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The Servicescape as an Antecedent to Service Quality and Behavioral Intentions

Daire Hooper

Technological University Dublin, daire.hooper@tudublin.ie

Joseph Coughlan

Technological University Dublin, joseph.coughlan@tudublin.ie

Michael Mullen

Florida Atlantic University

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Article Title Page

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[Author Details: Mandatory]

Author 1 Name: Daire Hooper
Department: College of Business
University: Dublin Institute of Technology
Town/City: Dublin
State (US only):
Country: Ireland

Author 2 Name: Joseph Coughlan
Department: College of Business
University: Dublin Institute of Technology
Town/City: Dublin
State (US only):
Country: Ireland

Author 3 Name: Michael R Mullen
Department: Department of Marketing, Barry Kaye College of Business
University: Florida Atlantic University
Town/City: Fort Lauderdale
State (US only): Florida
Country: United States of America

Author 4 Name:
Department:
University:
Town/City:
State (US only):
Country:

Corresponding author: Mandatory: Daire Hooper
[Corresponding Author's Email:] daire.hooper@dit.ie

Please check this box if you do not wish your email address to be published

NOTE: affiliations should appear as the following: Department (if applicable); Institution; City; State (US only); Country. No further information or detail should be included

Acknowledgments (if applicable):

Biographical Details (if applicable):

[Author 1 bio]

[Author 2 bio]

[Author 3 bio]

[Author 4 bio]

Structured Abstract [Mandatory]



Purpose: The purpose of this paper is to examine whether the servicescape should be subsumed as a dimension within service quality conceptualizations or whether it is a unique construct in itself which precedes service quality evaluations and behavioral intentions. We both propose and operationalize this model and in doing so make a theoretical contribution by demonstrating how a delineation between these two constructs is necessary in order for theory to progress in this area.

Design/methodology/approach: A total of 355 customers were intercepted as they exited a retail store and surveyed using a structured questionnaire. The data was then analyzed using structural equation modeling to test the research hypotheses.

Findings: This paper finds that it is more appropriate to model the servicescape as a separate construct which precedes service quality thus highlighting a need for a demarcation to be made between these important constructs. In addition, we find that design is a significant contributor to behavioral intentions further confirming the necessity to manage service environments in order to generate repatronage behaviors.

Practical implications: Service providers should consider the influence of store environments in shaping service quality perceptions and their subsequent impact on behavioral intentions.

Originality/value: The paper adds to the existing literature by disentangling the complicated relationships between service environments, service quality and behavioral intentions. Furthermore, the findings indicate to practitioners which aspects of the servicescape require attention so as to maximize repatronage intentions.

Keywords [Mandatory]: Store environments, servicescapes, behavioral intentions, service quality.

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The Servicescape as an Antecedent to Service Quality and Behavioral Intentions

Abstract

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1. Introduction

For consumers visiting a service or retail store, the service environment is the first aspect of the service that is perceived by the customer and it is at this stage that consumers are likely to form impressions of the level of service they will receive. Indeed, it is an old cliché that you never get a second chance to make a first impression and for this reason, it is argued herein, that the service environment should be viewed as an antecedent to service quality perceptions. This perspective conflicts with much of the service quality literature which includes tangible cues as a core dimension alongside a range of other service quality indicators. This article demonstrates how it is theoretically more prudent to model the servicescape as a predecessor to service quality evaluations. To do so, the article begins by providing an overview of the servicescapes literature, paying particular attention to the various dimensions proffered in the literature. Following on from this, we examine the service quality literature and from this it becomes evident of the overlap between the two constructs.

