# HOW SERVICE SEASONS THE EXPERIENCE:

# CAPTURING HOSPITALITY SERVICESCAPES

## Abstract

Hospitality servicescapes incorporate physical complexity and social interaction. These two features are often measured separately but rarely measured together in attempts to uncover consumer perceptions within these settings. A psychometric scale developed within the restaurant setting shows a five-dimensional structure for capturing the personality of a hospitality setting. In contrast to attribute-based measures, this measurement approach highlights the importance of service interactions in shaping consumer perceptions. The items proposed account for the dynamism of the setting including the heterogeneity possible due to high service levels. The scale indicates how certain consumer perceptions, as outlined in the dimensions of the proposed scale, are likely to influence consumer outcome behaviors. Managerially, the scale provides a more precise understanding of consumer perceptions within restaurants. As such, the scale can serve as an interesting positioning tool as well a method to evaluate consumer perceptions of restaurants.

Keywords: Personality; scale development; hospitality servicescapes; restaurants

## 1. Introduction

Many modern hospitality servicescapes incorporate some level of interaction between the service provider and the consumer, such as in hotels, restaurants, health clinics, airlines and banks, to name just a few examples. The image perceived by consumers of these hospitality servicescapes relies on the particular blend of environmental and service features. Given the complex relationships among the service providers, the environment and the consumers, these types of service scenarios are difficult to evaluate (Bitner, 1992).

Most hospitality settings are dynamic in nature – managers are continuously attempting to update their image and accommodate changes in tastes and fashion by making changes to their retail environment. However, decisions to make such changes are not necessarily based on accessible information regarding consumer perceptions. Other than attribute evaluations (i.e. good food, great décor), it can be difficult to know what consumers actively value in a restaurant setting in terms of overall ambiance and quality. Furthermore, most hospitality settings incorporate intensive service within elaborate environments where the synergy between these two is essential. For example, one cannot order a meal in most restaurants without a waiter, nor can one take a flight without ever interacting with a flight attendant.

Product/service perceptions are often projections of the self (Belk, 1988), which has led researchers to use personality traits as a means of independently evaluating brands (Aaker, 1997) and physical retail settings (d'Astous and Levesque, 2003). However, neither of these measures considers all the parameters of hospitality settings such as image, environment, and service together.

To address this gap, a multiple dimension scale is developed in this paper to measure consumer perceptions in hospitality servicescapes. The scale is based on existing theory and uses

the personality approach. It incorporates context-specific traits, and accounts for both the image and physical qualities of these servicescapes. As the hospitality servicescape is highly complex, the scale brings together brand, service and environmental perceptions, and incorporates them holistically rather than independently. Consequently, the proposed scale allows for a more comprehensive understanding of consumer perceptions in hospitality servicescapes. The proposed scale can assist managers in investigating, in more elaborate and consumer-centric terms, how the combination of all of the features in their servicescape shapes the image projected to their consumers.

## 2. Literature Review

### 2.1 Factors Influencing Perceptions in Retail Servicescapes

In hospitality settings, environmental, social and ambient clues can influence customer perceptions. These features interact not just with consumers but also with each other to elicit responses. In the case of hospitality services, "positive (negative) internal responses to the servicescape enhance (detract from) the nature and quality of social interactions between and among customers and employees" (Bitner, 1992, p. 61). For example, cleanliness in restaurants needs to be perceived by consumers not just in the physical environment but also on the service staff (Barber, Goodman, Goh, 2010). Moreover, it is shown that in ethnic restaurants, atmospherics, service quality, and food quality are together important in influencing consumer satisfaction and quality perceptions (Ha and Jang, 2010).

Physical and social aspects of hospitality servicescapes can independently and holistically influence the quality of image perceptions of consumers. Modifications to the internal and external physical features in hospitality environments can change consumer perceptions (Kimes

and Robson, 2004; Turley and Milliman, 2000). Similarly, changes in service features can result in revisions of image perceptions (SERVQUAL by Parasuraman et al., 1988). For example, a service provider's actions can influence the level of tip received, a causal relationship that is dependent on the sale techniques and the context (Lynn and McCall, 2009) and consumers make adjustment to their tip based on server effort (Maynard and Mupandawana, 2009). Service providers are also essential in communicating the environment's image. The service providers (i.e. front-line employees) themselves can have different ways of executing their service and different perspectives on how to do so, based on experience as well as their relationship and role expectations (Di Mascio, 2010). Ineffective handling of service execution is likely to have negative consequences on the service provider's image (Malshe, 2010). Consumers within an environment can even influence each other's perceptions of service contexts (Pranter and Martin, 1991).

*2.2 Consumer Evaluations of Hospitality Servicescapes*

Often in hospitality services, numerous features are either ambiguous or credence attributes, thus specifying what consumers perceive and subsequently evaluate is difficult (Wirtz and Bateson, 1995). If consumers do not evaluate the full scope of a service or an experience, they may use limited information to establish their perceptions, which in turn shape their expectations (Hoch and Deighton, 1989).

