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Consumer patronage and willingness-to-pay at different levels of restaurant attributes: A study from Kenya

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This study investigates the effect of three key restaurant attributes – food quality, service quality and ambiance – on consumers' (i) willingness-to-pay (WTP) and (ii) intentions to patronage (ITP) for limited service and upscale restaurants in Kenya. A full-profile 2 (types of restaurants) × 2 (levels of attributes) × 3 (service attributes) factorial design was developed in which type of restaurant (upscale dining and limited service) was varied as a between-subjects factor, and the variations in the attributes and levels a within-subject factor. Findings indicate that food quality is the only attribute to have a positive relationship with both consumer patronage and willingness-to-pay, in high-end as well as limited service restaurants. Service quality and ambiance both have an effect on consumer intentions in upscale dining, but not in a limited service restaurant. Moreover, an interaction effect was found. In high-end restaurants, and not so in limited service restaurants, increase in ambience was found to increase patronage and willingness-to-pay by a significant amount if service quality was also increased. The study extends previous work on the nature of restaurant attributes, as it (1) examines consumer preferences in a developing country, and (2) shows how attributes interact and affect ITP and WTP differently in a limited service and high-end restaurant context.

Keywords: attributes; consumer behavior; willingness to pay; consumer patronage; price

Introduction

One of the most important issues in consumer research is the determination of consumer preferences and wants so that marketers can adapt or generate new products accordingly (Griffin & Hauser, 1993; Verma, Thompson & Louviere, 1999; Bujisic, Hutchinson & Parsa, 2014). This implies that managers need insight into the profitable attributes that should be considered in making investment and strategic decisions. For example, restaurants may be obliged to invest in attributes such as ambiance in order to remain competitive and profitable in the marketplace. If managers elect to invest in a specific attribute, it is important for them to understand the long-term implication in relation to profitability and return on investment (ROI).

There is a vast literature on consumers' preferences for services, including studies on restaurant attributes (e.g. Perutkova and Parsa, 2010; Bujisic et al., 2014; Harrington, Ottenbacher & Kendall, 2011; Choi & Zhao, 2010; Kim, Raab & Bergman, 2010; Njite, Dunn & Kim, 2008; Knutson, Beck & Elsworth, 2006; Moschis, Curasi, & Bellenger, 2003), but with little attention for consumer preferences in non-western countries (e.g. Dutta et al., 2014; Khan & Oyewole, 2014; Upadhyay, Singh & Sharma, 2009; Lord, Putrevu & Shi Yi, 2005; Bhuian, 2000). Moreover, work focusing on the financial implications of consumer preferences is virtually non-existent, with the exception of Andersson (1991) and Dutta et al. (2014), who assess willingness-to-pay (WTP). Understanding WTP is of particular interest in studying consumer prerferences as it is rich in individual information. The ability to measure WTP enables managers to estimate demand and maximise revenue through price optimisation.

This study therefore investigates the effect of key restaurant attributes – specifically food quality, service quality and ambiance – on consumers' (1) willingness-to-pay (WTP) and (2) intentions to patronise (ITP). It focuses on restaurants in Kenya and differentiates between limited service and high-end restaurants, thereby, significantly extending previous work that has examined consumer behavioural intentions in other parts of the world (e.g., Bujisic et al., 2014; Dutta et al., 2014).

Literature review

Utility theories such as multi-attribute theory (MAUT) and subjective expected utility theory (SEUT) suggest that products (goods and services) comprise of several attributes that influence consumer purchase and consumer evaluation of the product. As Mittal, Kumar and Tsiros (1999) suggest, consumers are likely to evaluate their satisfaction with a product at the attribute level rather than at the product level as a whole.

Restaurants possess several attributes and extant literature reveals that food quality level, service levels and the ambiance are the most important attributes of customers' restaurant dining experience (e.g. Bitner, 1992; Dabholkar, Shepherd & Thorpe, 2000; Kim, Ng & Kim, 2009; DiPietro, Parsa & Gregory, 2011; Dutta et al., 2014). Moreover, these attributes were reported as significantly correlated with consumer behavioural intentions ITP and WTP (DiPietro et al., 2011).