Since the term the ‘servicescape’ was first coined by Bitner (1992), a steady stream of research has sought to demonstrate the impact of servicescapes on various post-consumption constructs such as emotion, customer satisfaction (Johnson *et al.*, 2004), store image (Baker *et al.*, 1994), service quality (Hightower *et al.*, 2002; Reimer and Kuehn, 2005), value for money (O’Cass and Grace, 2008), behavioral intentions (Harris and Ezech, 2008) and financial performance (Brüggen *et al.*, 2009). On the whole, the positive effects of the servicescape on these constructs has been demonstrated and the general consensus supports the important role servicescapes play. In more recent years, research has extended much of this theory to virtual servicescapes with numerous papers demonstrating their effects on consumer behaviors (Vilnai-Yavetz and Rafaeli, 2006; Harris and Goode, 2010). There have also been a number of qualitative papers published in this area and these have again shown the importance of service environments on maintaining customer relationships over time (Menzel-Baker *et al.*, 2007; Grayson and McNeill, 2009; Tuzovic, 2009) However, on a conceptual level certain ambiguities remain. For instance, there is little agreement between authors as to what constitutes the servicescape and it is unclear what should be regarded as a servicescape dimension and what the content of these dimensions should be. Furthermore, it is unclear whether the servicescape should be regarded as an additional service quality element, or whether it should be viewed as a separate construct in itself. While different approaches to

describing service quality have been proffered in the literature, the most frequently cited and influential is Parasuraman *et al.*'s (1985, 1988, 1994) SERVQUAL conceptualization. Although this model is not without its detractors, it has withstood many of the criticisms leveled at it and is now a stalwart of services marketing management theory.

The purpose of this study is to develop a theoretical model of servicescapes and to demonstrate how store environment perceptions precede a two dimensional view of service quality which are then modeled together as antecedents of behavioral outcomes. Firstly, we consider the servicescapes literature, which thus forms the basis of our model. Next the service quality literature is considered and a theoretical justification for modeling the servicescape as a precursor to service quality perceptions is provided leading to the hypothesized model. Following development of the theoretical model, we present research methods, results, a discussion of the theoretical, managerial implications and a conclusion.

2. Literature Review

2.1 Servicescapes

Although 'the servicescape' is probably the most widely used term to refer to the influence of tangible and intangible cues on consumers, there are three other appellations that are commonly used to describe the same concept, these being; atmospherics, environmental psychology and store environments. The literature surrounding each of these is derived from Mehrabian and Russell's (1974) work on environmental psychology however, certain discrepancies exist which can most likely be attributed to the corpus of literature from which they are derived.

The first term popularly used is 'Environmental Psychology', and those that coined this expression are not surprisingly, from a psychology background (Mehrabian and Russell, 1974). Mehrabian and Russell's (1974) theory lies at the core of this work with researchers directly applying their theory albeit in a consumer context (Donovan and Rossiter, 1982). The second term used in the literature, 'atmospherics', can be traced back to Kotler's (1974, p.50) seminal article in which he argued that atmospherics is 'the conscious designing of space to create certain effects in buyers'. He contended that environmental elements within the service environment such as noises, shapes, scents, music and colour can be modified so that

particular emotional effects will be elicited which in turn enhance purchase probability. This conceptualization is similar to Mehrabian and Russell's (1974) in that they both infer that environmental stimuli can be manipulated so that certain behaviors manifest. Although some see Kotler (1974) as the first to advocate the manipulation of environmental cues in order to affect consumer behavior, a number of studies previous to this had manipulated environmental elements (Smith and Curnow, 1966; Kotzan and Evanson, 1969). In general, researchers who use the term atmospherics tend to focus on one or two environmental stimuli and measure how they impact upon internal responses (such as emotions) and behavioral responses (such as spending more time in-store) with a wealth of studies within this area demonstrating these causal linkages (Turley and Milliman, 2000; Summer and Herbert, 2001; Michon *et al.*, 2005; Lin, 2010). The third stream of study has emerged from the retail literature and aptly refers to this area of research as the 'store environments' (Baker, 1987; Baker *et al.*, 1994; Baker *et al.*, 2002). Unlike the work of atmospherics authors, those who have taken this view have attempted to take an all-inclusive approach to the measurement of the environment by including multiple environmental stimuli (Baker *et al.*, 1994; Baker *et al.*, 2002). Much of the recent empirical research on servicescapes has taken this multi-dimensional perspective (Sherman *et al.*, 1997; Wakefield and Blodgett, 1996; Wakefield and Blodgett, 1999) although there seems to be some discrepancies with regards to their servicescapes measures. However, close examination of the literature finds that a number of common themes emerge that are relatively generic and could be applied to a variety of service industries.