When consumers evaluate experiences, there are competing demands which may make certain features more or less relevant. Research indicates that the perception of individual attributes may be influenced by overall impressions, just as strong impressions regarding one attribute may influence the perception of all other attributes (Wirtz and Bateson, 1995). This is known as the "halo effect". The anecdote that a bad coffee at the end of a meal taints the

perception of all previous courses served would be a good example of this phenomenon. The relevance of various attributes will vary as a function of individual preferences. In hospitality settings, some consumers will focus more on the service and others more on the cleanliness of the environment. The halo effect is most evident when services are evaluated on the basis of attributes (Wirtz and Bateson, 1995), and is therefore likely to occur in a hospitality situation that offers interpersonal services, such as restaurants.

Although there are ways of limiting the halo effect, such as evaluating individual settings using one attribute at a time (Wirtz and Bateson, 1995), it may be unrealistic to assume that such methods reflect actual consumer evaluation processes. Using restaurants as a test setting, Harris and Ezeh (2008) incorporate nine features in their servicescape model and associate all of them to loyalty intentions, demonstrating not only that consumers evaluate multiple attributes when in servicescapes but also that the impact of the features work in tandem. Thus evaluations in hospitality servicescapes can be multidimensional. Avoiding the halo effect in consumer evaluations may be difficult, if it is at all possible. This is particularly true when attempting to uncover expectations, which can be related to multiple dimensions, such as satisfaction and quality (Oliver, 1980; Parasuraman et al., 1988).

### 2.3 Personality in and of Servicescapes

For credence goods, service providers are particularly aware of the importance of personal interaction, service fulfillment as well as the location in which the service takes place in defining consumers' perception of value (Howden and Pressey, 2008). On the basis of this perceived value, consumers can establish congruence with their own personality.

Personality can be a predictive variable of behavior and differences in personality are linked to differences in consumption. Personality relies, in part, on the environment and on the social

setting in which it is developed (Rogers, 1961). An individual's self-concept is "the organized set of characteristics that the individual perceives as peculiar to himself/herself" (Ryckmann, 1993, p. 106). In this context, the self is an agglomeration of personality traits that are somewhat publicly molded.

Human personality measures generally center on the Big Five – five widely accepted dimensions with a varying number of traits (Goldberg, 1990). The number of traits used in psychology literature varies from 20 to 100, and they are used in bi-polar and uni-polar scales. However, the most robust format is 100 traits measured in a uni-polar format (Goldberg, 1992).

On the basis of a five-factor Brand Personality Scale (BPS), Aaker (1997) uses personality to measure consumer perceptions. Since the creation of the BPS, numerous extensions of it have been developed, demonstrating the applicability of personality trait-based measures across a variety of service domains in marketing. As many brands are products, the use of the BPS is appropriate for some categories, such as tangible products (Govers and Schoormans, 2005) and branded quick-service foodservice (Wee, 2004). The BPS is the premise upon which the Store Personality Scale (SPS) was developed (d'Astous and Levesque, 2003). However, while the BPS is used for numerous product categories, it has not been tested for service-heavy brands or for interpersonal services.

### 2.4 Actual Measures for Hospitality Servicescapes

Personality factors may be relevant for the measurement of holistic store image for hospitality settings because the use of independent physical attributes fails to capture the full scope of consumer perceptions (Oxenfeldt, 1974-1975). Just like people, products and services can have personality images, which can be described using terms such as "friendly", "modern" or "traditional" (Sirgy, 1982). Personality traits are perceived to be an appropriate measure for

consumption experiences because personality has foundations in the environment and because personality definition is affected by interactions (Belk, 1988). Furthermore, consumer personality can interact with brand personality and store-induced reactions (Orth, Limon and Rose, 2010), and consumer perceptions of a brand's image can lead to the personality development of that brand (Plumer, 1985).

## 3. Conceptual Framework

In hospitality servicescapes, contact with a service provider occurs within a specific physical environment and context. Not only is context essential to personality definition (Belk, 1988), but it should also be considered when measuring perceived quality (Tse and Ho, 2009). Furthermore, context is important when gauging a wide range of service interactions (Alden, He and Chen, 2010). Many available personality scales are variations of the original BPS applied within a specific context, but few are actually tailored to the context they claim to measure and this creates methodological issues. Different understandings of the same words used in a different context can significantly influence interpretation of the scale items, thereby affecting the outcome (Caprara, Barbaranelli and Guido, 2001). In addition, the applicability of one measure to one context does not necessarily make it applicable to another context. In fact, for services, the BPS is not effective in contexts other than those that are service-lean (Wee, 2004) such as a fast food restaurant versus a full-service seated restaurant.

The BPS considers the brand level and not the unit level of services. This is because "the framework does not generalize to research situations in which personality is measured at the individual brand level and/or situations in which consumers, rather than product categories, represent a facet of differentiation" (Austin, Siguaw and Mattila, 2003, p.88-89). In other words,

the BPS does not apply to all forms of retail servicescapes (Siguaw, Mattila and Austin, 1999). For example, by asking consumers to evaluate specific department stores (e.g., Wal-Mart) in terms of their various personality traits, the SPS by d'Astous and Levesque (2003) inevitably measures the brand personality of these chain stores rather than the personality of a specific store.