Food quality

Namkung and Jang (2007) investigated the significance of food quality in relation to customer satisfaction and behavioural intentions in mid- to upscale restaurants. Their findings revealed that, overall, food quality significantly influenced consumer satisfaction and behavioural intentions. A further analysis of their results revealed that taste and presentation were the two most important contributing aspects of food quality that enhanced consumer satisfaction with the food. Similarly, Min and Min (2011) examined service quality and customer satisfaction in fast food restaurant franchises in the USA. The results of their study revealed that the taste of the food was the most important restaurant attribute in fast food restaurant customers' perceptions and eventual satisfaction.

These studies indicate that there is a positive and significant relationship between food quality and consumers' behavioural intentions (DiPietro et al., 2011). That is, the higher the food quality, the higher the consumer satisfaction with the product and the more likely the consumer is expected to engage in a certain positive behavioural intentions. Given the reported importance of the food attribute for consumers of both limited service and high-end restaurants, it is formulated that:

- H_1: The relationship between food quality and consumer behavioural intentions is independent of the type of restaurant.
- H_{1a}: In the case of both high-end and limited service restaurants, there is a positive relationship between food quality and consumers' intention to patronise (ITP) a restaurant.
- H_{1b}: In case of both high-end and limited service restaurants, there is a positive relationship between food quality and consumers' willingness-to-pay (WTP).

Service quality

Service quality is perhaps one of the most examined constructs in the marketing literature. Kara, Kaynak and Kucukemiroglu (1995) investigated customer perception of fast food restaurants service quality in the United States and Canada using eleven attributes and concluded that service quality is significant to consumer behavioural intention. The work of Stevens, Knutson and Patton (1995), John and Tyas (1996), Qin and Prybutok (2008) and Qin, Prybutok and Zhao (2010) reveal that service quality is based on both tangible and intangible aspects of a product.

Overall, the extant literature seems to indicate that there is a relationship between service quality and customer satisfaction. Customers of limited service restaurants are mainly concerned with the limited aspects of service quality such as convenience, order accuracy and speed of service (Clark & Wood, 1998; DiPietro et al., 2011). Service level, however, is one of the most important factors that customers expect from an upscale dining establishment (Tlapa et al., 2011). In case of upscale dining, customers not only expect to meet or exceed all service quality dimensions, but also expect to receive excellent personalised service delivery and a "VIP-like" treatment.

Personalisation of service is of great strategic significance and businesses invest in personalisation and information processes and acquisition capabilities in order to develop and manage various customer retention strategies (Winer, 2001). Personalisation of service serves the distinct purpose of increasing customer loyalty and also serves as a deterrent to switching (Alba et al., 1997). Personalisation has exclusively been employed by businesses in the luxury goods and services sector where it often signals high quality with implicit price premiums for personalised products or services (Mattila, 1999). Other instances where personalisation can be observed are when consumer-service provider relationships are strong and repetitive, for example at those high-end restaurants where customers are greeted by their names and niceties are exchanged between the customers and service provider. Therefore, it is reasonable to propose that personalised service is positively related to behavioural intentions of consumers of high-end restaurants. Thus, the following hypotheses are formulated:

- H_2: The relationship between service quality and consumers' behavioural intentions is moderated by the type of restaurant based on the service levels offered.
- H_{2a}: In high-end restaurants, there is a positive relationship between service quality and intention to patronise (ITP).
- H_{2b}: In high-end restaurants, there is a positive relationship between service quality and consumers' willingness-to-pay (WTP).

Even though some of the aforementioned studies have showed that there is a relationship among service quality and consumer intentions, the extant literature reviewed does not establish nor provide concrete premises to make conclusions about the relationship between these variables in the limited service industry. It is therefore reasonable to argue that even though there is a relationship, its direction and strength cannot be easily deduced. The following hypotheses are therefore presented:

- H_{2c}: In limited service restaurants, there is a positive but nonsignificant relationship between service quality and consumers' willingness-to-pay (WTP).
- H_{2d}: In limited service restaurants, there is a positive but nonsignificant relationship between service quality and consumers' intention to patronise (ITP).

Ambiance

Unlike the consumers of tangible goods, consumers of services have a limited number of cues to evaluate their satisfaction. Therefore, consumers utilise several peripheral cues besides the core product in making their decisions. In many cases, the physical environment provides a tangible cue for evaluating the service product. In this way, physical environment can be perceived as an important element in evaluating and determining consumer satisfaction with the service provided (Booms & Bitner, 1982).