The first of these is ambient conditions and it is this aspect of the service that is most likely to affect one of the five senses (Bitner, 1992). It is thought that when ambient factors are maintained at a satisfactory level they do not directly motivate consumer purchases, however if any of these ambient cues fall outside their acceptable limits, or are absent from the environment, they have negative effects on consumer behavior (Baker, 1987; Hightower *et al.*, 2002). It can be seen from the atmospherics literature that ambient cues are one of the most widely studied aspects of the servicescape (Turley and Milliman, 2000) with an extensive range of ambience factors studied including music (Milliman, 1986; Yalch and Spangenberg, 1990; Areni and Kim, 1993; Herrington and Capella, 1994; Dubé *et al.*, 1995; Herrington and Capella, 1996; Yalch and Spangenberg, 2000; Chebat *et al.*, 2001; Jacob,

2006;), lighting (Areni and Kim, 1994; Summers and Hebert, 2001) and olfactory cues (Bone and Ellen, 1999; Davies *et al.*, 2003; Ward *et al.*, 2003).

The second commonly found dimension relates to design cues which unlike ambient cues are more visual in nature. The design aspect of the servicescape is possibly one of the most important as it facilitates the communication of a multitude of messages to the consumer from how to behave, to the service levels they should expect to receive (Bitner, 1992). Scholars generally categorize design elements as being either functional or aesthetic with issues ranging from architectural design, to the materials and the colours used in the decor (Baker, 1987). Space and layout also occur frequently in the literature and generally relate to the way furnishings and equipment are arranged and the spatial relationships among these objects (Bitner, 1992; Wakefield and Blodgett, 1996; Ryu and Jang, 2007). Ideally, the positioning of objects and furnishings within the environment should facilitate the free flow of movement throughout the service facility and ought to allow customers to accomplish their tasks during the service encounter (Grayson and McNeill, 2009). For example, aisle space must be sufficiently large so as to permit shoppers to browse comfortably without feeling crowded or cramped (Harrell *et al.*, 1980; Eroglu and Harrell, 1986; Hui and Bateson, 1991). For self-service store environments, the issue of space is likely to be more pertinent as customers must navigate through the structure of the facility to serve themselves. Furthermore, employing 'user-friendly' layout designs should improve customer search time and service reliability thus facilitating service delivery (Sulek and Lind, 1995). On the otherhand, if the layout is such that it inhibits movement throughout the environment it may lead to frustration which leads to a more dissatisfying experience for the customer (Bitner, 1992).

The role of equipment has also repeatedly appeared in the literature. While some services may be more equipment-dependent, in practically all services there is likely to be some element of contact with equipment by the customer. For self-service situations this aspect of the service environment is likely to have a significant impact upon consumer evaluations of the service as it determines how well the consumer can perform various tasks. This dimension is also critical in communicating the image of the store to customers with outdated tills and technology implying that the quality of service that the customer should expect is below average. A critical incident study by Hoffman *et al.* (2003) supported this notion as it was found that a significant proportion of servicescape failures were attributed to

mechanical problems such as inoperative computers and other equipment which subsequently inconvenienced the customer. From this, and other studies which have analyzed the role of equipment in the service encounter we believe this is an important aspect to servicescape design in the 21st Century.

A final dimension which is frequently cited in the literature is the role of hygiene and cleanliness. This servicescape dimension seems the most intuitive and possibly easiest to maintain but requires constant attention from the service provider. Despite the relative ease at which this dimension can be controlled, Hoffman *et al.* (2003) report that cleanliness issues are the most frequently cited servicescape failures by consumers. In fact, cleanliness issues are regarded by respondents as being the most serious service failures experienced. It is likely that this is due to the fact that maintaining a clean and hygienic environment should be one of the cheapest and easiest of the servicescape dimensions to control.