As there is a need for an alternative measurement tool that is specifically applicable to hospitality services, this paper develops a personality-based scale that takes the intricacies of such retail settings into account. The scale seeks to highlight those features that are essential to service-heavy settings. It seeks to uncover and account for the dynamic nature of the service brand, and the causality between the consumer's image perceptions and their subsequent behaviors.


## 4. Methodology

### 4.1 Determining the traits common to the restaurant experience

To develop the hospitality personality scale presented here, restaurants were selected as a setting. This is a physical setting serving food and beverage and is an appropriate context for examining hospitality. Furthermore, in terms of accessibility, restaurants are retail locations that most individuals are likely to frequent more often than hotels, airlines or health clinics. A pretest survey (n=34, 56% male, 68% between the ages of 18-49) showed that one hundred percent had eaten in a restaurant in the previous month. The broad range of restaurant retail services (both lean and elaborate) and the various types of retail settings (i.e., fast food, casual, fine dining, ethnic, breakfast, lunch, dinner, thematic, etc.) are features of this industry that make it appealing for measurement development.

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An exploratory approach was taken to generate items for the scale. Although human personality scales are wide in scope and have agreed upon five dimensions, they lack consensus regarding the number of possible traits to use (Goldberg, 1990). In service contexts, research has shown that pure human personality traits must be evaluated concurrently with service features (Cronin and Taylor, 1992). The BPS and, by default, the SPS have validity issues regarding the items they contain because those items are either not personality traits (Azoulay and Kapferer, 2003) or they are not adapted to the research context (Caprara et al. 2001). Therefore, an entirely new inventory is warranted.

A free-association questionnaire, based on Richins (1997), was created and distributed via email to a convenience sample of graduate students taking a marketing class at a large Canadian university and to the mailing list of a regional (same as the university) culinary web site that included numerous restaurant industry workers. In the questionnaire, respondents were given the following information: *When asked to give your impression of a particular person, you might answer with a set of personality traits. Now think about restaurants in the same way. Consider a restaurant that you ate at in the past year and please write down the personality traits that come to mind for this restaurant.* Respondents were asked to do this for five restaurants.

33% of the sample (n=48) were industry workers, while 67% were restaurant patrons. A recent Canadian survey (CRFA, 2010) confirms that almost 50% of Canadians have worked in foodservices and that over 20% had their first job in foodservices, thus explaining the high percentage of industry workers in the survey. Therefore, it included the perspectives of both service providers and consumers. The sample was 54% male and 60% of respondents were 18-39 years old. The average number of outings of the entire sample to restaurants was of 3.25 per month and 55% of the sample eats out at least once per week. Although the sample was small, it

generated enough mentions from which to identify personality traits that the sample was deemed acceptable.

*Analysis*: In total, 1,820 personality mentions were recorded for 426 restaurants. As some of the mentions referred to the same establishment, the number of individual restaurants covered was 194. The average respondent rated 8.87 restaurants with an average of 37.58 traits per respondent. A content analysis (Krippendorff, 2004) was conducted to obtain a frequency for the mentioned attributes. Synonyms were then regrouped. The objective of these tasks was to make sense of the mentions and identify only those that were personality traits. Initially, all mentions that did not relate to personality were removed. These included all references to physical attributes (e.g., great wine list, good food). All cultural, socio-economic and competence references were also removed (e.g., Mediterranean, European, retro, not Italian, middle-aged, motherly, high culture) as recommended by Azoulay and Kapferer (2003). Mentions that are associated with intellectual abilities, gender or social class were also removed in order to retain only personality traits (Azoulay and Kapferer, 2003). A list of 308 different traits remained, which was reviewed by three expert judges (a psychologist, a marketing professor and a doctoral student in psychology) to verify that only personality traits remained on the list. Interjudge agreement was 93% and, consequently, an additional 23 traits were removed. The final purified list contained 285 personality traits.

In order to reduce the number of traits, and to remove what may otherwise be artifacts or irrelevant items that could cloud future analyses, a second study was conducted (Aaker, 1997; Richins, 1997). For this study, the 285 traits were randomized and featured in an online survey where subjects read the following text: *Think of a restaurant that you have been to –ones that you liked as well as ones you didn't like. For each of the following traits, how well would you*

*say they could be at describing a restaurant you have in mind?* Respondents then rated each of the 285 traits on a seven-point scale including no answer mention (1 = not at all descriptive; 7 = very descriptive; I don't know what this means). Respondents did this exercise for five restaurants.

The sample (n=32) consisted of another pool of Canadian graduate marketing students who were given extra credit for their participation. The sample was 41% male, and 72% of respondents were 25-39 years old. 66% ate out at least once per week. Only 9% of those sampled worked in restaurants, while the rest of the sample was composed of restaurant patrons.

The summary ratings for each individual trait were calculated. To remain on the list, a trait had to have an average rating of at least 4.5 on the 7 point scale as this was the mean and the median of the entire data set. Following this step, 84 personality traits that might describe a restaurant remained on the list.