Indeed, the influence of the physical environment on behaviour and image formation is very apparent in predominantly service oriented businesses such as hotels and restaurants (Baker, 1987; Booms & Bitner, 1982; Upah & Fulton, 1985). Due to the inseparability of services, particularly

in restaurants, consumers have to be present in the physical environment to consume and experience the product. Due to this simultaneity, Bitner (1992) suggests that the premises or place of consumption cannot be hidden and plays a significant role in the consumer's overall perception of satisfaction and behavioural intentions.

According to Berry and Clark (1986), consumers commonly seek cues to a business's capability before, during and after the service encounter, and physical environment provides such cues (Rapoport, 1982). Environmental psychologists suggest that atmosphere, interior design, lighting, noise/music levels and types, and layout are crucial dimensions of the restaurant ambiance that influence consumer perception, satisfaction and behaviour (e.g. Kim et al., 2009; Wall & Berry, 2007). Some positive outcomes of a customer approach to the environment include: affiliation, staying longer, commitment, and carrying out the purpose of being at the business (Mehrabian & Russel, 1974).

Since customers of high-end restaurants tend to spend extended time in a built environment while dining out, the quality (atmosphere) of the built environment will be important to them. Conversely, since customers of limited service restaurants focus on speed of service, order accuracy, menu simplification and convenience, the high quality of the built environment will have lesser importance for their overall satisfaction. Thus, the following hypotheses are formulated:

- H_3: The type of restaurant moderates the relationship between ambiance and consumer behavioural intentions.
- H_{3a}: In high-end restaurants, there is a positive relationship between ambiance and consumers' intention to patronise (ITP).
- H_{3b}: In high-end restaurants, there is a positive relationship between ambiance and consumers' willingness-to-pay (WTP).
- H_{3c}: In limited service restaurants, there is a positive but nonsignificant relationship between ambiance and consumers' willingness-to-pay (WTP).
- H_{3d}: In limited service restaurants, there is a positive but nonsignificant relationship between ambiance and consumers' intention to patronise (ITP).

Methods

Participants

The participants analysed in this study consisted of a total of 294 respondents from the city of Nairobi, Kenya, with 141 responding to high-end restaurant scenarios and 153 responding to limited service restaurants. The sample consisted of 61% female and 32% males, ranging in age from 19 to 72. Due to the nature of restaurant types (upscale restaurants and limited service restaurants), two distinctive groups of participants were mandated. The first consisted of target people that had visited and paid for their meals at a high-end restaurant within the past month. Respondents that did not meet this eligibility were excluded from the study. For high-end restaurant scenarios, the respondents were selected randomly by an intercept method at a major retail shopping centre by trained researchers. By choosing every third retail customer, we were able to ensure randomisation and improve chances of generalisability to the greater population. The second group consisted of students at a large branch campus of one of the largest universities in Kenya located in Nairobi. This group of respondents (students) was identified as a good representative of consumers for limited service restaurants thus aiding in generalisability. According to the National Restaurant Association (2010) in USA, respondents between the ages of 18 and 24 are often considered as the prime users of limited service restaurants, thus, providing support for our choice of respondents for investigating quick service segment of the restaurant industry. Respondents for limited service restaurants were full-time students and the average age for the student respondents was 23 years. A majority of these student respondents indicated that they visit limited service restaurants at least twice a week.

Attributes

Three restaurant attributes were investigated: food quality, service quality, and ambiance (DiPietro et al., 2011). With regard to service quality, personalised service was selected for the purpose of this study. Personalisation refers to the tailoring of products and purchase experience to the tastes of individual consumers based upon their personal and preference information (Alba et al., 1997). For the high-end restaurants, attribute levels ranged from average food, average service, and average ambiance (atmosphere) on the low end, to excellent food, excellent service, and excellent ambiance (atmosphere) on the high end. The scenarios for limited service restaurants required patrons to make choices ranging from low food quality, non-personalised service, and less appealing place on the lower end of criteria, to good food, personalised service, and appealing place on the high end of the criteria.

Design

The participants were presented with several scenarios and were asked to consider and make a choice among the eight restaurant options with two levels (e.g. excellent and low) of three service attributes (food quality, service quality, and ambiance). It was a full profile factorial design with 2 (types of restaurants) × 2 (levels of attributes) × 3 (service attributes). Thus, all possible combinations of attributes were presented as different restaurant options to the respondents. Each restaurant option featured either a "high" or "low" service level, "high" or "low" atmosphere or "high" or "low" food quality.