2.2 Two Dimensions of Service Quality

Examination of the service quality literature generally finds that most authors define service quality as an overall appraisal of a product or service that is dependent on consumers' prior expectations (Grönroos, 1984; Bitner and Hubbert, 1994) and it is this consumer-centric definition that prevails most commonly in the literature. Many service quality theories describe service quality as a multi-dimensional construct, but although authors do not necessarily agree with the content or number of the dimensions, one sub-construct which is continually classified as a service quality element in some way or another are tangible cues. Parasuraman *et al.* (1985; 1988; 1991; 1994) include a tangibles dimension within their SERVQUAL framework which incorporates the appearance and design of the physical facilities, the appropriateness of the equipment used and also how the employees are presented. Similarly, Brady and Cronin (2001), Rust and Oliver (1994) and more recently Wall and Berry (2007) and Pollack (2009) all describe how service quality can be inferred from the quality of the service environment. Bitner's (1992, p. 63) seminal piece on servicescapes makes no explicit references to any service quality model per se, instead she notes that 'customers...tend to use extrinsic cues (such as the physical surroundings) to infer quality'. From this it can be seen that Bitner (1992) believes that the servicescape contributes to consumers' perceptions of service quality but how this should be modeled is unclear. As part of a larger model, Hightower *et al.* (2002) found that the servicescape is a predictor of

perceived service quality, however, the theoretical implications of this were not discussed. We argue that there needs to be a demarcation made between these two constructs and that servicescape evaluations should precede service quality perceptions as this element of the service is immediately evident to a customer. Moreover, a customer may actually use the servicescape to mould their perceptions of the personal service they are about to receive in which case the servicescape acts as an expectations primer. For these reasons we propose that the servicescape should be modeled as an antecedent to service quality. Further to this, we propose that service quality should be regarded as a two dimensional structure. This is in line with a number of authors' work in this area (Brady and Cronin, 2001; Wall and Berry, 2007) but primarily stems from Grönroos's (1984) original model. Grönroos (1984) describes service quality consisting of a technical and a functional service quality dimension. The functional dimension relates to *how* the service is delivered whereas the technical aspect refers to *what* the customer actually receives. From this we can see that the 'how' aspect of this model relates primarily to the role employees play in the service delivery whereas the 'what' is more akin to a general or overall service evaluation. Using this as a basis, we propose that **consumers' perceptions of** employee service quality has a direct impact on overall service evaluations, thus in a sense moving away from Grönroos's (1984) original framework as we believe a four-step relationship where servicescape evaluations precede employee service quality which in turn has a direct effect on outcome, or overall service quality is more appropriate. The following hypotheses reflect this supposition:

H1: Servicescape perceptions will have a direct and positive effect on employee service quality.

H2: Servicescape perceptions will have a direct and positive effect on overall service quality.

H3: Employee service quality will have a direct and positive effect on overall service quality.

On the whole the literature has pointed to the fact that a favorable service experience will result in positive behavioral responses (Zeithaml *et al.*, 1996) with high levels of service quality thought to be an essential ingredient of a business's survival. Indeed the quality of the service received will ultimately determine whether an individual engages in both positive word-of-mouth communications and repatronage behaviors. Numerous studies over the years

have demonstrated the positive relationship between service quality and repatronage intentions. **Keaveney's** (1995) seminal paper on the causes of customer switching behavior found that consumers switch for a variety of reasons, however most of these reasons were related to service quality failures. In line with this research we propose the following hypothesis:

H4: *Servicescape perceptions will have a direct and positive effect on behavioral intentions.*

H5: *Overall service quality will have a direct and positive impact on behavioral intentions.*

Fig. 1 reflects each of these hypotheses which describes the servicescape as a direct antecedent to employee service quality and having an indirect impact on overall service quality evaluations. Servicescapes and overall service quality subsequently have a direct impact on behavioral intentions.

[Insert Figure 1 about here]

3. Method

3.1 Study Context

Data for this study was collected in service stations in Dublin, Ireland. As well as selling petrol and petrol-related products, the service stations also include a convenience store which sell a variety of hot and cold food in addition to a selection of grocery items. Given that the chosen service was retailing, it was decided that a survey intercept technique would be most appropriate. This was a logical approach as it allowed us to sample individuals who had used the service in the time immediately before completing the survey. Interviewers were graduate students who were trained and observed. They were instructed to interview customers exiting the store only. **Data collection took place over two weeks** and yielded a sample size of 355 of which 34% were female and 66% were male.