To ensure that the exploratory data-driven methodology was appropriate and did not replicate previously defined measures, the traits were reviewed to see if any were included in the BPS measure (15 traits), the Store Personality measure (20 traits) and Goldberg's uni-polar clusters measure (100 items). The results show that the traits on the final list are more specific to the hospitality context and have little in common with the previous measures (Table 1).

<div align="center">Table 1 here</div>

### 4.2 Uncovering the dimensions of hospitality personality

Following the purification and reduction exercises, an online survey using the remaining 84 traits was created to uncover the psychometric dimensions of hospitality personality. An online survey was deemed appropriate because it not only allowed for more efficient data collection but

also for wider geographic coverage and, therefore, for more external validity in the results (Bhattacherjee, 2002).

At the beginning of the survey, subjects were asked to state the name of a restaurant they had patronized in the past 30 days and the geographical location of that restaurant. Subjects were then asked to keep this restaurant in mind and follow these instructions: *It is possible to think of restaurants as persons in that they can have personality traits just like an individual human being. In this research, we want you to think of restaurants as persons and we would like to know how you perceive their personalities. Thinking of the restaurant that you mentioned before, please use the rating scale to tell us how descriptive you think these personality traits are of the restaurant you ate at.* Focusing on their experience at the stated establishment, respondents used a 1=not at all descriptive to 5=very descriptive scale to rate each trait.

The survey was distributed to general and food/wine centric consumer panels via consumer interest web sites (blogs, forums) in three major North American cities – Montreal, Toronto and New York. These web sites are frequently referenced in popular media and are widely accessible and recognized. The focus of these web sites revolves around restaurants making the respondents well versed in the context. Webmasters were asked to distribute the survey to their mailing lists. 239 respondents completed the survey and 202 were usable (85%). The sample was 46% male and 16% of respondents worked in the industry. 78% of respondents were aged 25-54, and 67% of respondents ate out at least once per week.

*Exploratory factor analysis (EFA):* The resulting sample reported a Kaiser-Meyer-Olkin statistic of 0.907, which indicates that the data was appropriate for exploratory factor analysis, particularly as this is an ad hoc measure (Conway and Huffcutt, 2003). Therefore, the data can be used to identify the potential dimensions of hospitality personality scale.

A principal component analysis with varimax rotation was used in order to best identify the factors. An overview of the Scree plot showed that the optimal number of factors was about four. Since the literature regarding experiential consumption scenarios mentions four evaluative features (one social and three environmental, according to Bitner (1992)) and most previously developed personality measures encompass five factors, an analysis of four and five-factor solutions was conducted. On that basis, incorporation of the fifth factor, which accounted for 7% of the total variance, was deemed more appropriate for construct validity purposes. Therefore, a five-factor solution was retained. This approach is coherent with Goldberg's research, which demonstrates that five-factor solutions are the most promising and representative for personality measures (Goldberg, 1993).

The items in the scale were purified through an iterative process or removing double loading factors (less than .4) and items with extremely low loadings. The remaining five-factor solution is comprised of 54 traits with 62% of the total variance explained. Each indicator loads on only one dimension and there is a minimum of three traits on each dimension (Nunnally, 1978). The dimensions are entitled: Reputation, Distinction, Approachability, Consideration, and Dynamism.

In order to make the scale more parsimonious, three dimensions were independently factored using principal component analysis and varimax rotation (as per Aaker, 1997). After the facets within the three largest dimensions were regrouped, a factor analysis of the remaining 42-trait structure was run to gauge whether this purification step led to a better overall model than the original 54-trait five factor model. The total explained variance for the 42 trait model remained stable at 62%, indicating that the 42-trait model is a more parsimonious, yet equally

reliable, model. Table 2 outlines the resulting framework, including the names of each dimension and the traits included in them, while Table 3 outlines the factor structure.

<u>Tables 2 and 3 here.</u>

In order to assess the relevance of this new structure and unearth its merits, the proposed scale was tested against an existing managerial scale. The purpose was to show that the proposed scale provides a better representation of consumer perceptions than existing alternatives. The *Zagat guide*, a global reference guide for restaurants ([www.zagat.com](http://www.zagat.com)) includes over 30,000 listings for dining establishments worldwide, and it was chosen for the comparison. This publicly accessible review database evaluates restaurants using consumer ratings on three dimensions: service, food and décor. The rating scales are the same regardless of a restaurant's geographical location.

Of the 202 data points collected for the EFA, 77 respondents referred to restaurants with ratings available in the Zagat survey. Using these 77 establishments, comparisons between sub samples of the overall data set and on the three Zagat dimensions (food, service, décor) were run to see if there were significant differences. One comparison was between two distinct cities within the same country (Montreal and Toronto). The Zagat dimensions of food, service and décor showed no significant ($p > 0.05$) differences between patrons in Montreal and Toronto. The Zagat ratings indicate that consumers in both cities patronize restaurants with equivalent scores for the attributes of food, service and décor. However, the newly developed scale revealed that there was a significant difference ($p < 0.05$) in the reputation dimension, where Toronto patronized restaurants with higher ratings. A closer review of the facets and traits reveals that creative, daring, experiential and innovative were all rated significantly higher ($p < 0.05$) in

Toronto, whereas inventive did not. Ambitious and impressive also rated significantly higher (p < 0.05) in Toronto, while passionate did not.