The type of restaurant (limited service/high-end) was varied as a between-subjects factor. Nested in a type, every respondent judged either a limited service or high-end restaurant but not both. The variations in the type of restaurants comprised a within-subject factor. Due to the distinct differences and characteristics of these two restaurant types, it was felt that it would be conceptually easier and more possible for consumers/respondents to solely identify a single restaurant type, and, therefore, easier for the manipulation and communication.

Independent and dependent variables

The three restaurant attributes, food quality, service quality and ambiance, were manipulated as the independent variables. Criticality of the restaurant encounter was applied to ensure that respondents focused and identified the restaurant type and the context. This criticality was manipulated as a between-subject factor. For each restaurant type, the respondents read

a short scenario describing the conditions under which each restaurant type was being selected. The scenarios described conditions that were either high or low in terms of criticality, thus, describing greater or lesser outcomes visiting these restaurants.

Two dependent variables, indicating the consumer behavioural intentions intent to patronise (ITP) and willingness-to-pay (WTP), were examined. ITP and WTP were examined in both limited service and high-end restaurants. Intention to patronise (ITP) was conceptualised as the future action of the consumer to purchase the product, visit the restaurant or recommend the restaurant to friends, relatives and colleagues. It was measured on a seven-point Likert scale by asking participants the likelihood of selecting a restaurant for their visit. WTP was examined with Kenyan Shillings (KSh.) currency using a price range that was determined appropriate from a pretest and multiple discussions held with local restaurant owners. It was defined as the reservation price, the maximum price a given consumer willing to pay for a product or service (Davenport, 1902; Jennings & Jennings, 2000). The high and low end of price points for both upscale restaurant and quick service restaurants were determined in the pre-test stage with over 64 students.

Participants for the high-end restaurants were asked to choose amounts they were willing to pay while dining out, ranging from KSh. 1 500 (US$18.75) to KSh. 2 000 (US$25), with an average of about Ksh $1 750 (US$ 22) at the high-end, and KSh. 500 (US$6.25) to KSh.700 (US$8.75), with an average of about Ksh 600 (US$ 7.50) at the low end (Appendix A). Limited service restaurant participants were given a different range of price amounts and they were asked to indicate how much they would be likely to pay for eating at low-end restaurants. There were several possible ranges of amounts, with the lowest being KSh.70 (US $0.85) to KSh.100 (US $1.25) with an average of about Ksh 85 (US$ 1.05), and the highest range being KSh.150 (US$1.90) to KSh. 200 (US$. 2.50) with an average of about Ksh 175 (US$2.20). The exchange rate at the time of data collection was about US$1 = KSh. 80.

Results and findings

Hypotheses H_1, H_{1a} and H_{1b} stated that the relationship between *food quality* and intent to patronise (ITP) as well as willingness-to-pay (WTP) is positive and independent of type of restaurant. The first observation was that of the overall *F*-test (overall for ITP and WTP), with a main interest in the Wilks' lambda (λ) statistic and the *F*-value associated with it (See Table 1). The one-way MANOVA revealed a significant multivariate main effect for food quality, Wilks' $\lambda = 0.853$, $F(2, 289) = 24.863$, $p < 0.001$, $\eta_p^2 = 0.147$ (power = 1.000), showing a statistically large ($\eta_p^2 > 0.14$, Cohen, Cohen, West & Aiken, 2003) main effect of food quality on the dependent variables ITP and WTP together.

Having obtained a significant multivariate main effect for all the factors, a univariate *F*-test (examining between-subjects effects) was conducted on each of the dependent variables to establish if food quality and restaurant type had a significant influence on ITP and WTP separately. At this point, since we were conducting four tests, the experiment-wise alpha rate of 0.05 was divided by four to obtain an acceptable confidence level for each of the four tests, so we set the alpha level to $p < 0.0125$. By that criterion, again, all results obtained for the univariate tests were significant for the effect of food quality on ITP ($F(2, 57) = 24.86$, $p < 0.0125$) and WTP ($F(2, 57) = 34.13$, $p < 0.000$).