3.2 Measures

All respondents provided the information on a structured questionnaire which addressed the pertinent research questions. We view the servicescape as a multi-dimensional construct with multiple items for each servicescape dimension. These items were taken from a variety of sources, however as there were no items to reflect certain aspects of the service environment, these were created by the authors. A pilot test was run which validated these items. A full list of items and sources can be found in Table 1. All items were in statement form and were rated by respondents on 7 point Likert scales from Strongly Disagree to Strongly Agree.

[Insert Table 1 about here]

3.3 Data analyses and Results

Data collected from respondents was analyzed with confirmatory factor analysis (CFA) and structural equation modeling. Firstly the data was examined for normality and outliers (Mullen *et al.*, 1995) and as no problems were noted here we proceeded to follow Anderson and Gerbing's (1988) recommended two-step approach to assess the measurement model. This allowed for individual items to be assessed for composite reliability, convergent reliability and discriminant validity. Harman's one-factor method was also used to test for common methods bias (Podsakoff *et al.*, 2003). The analysis looked at the factor loadings, the internal consistency of items, discriminant validity and convergent validity resulting in the deletion of a number of service quality items.

[Insert Tables 2 about here]

Reliabilities and confirmatory factor properties for the full model are shown in Table 2. Discriminant validity was tested using Bagozzi *et al.*'s (1991) recommendations and it was found that the phi coefficients between all constructs were significantly less than 1.0. Although the model yielded a significant chi-square, this is not surprising as when larger samples are used this statistic reaches significance very easily. The remaining fit indices indicated an excellent fit ($\chi^2 = 209.21$, $df = 83$, $p = 0.000$, $RMSEA = 0.067$, $CFI = .95$, $SRMR = 0.058$) and were well within recommended threshold levels (Hooper *et al.* 2008). Composite reliabilities were also above Bagozzi and Yi's (1988) 0.60 threshold and these are also displayed in Table 2 which allows us to discuss each of the hypotheses separately. Table 3 shows all standardized structural parameter estimates and the results of the hypotheses tests for the model.

[Insert Table 3 about here]

As expected, Hypothesis 1 which links servicescape perceptions with employee service quality is found to be significant and positive ($\gamma_{11} = 0.66, t = 8.83, p = 0.04$). Thus, positive servicescape evaluations are likely to lead to more positive perceptions of employee service quality. The direct effect of servicescapes on overall service quality (H2) was found to be both positive and significant ($\gamma_{21} = 0.27, t = 3.14, p = 0.07$). Hypothesis 3, which predicted a positive relationship between employee service quality and overall service quality was also supported ($\beta_{12} = 0.45, t = 5.02, p = 0.14$). As expected, the direct effect of servicescapes on behavioral intentions (H4) was both significant and positive ($\gamma_{11} = 0.44, t = 3.39, p = 0.09$). Hypothesis 5, predicting a positive relationship between overall service quality and behavioral intentions was also supported ($\beta_{13} = 0.25, t = 3.39, p = 0.09$). From this we can see that the results support all our hypothesis in that the paths are all significant and in the expected direction. Overall, these results support our theoretical model and provide evidence for the servicescape as a predictor of service quality rather than an additional dimension to be subsumed within the construct. Furthermore, our results also indicate that the servicescape is a powerful determinant of overall service quality perceptions as well as repatronage and word-of-mouth behaviors.

4 Discussion

The aim of this paper was to test the effects of the servicescape and two dimensions of service quality on behavioral intentions. A structural model investigated whether the servicescape is an antecedent to the two dimensions of service quality perceptions and behavioral intentions. Results support our four-stage model (servicescape \rightarrow employee service quality \rightarrow overall service quality \rightarrow behavioral intentions) which demonstrates that consumers perceive service experiences in an almost ‘chain-like’ manner whereby each service element has a subsequent impact on the next.