It is possible to speculate from the results comparing Montreal and Toronto diners that Toronto diners prefer trendy and creative restaurants.  These consumer perceptions are uncovered using the multiple traits of the hospitality personality scale, but were not revealed using the attribute-based, three-dimensional assessment provided by Zagat.

### 4.3: Confirming the Reliability of the Scale

The objective of this study was to confirm the scale items. Using the 42 traits retained from the EFA, another online survey was conducted in exactly the same fashion as in Step 2 but with a new sample.

As with Study 2, subjects were asked to state the name of a restaurant they had patronized in the past 30 days and the location of this restaurant. Subjects were then asked to keep this restaurant in mind and rate (1=not at all descriptive; 5=very descriptive) each trait in light of their experience at the stated establishment. The survey was diffused to an online consumer panel dispersed all over North America and maintained by a marketing researcher in the United States. The online survey resulted in 227 data points. The sample was 63% female and 79% of respondents were 18-49 years old. 51% of respondents ate in restaurants at least once per week. The respondents were 34% Canadian and 63% American. Furthermore, respondents were asked to state which meal they ate at the restaurant. 58% stated that they had eaten dinner, while 17% had eaten lunch, and the remainder indicated that they had eaten breakfast.

*Confirmatory Factor Analysis (CFA):* An analysis of the 227 data points was conducted with AMOS software to determine the reliability of the hospitality scale. All five dimensions were first tested individually in order to isolate erroneous items or problematic indicators, either

not loading on any dimensions, or on more than one dimension. For each of the five dimensions, all of the parameter estimates were shown to be highly significant (p < 0.001), demonstrating that they were relevant to the dimension they were meant to represent. Once grouped together and allowed to correlate, the absolute fit statistics suggested a moderate model fit. In line with Hair, Black, Babin, Anderson and Tatham (2006), five indicators were dropped on the basis of residual estimates and modification indices to ensure a better model fit. This purification resulted in a 37-item model with excellent absolute fit statistics ($\chi^2$ = 2180.71; df = 804; $\chi^2$/df = 2.85; Hair et al., 2006) and moderate incremental fit statistics (CFI = .75; GFI = .68; NFI = .66). Although complex models often yield lower fit indexes (Hair et al., 2006), the extracted variance measures for each of the dimensions demonstrates strong overall reliability for most of the dimensions (Reputation = .77; Distinction = .86; Approachability = .75; Consideration = .59; Dynamism = .52). Each item had a regression weight that was highly significant (p < 0.001) and all of the critical ratios loaded on the factors in a highly significant fashion. Each dimension also retained a minimum of three indicators (Bollen, 1989).

The fit statistics demonstrate that this large model is capable of creating order despite the complexity of the relationships among the 37 items on the scale. This is further supported by the correlations of the items within factors (alphas of 0.60-0.90), indicating that the items were still appropriately dispersed across their intended dimensions. For the final list of the traits included in the hospitality scale and their congruence correlations, please refer to Appendix A.

The usability of the scale lies in its ability to act as an antecedent to specific beneficial consumer outcome behaviors and actions in restaurants. In addition to rating a particular restaurant for Step 3, subjects were asked to indicate their level of satisfaction with their experience, how much value they felt they got, how worthwhile the experience was, how likely

they would be to return and how likely they would be to recommend the establishment to someone else (word-of-mouth). The results (Table 4) demonstrate how each dimension of the hospitality personality scale can be a determinant of desirable outcome behavior by consumers and, thereby confirm the newly developed scale. In particular, Table 4 showcases how consumer perceptions will vary depending on the meal occasion. This shows that the scale is capable of distinguishing among various factors within the environment and highlights its precision in terms of understanding dynamic environments.

<center>Table 4 about here.</center>

## 5. Discussion

The scale that this article presents sheds light on the depth and quality of the perceptions consumers make when they are engaging in hospitality experiences. As stated by Bolton, Grewal and Levy (2007), much remains to be uncovered in terms of consumers' holistic image impressions in these servicescapes. However, this scale moves one step closer to explaining the multiple dimensions of consumers' perceptions and clarifying the mechanisms behind those perceptions.

Across multiple samples, the weights of the dimensions and the overall variance do not fluctuate significantly. This is essential as the premise of the research is to account for variations on the individual brand level (Austin et al., 2003) and to account for the dynamic nature of the setting. A close review of the dimensions showcases the high level of interdependency among the environment, the interactions within the environment and the overall retail offer, and further clarifies the nature of hospitality scenarios. Bitner (1992) points out that all three of these elements interact in highly interpersonal settings such as hospitality to create a servicescape image. This is made obvious by the dimensions of the proposed scale, as each dimension

contains at least two of these features. For example, a restaurant can be distinct in terms of its cuisine, its decor and its service, be reputable in terms of service and the meals it promotes, and create an approachable environment where the staff puts diners at ease. This illustrates the theoretical standpoint that many hospitality servicescapes cannot be separated from the social interactions within them.

