td>
<td>satisfaction</td>
</tr>
<tr>
<td>Spies, Hesse, and Loesch (1997)</td>
<td>furniture stores</td>
<td>survey/quasi-experimental</td>
<td>condition, layout, information rate</td>
<td>Mood</td>
<td>◆</td>
<td>satisfaction, money spent</td>
</tr>
<tr>
<td>Bitner (1990)</td>
<td>airport</td>
<td>experimental/lab</td>
<td>(dis)organized environment</td>
<td>■</td>
<td>disconfirmation, attributions</td>
<td>satisfaction, service quality, word of mouth, switching, loyalty, offer, attributions</td>
</tr>
<tr>
<td>Hightower, Brady, and Baker (2002)</td>
<td>baseball stadium</td>
<td>survey</td>
<td>unspecified</td>
<td>Positive affect</td>
<td>☐</td>
<td>service quality, value</td>
</tr>
<tr>
<td>Hui and Bateson (1991)</td>
<td>bank/bar</td>
<td>experimental/lab</td>
<td>perceived density, perceived choice</td>
<td>Pleasure</td>
<td>◄</td>
<td>perceived crowding and control</td>
</tr>
</tbody>
</table>

* ◆: no variable, ☐: no relationship between variables, ▶: emotional reaction cause cognitive responses, ◄: cognitive responses cause emotional responses

**Table 1: Sample of servicescape studies**

(*: no variable, ☐: no relationship between variables, ▶: emotional reaction cause cognitive responses, ◄: cognitive responses cause emotional responses)
The appraisal theory of emotions provides a solid theoretical framework to conceptualize the structure of the relationship between emotional and cognitive reactions towards the service environment. Nonetheless, our critical literature review revealed that 42 out of the 74 studies in premier marketing journals find a significant direct effect (i.e. without the mediation of emotional reactions) from environmental stimuli to cognitive reactions. We put forward the proposition that one potential reason behind this paradox could be the degree of customers’ familiarity with the servicescape. More specifically, repeated exposure to any servicescape results in increased familiarity with the set of stimuli making up the servicescape, which makes customers more reliant on their past experiences and more inclined to retrieve and process this information to give meaning to familiar stimuli. Such reliance on cognitive evaluations does not suggest that customers are not experiencing emotional episodes, but rather that cognitive reactions have a stronger influence on their service-related behaviors (i.e. primacy of cognition). On the other hand, customers with lower exposure to the servicescape lack this bank of past experiences and are hence expected to rely on their emotional reactions as a source of information (i.e. primacy of emotions).

The affect infusion model (AIM) provides theoretical support for this assumption (Forgas, 1995). According to AIM, when individuals become exposed to a certain stimulus for the first time (or very rarely), they normally lack the necessary frame of reference against which they could process the stimulation to produce a cognitive reaction, such as an assessment of service quality. In such cases, emotional responses prevail over cognitive ones, acting as information-like sources. However, as customers experience the same stimulation repeatedly, they progressively learn what to expect the next time they will encounter the same situation. Emotional reactions become then less influential since customers can rely rather confidently on past experience to drive their response. Hence, their response is primarily affected by cognitive reactions.

In other words, the indirect effect of the servicescape on cognitive reactions via emotional reactions is likely to be stronger for infrequent customers than for frequent ones and vice versa. As such, the customer’s familiarity with the servicescape is a moderator determining whether emotional or cognitive reaction will be more influential on customers’ responses to the servicescape. To empirically investigate the moderating effect of familiarity with the servicescape, we put forward the following two hypotheses:

**Hypothesis 2a:** The indirect effect of the servicescape on cognitive reactions via emotional reactions is stronger for infrequent customers than for frequent customers.

**Hypothesis 2b:** The direct effect of the servicescape on cognitive reactions is stronger for frequent customers than for infrequent customers.

### 4. Methodology, Analyses, and Results

To test the hypotheses, data were collected via a mall-intercept survey approach, across different days and times of the week, by customers exiting either from restaurants (n=1,145) or banks (n=1,174). A screening question confirmed that respondents had visited restaurants exclusively for recreation and banks exclusively for work purposes. The data collection instrument was comprised of scales extensively employed in past research. More specifically, the servicescape effects were captured by the information load scale of Mehrabian and Russell (1974), emotional reactions were measured by Izard’s (1977) differential emotions scale (DES III), while cognitive reactions were measured by the servicescape quality factor of Brady and Cronin Jr. (2001).