[Insert Figure 2 about here]

Thus, we have shown how tangible cues lie outside the realm of service quality and serve as an antecedent, rather than an element of the construct. Notable authors on service quality (e.g. Parasuraman *et al.* 1988; 1994; Rust and Oliver, 1994; Brady and Cronin, 2001; Wall and Berry, 2007; Pollack, 2009) have published studies in this area in which tangibles

are subsumed under service quality. The difference between these earlier studies and the current study is that the majority of these have not sought to delineate between the servicescape and service quality. Here we can see that for consumers visiting a service or retail store, the service environment is the first aspect of the service that is perceived by the customer and it is at this stage that consumers are likely to form impressions of the level of service they will receive. Indeed, it is very difficult to erase first impressions and it is for this reason, that we believe and have shown that the service environment should be viewed as an antecedent to service quality perceptions. This perspective differs from much of the service quality literature which includes tangibles cues as a core dimension alongside a range of other service quality indicators. Our study demonstrates how it is theoretically more prudent to model the servicescape as a predecessor to service quality evaluations.

Despite other studies in the past having examined the direct effects of the environment on behavioral and loyalty intentions (Harris and Ezeh, 2008), the hypotheses set out in this paper did not specify a direct link between the servicescape and behavioral intentions. Instead it was expected that all servicescape constructs would affect behavioral intentions through service quality perceptions. Not only does the servicescape influence how consumers' perceive the service delivered by service staff, but also directly impacts their impressions of the overall service they received. Furthermore, their evaluations of the servicescape directly affects intentions to return to the service which accentuates the salience of the store environment.

4.1 Managerial Implications and Future Research Directions

The research presented here offers some guidelines for managers of retail services that can be used as input to improve their service offering. Firstly, it is essential that managers recognize the influence of the servicescape as a marketing tool. Our research has shown that servicescape evaluations directly impact behavioral intentions. Thus, it is imperative to ensure that repatronage intentions are optimized. To meet this end, managers need to consider the importance of both tangible and intangible cues as strategic goals. Our research has found that consumers perceive service quality in terms of intangibles such as the reliability of the service and its efficiency, with tangible cues, otherwise known as the servicescape, having a direct impact on service quality perceptions.

Up until this point, the extant literature has provided little insight into the theoretical differences between service quality and the servicescape. This paper has demonstrated that consumers cognitively discriminate between these two constructs, with perceptions of the servicescape directly preceding service quality perceptions. Thus, managers need to be aware of the effect that service environments have in shaping overall service quality evaluations. This is particularly the case as the first point of contact for consumers are tangible cues. Therefore, it is essential that the service environment is managed so that, at a minimum, it matches consumers' expectations of what to expect from such a service and that the service environment is congruent with the service type. Managers must buy into the idea that service environments need to be maintained so as to optimize consumers' evaluations of the service quality that they receive. To meet this end, managers must communicate to staff the benefits of maintaining a clean, and well-kept service environment that facilitates customers in achieving their service goals. **As with many services, it is very difficult for managers to both retain and attract and 'right' kind of staff and of all aspects of the service offering it is the most complex part to manage and control and is likely to be highly variable from one service provider to the next. Therefore, it is very reassuring to see that the physical aspects of the service, which are not variable, hold such value for customers. Because of this, the servicescape should be under constant evaluation and observation by management. While a major overhaul of the design might be both costly and difficult to do, adjustments such as repainting the service environment or adding decorative features may rejuvenate the environment and allow it to maintain its attractiveness to customers. If the upkeep of the servicescape is not prioritized, the likelihood is that customers will begin to patronize competitors.**

The cleanliness and hygiene of the service station is a key element of this. In terms of control, this facet of service design is relatively easy to manage. All flooring, outdoor and indoor space should at all times be free from litter and management must oversee regular cleaning of the environment. It is also essential that managers understand that perceptions of the cleanliness of the environment will impact how consumers perceive the service staff. The reasoning behind this is that it seems that customers attribute the upkeep of the store as the responsibility of the staff and therefore it should be realised

by management that if they wish customers to perceive staff in a positive light then care should be taken to maintain a hygienic and clean store environment. Equipment and machinery are also key, with managers ensuring that all self-service equipment is in working order and without any mechanical defects. On the whole, constant attention needs to be paid to the servicescape and innovations and ways to improve it should constantly be considered by management.