MANOVA results were analysed for any interaction. The results revealed that the interaction between restaurant type and food quality was non-significant (Wilks' $\lambda = 0.898$, $F(2, 289) = 0.366$, $p = 0.588$, $\eta_p^2 = 0.102$ (power = 1.000)), showing that the interaction effect of restaurant level and food quality on the behavioural intentions ITP and WTP was non-significant. Thus, restaurant type did not moderate the influence of food on consumer behavioural intention (Table 1). Therefore, hypothesis H_1 was supported as there was no statistically significant moderating influence of restaurant type (limited service or high-end) on the relationship between food quality and the intent to patronise (ITP) and willingness-to-pay (WTP).

Table 1: Multivariate tests for food quality, restaurant types and dependent variables

Effect	Value	*F*	Hypothesis df	Error df	Sig.	Partial eta squared	Observed power
Intercept							
Pillai's trace	0.913	1512.916	2.000	289.000	0.000	0.913	1.000
Wilks' lambda	0.087	1512.916	2.000	289.000	0.000	0.913	1.000
Hotelling-Lawley trace	10.470	1512.916	2.000	289.000	0.000	0.913	1.000
Roy's largest root	10.470	1512.916	2.000	289.000	0.000	0.913	1.000
Restaurant level							
Pillai's trace	0.849	814.076	2.000	289.000	0.000	0.849	1.000
Wilks' lambda	0.151	814.076	2.000	289.000	0.000	0.849	1.000
Hotelling-Lawley trace	5.634	814.076	2.000	289.000	0.000	0.849	1.000
Roy's largest root	5.634	814.076	2.000	289.000	0.000	0.849	1.000
Food quality							
Pillai's trace	0.147	24.863	2.000	289.000	0.000	0.147	1.000
Wilks' lambda	0.853	24.863	2.000	289.000	0.000	0.147	1.000
Hotelling-Lawley trace	0.172	24.863	2.000	289.000	0.000	0.147	1.000
Roy's largest root	0.172	24.863	2.000	289.000	0.000	0.147	1.000
Restaurant level * Food quality							
Pillai's trace	0.102	0.386	2.000	289.000	0.601	0.102	1.000
Wilks' lambda	0.898	0.366	2.000	289.000	0.588	0.102	1.000
Hotelling-Lawley trace	0.113	0.371	2.000	289.000	0.590	0.102	1.000
Roy's largest root	0.113	0.386	2.000	289.000	0.651	0.102	1.000

A *t*-test was conducted to examine the difference in the consumer willingness to pay when food was varied from low to high. The results of this *t*-test revealed that in high-end restaurants when food quality was low, the consumer willingness to pay was ($\bar{x}_{WTP}$ = 1400) and when food quality was high, it was ($\bar{x}_{WTP}$ = 1650), representing a 17.9% change. Also, in the case of limited service restaurants, when food quality was low, the willingness to pay was (= 130) and when food quality was high ($\bar{x}_{WTP}$ = 155), a 19.2% change. There was no statistical difference (t (139) = 1.23, $p > 0.05$) in the WTP when food quality increased in the limited service restaurants.

Therefore, analysing the means of consumer behavioural intention in both restaurants types when food quality was varied from low to high (Table 2, and Figures 1 and 2), revealed a positive relationship between food quality and consumer intentions but it was not significantly moderated by the type of restaurant. Thus, support was found for hypotheses H_{1a} and H_{1b}.

Hypothesis H_2 stated that the type of restaurant moderates the relationship between service quality and intent to patronise (ITP) as well as willingness-to-pay (WTP). In high-end restaurants this relationship was posited as being significantly positive (H_{2a} and H_{2b}), whilst for limited service restaurants it was considered positive but nonsignificant (H_{2c} and H_{2d}). One-way MANOVA analysis revealed a significant multivariate main effect for service quality, Wilks' $\lambda = 0.648$, F (2, 289) = 78.158, $p <$ .001, $\eta_p^2 = 0.352$ (power = 1.000), showing a large main effect of service quality on ITP as well as WTP (see Table 3). Other associated statistics (Table 3) further supported the main effect for quality of service on behavioural intention.