The first hypothesis (H1) suggests that emotional reactions mediate the effect of the servicescape on customers’ cognitive evaluations of servicescape quality. However, the extant
literature suggests that the servicescape can have a direct, unmediated effect on cognitive reactions, such as assessment of the service quality, while cognitive reactions can also intervene in the relationship between servicescape configurations and emotional reactions, which is exactly the opposite of what H1 suggests. The examination of H1 required thus the comparison of the structure among the servicescape and the psychological reactions put forward by the current study with the exact opposite structure. Competing model comparisons were performed independently for each service context. Table 2 presents the results and shows that the proposed structure of relationships is significantly different from the competing one, based on both the $\Delta \chi^2$ and $\Delta$CFI criteria. More importantly, all fit indices clearly establish the superiority of the proposed structure over the competing one, thus supporting H1.

Table 2: Competing models comparisons

<table>
<thead>
<tr>
<th>Context</th>
<th>Model</th>
<th>$\chi^2$</th>
<th>df</th>
<th>p</th>
<th>$\Delta \chi^2$</th>
<th>df</th>
<th>P</th>
<th>CFI</th>
<th>$\Delta$CFI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank Sample</td>
<td>Emotion→Cognition</td>
<td>3,881.358</td>
<td>719</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
<td>0.923</td>
<td></td>
<td>0.044</td>
</tr>
<tr>
<td></td>
<td>Cognition→Emotion</td>
<td>4,151.836</td>
<td>719</td>
<td>0.000</td>
<td>270.478</td>
<td>0</td>
<td>0.000</td>
<td>0.881</td>
<td>0.042</td>
<td>0.070</td>
</tr>
<tr>
<td>Restaurant Sample</td>
<td>Emotion→Cognition</td>
<td>3,941.212</td>
<td>719</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
<td>0.928</td>
<td></td>
<td>0.041</td>
</tr>
<tr>
<td></td>
<td>Cognition→Emotion</td>
<td>4,344.897</td>
<td>719</td>
<td>0.000</td>
<td>403.685</td>
<td>0</td>
<td>0.000</td>
<td>0.886</td>
<td>0.042</td>
<td>0.066</td>
</tr>
</tbody>
</table>

Table 3 summarizes the results of the SEM multi-group analyses ran to assess the moderating effect of the familiarity with the servicescape. Looking at the differences in the beta values of the paths from information load to servicescape quality in Table 3, those visiting the servicescape only a few times per year, in comparison to the frequent customers (i.e. a few times every month), rely significantly more on their emotional reactions when assessing servicescape quality. In contrast, compared to the less frequent customers, more frequent ones seem to be affected significantly more directly by the servicescape in forming their cognitive evaluations of servicescape quality. This finding is consistent across both service contexts, fully supporting both H2a and H2b.

Table 3: Results of hypotheses testing

<table>
<thead>
<tr>
<th>Effects</th>
<th>Frequency of Visit</th>
<th></th>
<th></th>
<th></th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Low</td>
<td>High</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>(banks n=347</td>
<td>(banks n=577</td>
<td></td>
<td>(restaurants n=429)</td>
<td>(restaurants n=501)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Beta*</td>
<td>Hypothesis</td>
<td>Beta*</td>
<td>Hypothesis</td>
</tr>
<tr>
<td>Information load (indirect effects via emotions)</td>
<td>Servicescape quality</td>
<td>0.39</td>
<td>0.36</td>
<td>H2a supported</td>
<td>0.18</td>
<td>0.20</td>
<td>H2a supported</td>
</tr>
<tr>
<td>Information load (direct effects)</td>
<td>Servicescape quality</td>
<td>0.23</td>
<td>0.21</td>
<td>H2b supported</td>
<td>0.48</td>
<td>0.45</td>
<td>H2b supported</td>
</tr>
</tbody>
</table>
5. Discussion and Implications

Study results indicate that emotional reactions mediate the relationship between servicescape stimulation and the cognitive reactions that attempt to give meaning to the stimuli that the environment generates. However, as customers become more familiar with the environment through repeated exposure, the mediation weakens in favor of the direct effect. The repeated exposure builds an amalgam of experiences against which the customer interprets the servicescape stimuli every additional time s/he is exposed to the same environment. The results of the present study therefore provide a theoretically driven explanation of when emotional reactions intervene in the relationship between environmental stimuli and cognitive evaluations and when they do not. The implication for scholars is thus that both emotional and cognitive reactions have to be jointly considered when seeking to explain the impact of the servicescape on customers’ responses. At the same time, controlling for the degree to which the customer is familiar with the store setting produces a more valid and realistic assessment of the impact of servicescape stimulation.

6. References