The current study examined a service station with a retail store attached, however in terms of application, we believe these findings will hold true in any manner of services. The servicescape will impact over all evaluations of services in a wide range of services including; retail, restaurants, financial services and even services offered by government agencies are likely to be judged in this way. Further research should seek to replicate this study to clarify whether this is the case.

5 Conclusion

This paper began with the premise that there is theoretical confusion between our understanding of service environments and service quality with no clear distinction made in the literature between the two. Our research suggests that consumers evaluate the servicescape which then leads to linkages to service quality and subsequently to behavioral intentions. Through the provision of a framework that elucidates the evaluative process that consumers engage in, we are given the opportunity to deepen our understanding of how consumers experience services. The SERVQUAL instrument has become a stalwart of services marketing theory, and it is this model that includes tangible cues in its framework. Within this paper we argue that service quality is best described in terms of intangible cues primarily related to the actual service that is delivered by service personnel. Theoretically it is more sensible that service environments and all their associated tangible cues are seen as distinct from employee related issues the two are quite conceptually different one another. We recognise that customers evaluate services holistically, however the servicescape should be regarded as a primer which moulds customers' expectations of the service they are about to receive. Indeed, it is quite possible for an individual to evaluate a service or store based on

aesthetics or visual cues only and for this reason it is understandable that servicescape evaluations should serve as an antecedent to service quality perceptions.

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Fig. 1 Theoretical Model of the Servicescape, Service Quality and Behavioral Intentions