Further examining the MANOVA table it was found that the interaction between restaurant type and service quality was significant, Wilks' $\lambda = 0.767$, F (2, 289) = 43.996, $p < 0.001$, $\eta_p^2 = 0.233$ (power = 1.000), showing that restaurant type (limited service and high-end) moderated the influence of service quality on consumer behavioural intention (Table 3). Thus, hypothesis H_2 is supported as restaurant type significantly moderates the relationship between service quality and the intent to patronise (ITP) and willingness-to-pay (WTP).

To further test this relationship (H_{2a}, H_{2b}, H_{2c} and H_{2d}), the means of the respondents were examined (Table 4 and Figures 3 and 4). The posited $H_{2a/b}$ states that in high-end restaurants there is a positive and significant relationship between service quality and consumer intentions. That means, when the levels of service are raised (e.g. personalisation of service and attention to detail) in high-end restaurants from low to high, the intent to patronise (ITP) and willingness-to-pay (WTP) also increase. A post priori *t*-test was conducted to examine the difference in the consumer willingness to pay when service was varied from low to high. The results revealed that in the high-end restaurant when service quality was low, the consumer willingness to pay was ($\bar{x}_{WTP}$ = 1 028) and when service quality was raised to high then it was ($\bar{x}_{WTP}$ = 1 515) with a *t*-value of t (140) = 4.43, $p < 0.001$. Thus, there was a statistically significant difference in the consumer WTP when service was varied from low to high value (47% change). Similarly, a *t*-test was conducted to examine the influence of varying service on consumer's intention to patronise the high-end restaurants. The results of the *t*-test revealed that when the level of service personalisation improved the ITP also increased ($\bar{x}_{ITP}$ = 3.44) to ($\bar{x}_{ITP}$ = 5.87), a 70% change, with a *t*-value of t (141) = 4.6, $p < 0.000$. Thus, H_{2a} and H_{2b} are supported since there is a positive and significant relationship between service quality and intent to patronise and willingness-to-pay in high-end restaurants.

For limited service restaurants ($H_{2c/d}$) a positive but nonsignificant relationship was posited between service quality and consumer ITP and WTP. In limited service restaurants, the results revealed that

Table 2: Estimated marginal means for willingness-to-pay (WTP) and intention to patronise (ITP) – Food quality

Restaurant type	Food quality level	Intention to patronise (mean)	% change	Willingness-to-pay (mean)	% change
Limited service	Low food quality	4.43	33.4	130	19.2
	High food quality	5.91		155	
High-end	Low food quality	4.03	31.0	1400	17.9
	High food quality	5.28		1650	

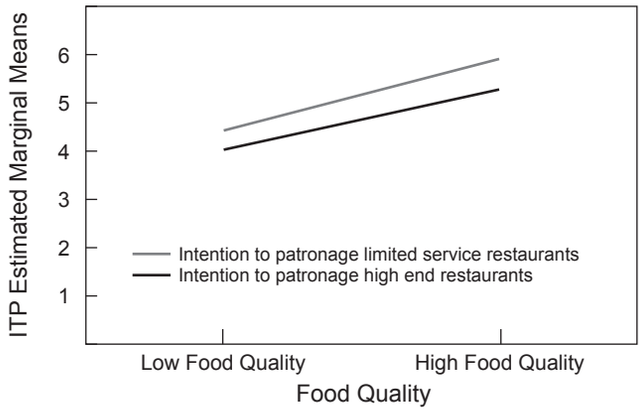

Figure 1: Estimated Marginal Means for ITP for Food Quality

Figure 2: Estimated marginal means for WTP for food quality

when service quality was low, the mean value for willingness to pay was ($\bar{x}_{WTP} = 151$) and when service was high quality the WTP was ($\bar{x}_{WTP} = 180$). The *t*-test revealed (t (152) = 1.72, $p < 0.05$) that there was no statistically significant difference in the WTP if service quality was increased from low to high in limited service restaurants, thus hypothesis $H2_C$ was supported.

A *t*-test was further conducted to examine the influence of varying service on consumer's intention to patronise (ITP) limited service restaurants. The results of the *t*-test revealed that when the level of service personalisation increased the ITP increased from ($\bar{x}_{ITP} = 4.11$) to ($\bar{x}_{ITP} = 5.52$), a 34% change, with a *t*-value t (141) = 3.22, $p < 0.05$. This indicates that improvement in service does increase consumers' intention to patronise. Thus, the hypothesised nonsignificant relationship, $H_{2d,}$ between ITP and service quality in limited service restaurants was not supported.