This research contributes to existing literature in numerous fields. We show an alternative to attribute-based measurement for use especially in situations where the distinction between products and services is vague (Rust and Chung, 2006). This research is in agreement with Tombs and McColl-Kennedy's (2003) statement that models for servicescapes tend to over-emphasize tangible features and, consequently, it offers a more elaborate, image-incorporating measure for an often complex and highly interpersonal servicescape. Finally, this research contributes to the literature by finding that synergies between service provision, service delivery and the physical store environment are essential to enhancing consumer perceptions of servicescapes (O'Cass and Grace, 2008).

The possible applications for this scale are numerous. Personality traits serve as an appropriate measure and move beyond the capabilities of other measures commonly used in hospitality settings. Personality traits take not only the physical features inherent to these spaces into consideration but also the service interactions within those spaces. The five dimensions allow for a better understanding of consumer evaluation and, therefore, the scale is appropriate for use as an antecedent measure for such behaviors as satisfaction (Oliver, 1980), repatronage (Kumar and Shah, 2004) and word-of-mouth (Reichheld, 2003).

**6. Managerial Implications**

The proposed scale can be used as a professional measure within hospitality environments because it is wider-ranging - it incorporates more factors and items to measure consumer perceptions. Although previous managerial measures, such as those that evaluate attributes (e.g., Zagat's for restaurants) or have one-dimensional representations (e.g., star or fork ratings for dining experiences), might be interesting, they say little about how consumers evaluate these types of hospitality settings. "Because restaurants operate in a highly competitive business environment, it is often critical for the restaurateurs to develop or try to develop a distinctive dining experience" (Johnson, Surlemont, Nicod, Revaz, 2005, p. 171) – it is the perception of this distinct experience that this research aims to help retailers understand.

Because the restaurant setting is used to represent hospitality scenarios, the resulting scale can be used by restaurateurs. In the hospitality industry, one-dimensional models (a star system) or three dimensional attribute-based systems (food/service/decor) do not necessarily offer customers enough diagnostic information to properly gauge the experience they should expect to have (Skowronski and Carlston, 1987).

To highlight the usability of the scale, we provide a tangible example. The purpose of the CFA study was to look at independent restaurants. However, since the scope of the sample was North American, few restaurants were mentioned more than twice. However, two Japanese restaurants located in NYC were noted. A review of the average score given to the two restaurants, per dimension of the HPS, shows that there are some differences between the two, even though they could be described identically as "Japanese or sushi restaurants in NYC". See Table 5. (Note: Zagat scores were not available for both restaurants).

<u>Table 5 here.</u>

By simply asking consumers to fill in an after-meal survey of their experience, using 5 point scales and including the traits proposed in this paper, restaurant owners can analyse consumers' responses. By comparing the results such as the ones presented in Table 5, it appears that Restaurant A and B share the same perceptions from consumers in that they both have a good reputation and level of consideration. However, restaurant A is more approachable than Restaurant B, whereas Restaurant B is more distinct and dynamic.

From such results, Restaurant A owners would be able to better understand the overall positioning they have in consumers' minds versus competing restaurants and how. Thus how their décor, service and food are altogether perceived.

Restaurateurs can use the specific traits outlined in the hospitality scale in their promotional materials by using some of the personality traits outlined in the scale within the content of their ads and brochures. This would offer consumers more coherent points of comparison and evaluation, as these traits represent consumer perceptions, and could allow consumers to make more accurate judgments of likely restaurant experiences prior to their encounter. This would, in turn, increase the potential for a more positive experience (Donovan and Rossiter, 1982).

Furthermore, when researching the domain of food, distinguishing between the ethnicity versus the experience of a cuisine is important in order to avoid respondent bias. The scale accounts for this aspect and is therefore more valid as a measure. For example, the distinction dimension includes traits like interesting, original, unique, all of which relate to trying something novel, rather than to cultural or ethnic factors.

As this scale is an elaborate measure of a restaurant experience (given its numerous items), practitioners will be able to obtain a deeper understanding of how consumers assess restaurants. First and foremost, the halo effect is likely not to be present because attribute based measures are

not being used (Wirtz and Bateson, 1995). Furthermore, image construal is not limited to actual purchases but can also be applied to brands and to stores with which consumers have not yet interacted (Oxenfeldt, 1974-1975). This scale allows restaurant managers to see how they are perceived by their consumers and by those who have yet to patronize their establishments. Just as the social environment is dynamic, the service execution styles of service providers can vary as well (Di Mascio, 2010). This scale allows practitioners to calibrate and tailor the service style of employees to meet the perceptions of customers by having both current and potential groups complete the measure. They can determine the perceptions as outlined by traits common to the restaurant retail servicescape that are more desirable, depending on what the restaurant wants the consumers to experience. Restaurateurs can also position themselves more clearly relative to other establishments.