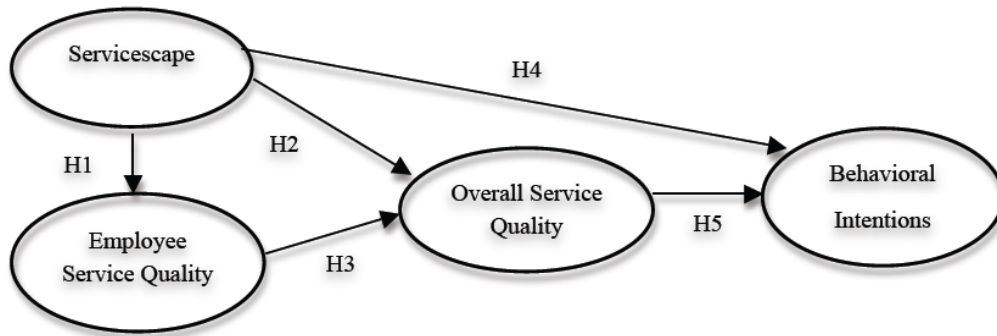


Fig. 2: Results: Standardized Parameter Estimates of the Model

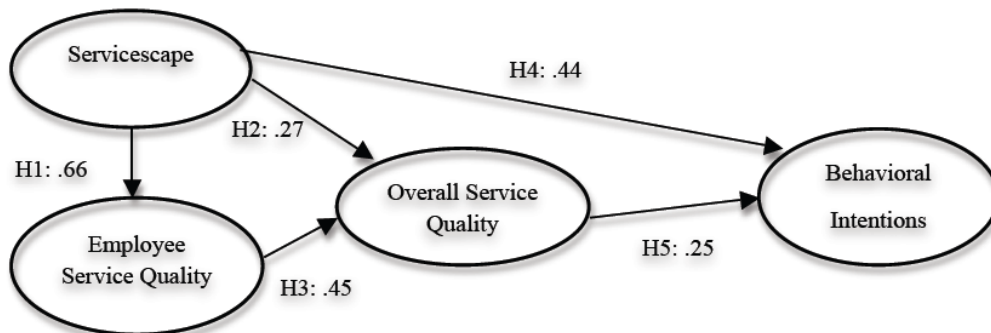


Table 1 Constructs with Measures and Sources

Constructs and Measures	Sources, Adapted from:
<i>Equipment</i>	
The equipment was modern looking	Wakefield and Blodgett (1999)
The electronic equipment was excellent	Wakefield and Blodgett (1999)
The equipment was of high quality	Wakefield and Blodgett (1999)
<i>Design</i>	
I found the interior design visually appealing	Reimer and Kuehn (2005)
The interior design was attractive	-----
The colour schemes were appropriate	Baker (2002)
The architecture was attractive	Reimer and Kuehn (2005)
<i>Space</i>	
The flooring was appropriate	-----
I found my way around easily	Wakefield and Blodgett (1996)
<i>Ambience</i>	
The background music was pleasant	Reimer and Kuehn (2005)
The lighting was comfortable	Reimer and Kuehn (2005)
The store had a pleasant smell	Hightower <i>et al.</i> (2002)
The background music was appropriate	Hightower <i>et al.</i> (2002)
<i>Hygiene</i>	
The service station appeared to be hygienic	-----
The store was very clean	Reimer and Kuehn (2005)
The employees were neat and tidy in appearance	Reimer and Kuehn (2005)
<i>Functional/Employee Service Quality</i>	
The service in store was delivered promptly	Grace and O’Cass (2004)
The staff were helpful	Grace and O’Cass (2004)
The service was efficient	Grace and O’Cass (2004)*
The staff were trustworthy	Grace and O’Cass (2004)*
The staff were polite	Grace and O’Cass (2004)
<i>Overall Service Quality</i>	

The store provided good service	Grace and O’Cass (2004)*
The service was of a very high quality	-----*
The service here suited my needs	Grace and O’Cass (2004)
The service here is reliable	Grace and O’Cass (2004)
The service station provided quality service	Grace and O’Cass (2004)
<i>Behavioral Intentions</i>	
Say positive things about this service station to other people	Zeithaml <i>et al.</i> (1996)
I would recommend this service station to someone else	Zeithaml <i>et al.</i> (1996)
I would encourage friends and family to go to this service station	Zeithaml <i>et al.</i> (1996)
I would consider this service station as my first choice in the future	Zeithaml <i>et al.</i> (1996)

* = denotes items that did not meet validity criteria

Table 2 CFA Results for Full Model

Construct	Factor Loading	t Value	Composite Reliability	α
Servicescape			.79	.79
Equipment	0.64	---- ^a		
Design	0.66	11.21 ^b		
Ambience	0.55	8.27 ^b		
Space	0.67	9.61 ^b		
Hygiene	0.73	10.18 ^b		
Employee Service Quality			.75	.76
The staff were polite	0.82	11.27 ^b		
The staff were helpful	0.66	9.99 ^b		
The service in store was delivered promptly	0.67	---- ^a		
Overall Service Quality			.74	.80
The service here suited my needs	0.66	11.69 ^b		
The service here is reliable	0.89	---- ^a		

The service station provided quality service	0.74	13.73 ^b		
Behavioral Intentions			.86	.89
Say positive things about this service station to other people	0.83	13.90 ^b		
I would recommend this service station to someone else	0.81	---- ^a		
I would encourage friends and family to go to this service station	0.80	32.82 ^b		
I would consider this service station as my first choice in the future	0.64	11.41 ^b		

^a = The corresponding coefficient was fixed to set the metric of the latent construct.

^b = Significant at the $p < 0.05$ level

Table 3: Results: Parameter Estimates and Hypotheses

Structural Paths	Overall	Standardized Path Coefficients	<i>t</i> Value
H1: Servicescape → Employee Service Quality	Supported	0.66	7.58 ^a
H2: Servicescape → Overall Service Quality	Supported	0.27	3.07 ^a
H3: Employee Service Quality → Overall Service Quality	Supported	0.45	5.02 ^a
H4: Servicescape → Behavioral Intentions	Supported	0.44	5.28 ^a
H5: Overall Service Quality → Behavioral Intentions	Supported	0.25	3.39 ^a

^a = Significant at the $p < 0.05$ level