Hypothesis H_3 described the relationship between ambiance and consumer intention, moderated by type of restaurant. The one-way MANOVA analysis revealed a significant main effect for ambiance (Table 5) showing a large main effect of ambiance on ITP and WTP together. Other statistics observed were Pillai's trace = 0.374, $F(2, 289) = 14.896$, $p <. 001$, $\eta_p^2 = 0.154$, and

Table 3: Multivariate tests for service quality, restaurant types and dependent variables

Effect	Value	*F*	Hypothesis df	Error df	Sig.	Partial Eta Squared	Observed Power
Intercept							
Pillai's trace	0.939	2208.051	2.000	289.000	0.000	0.939	1.000
Wilks' lambda	0.061	2208.051	2.000	289.000	0.000	0.939	1.000
Hotelling-Lawley trace	15.281	2208.051	2.000	289.000	0.000	0.939	1.000
Roy's largest root	15.281	2208.051	2.000	289.000	0.000	0.939	1.000
Restaurant levels							
Pillai's trace	0.867	940.883	2.000	289.000	0.000	0.867	1.000
Wilks' lambda	0.133	940.883	2.000	289.000	0.000	0.867	1.000
Hotelling-Lawley trace	6.511	940.883	2.000	289.000	0.000	0.867	1.000
Roy's largest root	6.511	940.883	2.000	289.000	0.000	0.867	1.000
Service levels							
Pillai's trace	0.352	78.518	2.000	289.000	0.000	0.352	1.000
Wilks' lambda	0.648	78.518	2.000	289.000	0.000	0.352	1.000
Hotelling-Lawley trace	0.543	78.518	2.000	289.000	0.000	0.352	1.000
Roy's largest root	0.543	78.518	2.000	289.000	0.000	0.352	1.000
Restaurant level * Service level							
Pillai's trace	0.233	43.996	2.000	289.000	0.000	0.233	1.000
Wilks' lambda	0.767	43.996	2.000	289.000	0.000	0.233	1.000
Hotelling-Lawley trace	0.304	43.996	2.000	289.000	0.000	0.233	1.000
Roy's largest root	0.304	43.996	2.000	289.000	0.000	0.233	1.000

Table 4: Estimated marginal means for willingness-to-pay (WTP) and intention to patronise (ITP) – Service quality

Restaurant type	Service quality level	Intention to patronise (mean)	% change	Willingness-to-pay (mean)	% change
Limited service	Low service quality	4.11	34.3	151	19.2
	High service quality	5.52		180	
High-end	Low service quality	3.44	70.6	1028	47.4
	High service quality	5.87		1515	

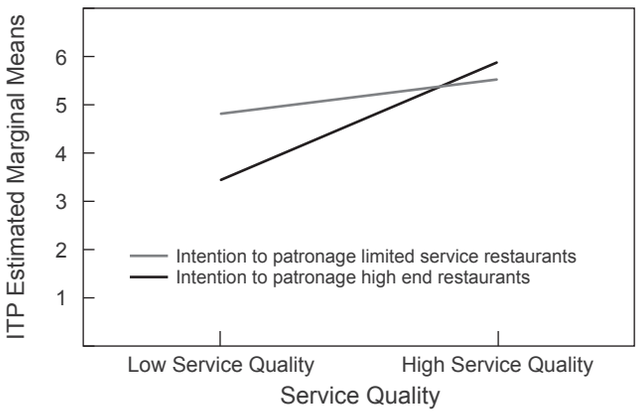

Figure 3: Estimated marginal means for ITP for service quality

Figure 4: Estimated marginal means for WTP for service quality

Hotelling-Lawley trace = 0.172, $F(2, 289) = 14.896$, $p < 0.001$, $\eta_p^2 = 0.154$, providing further support for hypothesis H_3.

The results also revealed that the interaction between restaurant type and ambiance was significant (Table 6), indicating that the restaurant type moderated the influence of ambiance on intent to patronise and willingness-to-pay (Table 6). These findings provide support for hypothesis H_3, indicating that there is a statistically significant moderating influence of type of restaurant on the relationship between ambiance and consumers' intention.