## 7. Limitations and Future Research

The exploratory, data-driven nature of this project means that more studies should be conducted to ensure the construct validity of the measure. The proposed scale was developed within one retail setting believed to represent the category of hospitality servicescapes. However, additional research in other hospitality settings would allow for a better understanding of how the results presented in this paper might be generalized to other hospitality settings. While the confirmatory factor analysis fit indexes for the restaurant scale were moderate, it is important to note the size and complexity of the model. Nonetheless, additional studies to substantiate and even refine the number of variables in this scale might be wise.

In addition, the testing of this scale in multi-cultural settings in order to see how culture affects the perceptions of a hospitality experience may be worthwhile. Just as market share performance and brand image strategies vary by culture (Roth, 1995), it might be posited that

culture can permeate front-line service encounters and influence their outcomes. Donthu and Yoo (1998) specify that individuals from different countries have different perceptions with regards to service encounters and that these perceptions influence their patterns of behavior, both in terms of controllable factors (i.e., service promises) and uncontrollable factors (i.e., personal needs). Seeing whether and how these findings can be captured using personality trait-based measures could be fascinating.

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## APPENDIX A: The Hospitality Personality Scale
### (Means and Standard Deviations)

| | Mean | Standard Deviation | Factor Name | Mean | Standard Deviation | Reliability |
|---|---|---|---|---|---|---|
| Creative | 3.84 | 1.11 | Distinction | 3.58 | 1.52 | 0.90 |
| Daring | 2.94 | 1.39 | | | | |
| Innovative | 3.70 | 1.17 | | | | |
| Inventive | 3.43 | 1.27 | | | | |
| Interesting | 4.09 | 0.93 | | | | |
| Original | 3.69 | 1.21 | | | | |
| Unique | 3.64 | 1.25 | | | | |
| Ambitious | 3.54 | 1.33 | | | | |
| Passionate | 3.33 | 1.37 | | | | |
| Accommodating | 4.30 | 0.99 | Reputation | 4.14 | 1.30 | 0.89 |
| Eager to please | 4.15 | 1.09 | | | | |
| Friendly | 4.33 | 0.94 | | | | |
| Hospitable | 4.25 | 1.11 | | | | |
| Welcoming | 4.30 | 0.91 | | | | |
| Authentic | 3.96 | 1.33 | | | | |
| Dedicated | 4.05 | 1.22 | | | | |
| Genuine | 3.99 | 1.37 | | | | |
| Well-intentioned | 4.16 | 1.18 | | | | |
| Neat | 4.32 | 1.03 | | | | |
| Polite | 4.39 | 0.95 | | | | |
| Proper | 3.79 | 1.28 | | | | |
| Respectful | 4.16 | 0.96 | | | | |
| Consistent | 3.82 | 1.43 | | | | |
| Reliable | 4.11 | 1.17 | | | | |
| Approachable | 4.22 | 1.03 | Approachability | 3.77 | 1.44 | 0.81 |
| Easy going | 3.86 | 1.14 | | | | |
| Laid back | 3.61 | 1.37 | | | | |
| Low key | 3.34 | 1.38 | | | | |
| Modest | 3.16 | 1.27 | | | | |
| Reasonable | 3.93 | 1.21 | | | | |
| Relaxed | 4.29 | 0.94 | | | | |
| Flexible | 3.66 | 1.19 | Consideration | 3.65 | 1.33 | 0.64 |
| Intimate | 3.19 | 1.31 | | | | |
| Warm | 4.11 | 0.920 | | | | |
| Animated | 3.37 | 1.47 | Dynamism | 3.57 | 1.55 | 0.60 |
| Festive | 3.83 | 1.04 | | | | |
| Lively | 3.49 | 1.18 | | | | |

**Table 1: Commonalities Between Trait Catalogues**

| | Catalogues of Traits Generated | |
| --- | --- | --- |
| | **Initial 285-Trait Inventory** | **Reduced 84-Trait Inventory** |
| *Traits appearing in:* | | |
| Brand Personality Scale | 7 (2.5%) | 4 (4.8%) |
| Store Personality Scale | 6 (2.1%) | 4 (4.8%) |
| Goldberg clusters | 34 (11.9%) | 10 (11.9%) |
| Both BPS and SPS | 2 (0.7%) | 2 (2.3%) |
| Both Goldberg and SPS | 1 (0.3%) | 0 (0%) |
| None of the above | 235 (84.5%) | 64 (76.2%) |

**Table 2: Comparing the 42-Trait Structure to the 54-Trait Structure**

| | 42-trait model | | 54-trait model | |
|---|---|---|---|---|
| | **Number of indicators** | **Variance per factor** | **Number of indicators** | **Variance per factor** |
| **Reputation** | 16 | 14.9% | 22 | 20.4% |
| **Distinction** | 12 | 18.1% | 16 | 19.0% |
| **Approachability** | 7 | 12.9% | 9 | 11.1% |
| **Consideration** | 4 | 7.6% | 4 | 6.2% |
| **Dynamism** | 3 | 8.9% | 3 | 5.0% |
| *Total variance explained* | | 62.2% | | 61.7% |

**Table 3: Parsimonious 42-trait EFA Factor Structure for Hospitality Services**

|  | Distinction | Reputation | Approachability | Dynamism | Consideration |
|---|---|---|---|---|---|
| Creative | **.837** | .033 | .014 | .098 | .116 |
| Daring | **.885** | -.002 | .015 | .079 | .020 |
| Experiential | **.812** | .029 | -.016 | .087 | .083 |
| Innovative | **.906** | .021 | -.059 | .049 | .124 |
| Inventive | **.819** | .031 | -.078 | .065 | .170 |
| Interesting | **.647** | .333 | .143 | .257 | .037 |
| Original | **.811** | .097 | .087 | .224 | .005 |
| Refreshing | **.621** | .255 | .129 | .283 | .031 |
| Unique | **.713** | .103 | .291 | .216 | .030 |
| Ambitious | **.608** | .221 | -.217 | .027 | .324 |
| Impressive | **.667** | .273 | -.083 | .180 | .281 |
| Passionate | **.471** | .204 | -.083 | .350 | .449 |
| Accommodating | .034 | **.500** | .253 | .420 | .334 |
| Eager to please | .232 | **.609** | .109 | .314 | .324 |
| Friendly | .134 | **.437** | .420 | .406 | .278 |
| Hospitable | .103 | **.601** | .299 | .443 | .225 |
| Welcoming | .108 | **.468** | .385 | .488 | .238 |
| Dedicated | .333 | **.569** | .108 | .268 | .043 |
| Authentic | .328 | **.323** | .318 | .359 | .029 |
| Genuine | .271 | **.401** | .390 | .196 | .161 |
| Well-intentioned | .124 | **.511** | .155 | .391 | .127 |
| Neat | .152 | **.674** | -.080 | .016 | .146 |
| Proper | .105 | **.527** | -.203 | -.264 | .352 |
| Polite | -.024 | **.720** | .032 | -.020 | .309 |
| Respectful | .098 | **.722** | .132 | -.033 | .356 |
| Consistent | .070 | **.656** | .340 | .160 | -.169 |
| Dependable | .068 | **.703** | .283 | .101 | -.060 |
| Reliable | .068 | **.725** | .246 | .255 | .025 |
| Approachable | -.008 | .118 | **.625** | .164 | .303 |
| Easy going | .110 | .112 | **.842** | .201 | -.004 |
| Laid back | .097 | -.071 | **.771** | .188 | .074 |
| Low key | -.203 | .065 | **.760** | -.162 | -.045 |
| Modest | .029 | .293 | **.705** | -.064 | .076 |
| Reasonable | -.062 | .225 | **.662** | .073 | -.051 |
| Relaxed | .017 | .123 | **.816** | .147 | .147 |
| Flexible | .115 | .262 | .230 | .054 | **.477** |
| Intimate | .136 | .081 | .125 | -.073 | **.763** |
| Romantic | .251 | .263 | -.077 | .010 | **.695** |
| Warm | .152 | .141 | .332 | .285 | **.667** |
| Animated | .291 | .129 | .078 | **.766** | -.014 |
| Festive | .327 | .213 | .040 | **.711** | -.026 |
| Lively | .325 | .063 | .142 | **.719** | .045 |

**Table 4: Dimensions as Determinants of Key Marketing Behaviors**

| | Dimensions | DEPENDENT VARIABLES COEFFICIENT STANDARDIZED BETAS | | | | |
|---|---|---|---|---|---|---|
| | Dimensions | Satisfaction | Value | Worth | WOM | Repatronage |
| **Meal Occasion: LUNCH** | *Reputation* | .543[b] t=3.23 | | | .582[a] t=4.35 | .556[a] t=4.91 |
| | *Distinction* | | | | | |
| | *Approachability* | | .474[b] t=3.28 | | | |
| | *Consideration* | | | .471[b] t=3.25 | | |
| | *Dynamism* | -.365[c] t=-2.17 | | | | |
| | **Dimensions** | **Satisfaction** | **Value** | **Worth** | **WOM** | **Repatronage** |
| **Meal Occasion: DINNER** | *Reputation* | .637[a] t=9.43 | .38[a] t=4.00 | .497[a] t=6.14 | .407[a] t=4.92 | .404[a] t=4.67 |
| | *Distinction* | | | .170[c] t=2.10 | .254[c] t=3.07 | .181[c] t=2.10 |
| | *Approachability* | | .225[c] t=2.36 | | | |
| | *Consideration* | | | | | |
| | *Dynamism* | | | | | |

[a] p-value < 0.001; [b] p-value < 0.01; [c] p-value < 0.05

**Table 5: Example of Personality Profiles of Two Restaurants.**

|  | **Resto A** | **Resto B** |
|---|---|---|
| Distinction | 1.67 | 3.56 |
| Reputation | 3.53 | 3.13 |
| Approachability | 3.57 | 2.14 |
| Consideration | 3.00 | 3.33 |
| Dynamism | 1.00 | 3.67 |