Hypotheses $H_{3a/b}$ stated that in high-end restaurants a positive and significant relationship exists between ambiance and consumer intentions. Thus, when the ambiance levels of the built environment are varied from low to high, ITP and WTP are expected to increase. The *t*-test was conducted to examine the difference in the consumer willingness to pay when ambiance was varied from low to high. The results of this *t*-test revealed that in high-end restaurants when ambience was low, the consumer willingness to pay was ($\bar{x}_{WTP} = 1\ 180$) and when ambience was improved to high quality then the WTP was ($\bar{x}_{WTP} = 1\ 522$) with a *t*-value of $t\ (141) = 6.22$, $p < 0.000$. Thus, a statistically significant difference in consumer WTP was observed when ambience was improved from low to high (29% change).

Similarly, a *t*-test was conducted to examine the influence of varying ambience on the consumer's intention to patronise high-end restaurants. The results of the *t*-test revealed that when the level of ambience increased the ITP has increased from ($\bar{x}_{ITP} = 3.97$) to ($\bar{x}_{ITP} = 5.36$) with a *t*-value of $t\ (141) = 4.31$, $p < 0.001$, representing a 35% change (Figure 6). Thus, hypotheses $H3_a$ and $H3_b$ were supported.

Hypothesis $H_{3c/d}$ stated that in limited service restaurants there is a positive but nonsignificant relationship between ambiance and willingness-to-pay (WTP) and intent to patronise (ITP). In limited service restaurants, when ambience quality was low, the willingness to pay was ($\bar{x}_{WTP} = 138$) and when ambience was high the WTP was ($\bar{x}_{WTP} = 145$) with a *t*-value of $t\ (151) = 1.72$, $p = 0.057$. These findings showed no statistically significant difference in the WTP if ambience improved from low to high in limited service restaurants. Thus, hypothesis $H3_C$ was supported.

A *t*-test was further conducted to examine the influence of varying ambience on consumers' intention to patronise (ITP) limited service restaurants. The results of the *t*-test revealed that when the level of ambience increased from low to high the ITP increased from ($\bar{x}_{ITP} = 4.31$) to ($\bar{x}_{ITP} = 5.34$) with a *t*-value of $t\ (141) = 2.22$, $p < 0.05$, representing a 24% change. These results revealed that increase in ambience significantly increases the willingness to patronise, thus the hypothesis $H3_d$ was not supported. This clearly indicates that even in limited service restaurants consumers care for quality in ambiance and the relationship is positive similar to the high-end restaurants. This observation can be supported by the fact that most limited service restaurants often tend to remodel their restaurants periodically meeting the changing needs of the customer.

Table 5: Multivariate tests for ambiance, restaurant types and dependent variables

Effect	Value	*F*	Hypothesis df	Error df	Sig.	Partial Eta Squared	Observed Power
Intercept							
Pillai's trace	0.913	1524.565	2.000	289.000	0.000	0.913	1.000
Wilks' lambda	0.087	1524.565	2.000	289.000	0.000	0.913	1.000
Hotelling-Lawley trace	10.551	1524.565	2.000	289.000	0.000	0.913	1.000
Roy's largest root	10.551	1524.565	2.000	289.000	0.000	0.913	1.000
Restaurant type/level							
Pillai's trace	0.848	808.432	2.000	289.000	0.000	0.468	1.000
Wilks' lambda	0.152	808.432	2.000	289.000	0.000	0.468	1.000
Hotelling-Lawley trace	5.595	808.43	2.000	289.000	0.000	0.468	1.000
Roy's largest root	5.595	808.432	2.000	289.000	0.000	0.468	1.000
Ambiance level							
Pillai's trace	0.374	14.896	2.000	289.000	0.000	0.154	1.000
Wilks' lambda	0.651	15.978	2.000	289.000	0.000	0.154	1.000
Hotelling-Lawley trace	0.172	14.896	2.000	289.000	0.000	0.154	1.000
Roy's largest root	0.168	14.935	2.000	289.000	0.000	0.154	1.000
Restaurant level * Ambiance level							
Pillai's trace	0.078	12.231	2.000	289.000	0.000	0.078	0.996
Wilks' lambda	0.922	12.231	2.000	289.000	0.000	0.078	0.996
Hotelling-Lawley trace	0.085	12.231	2.000	289.000	0.000	0.078	0.996
Roy's largest root	0.085	12.231	2.000	289.000	0.000	0.078	0.996

Table 6: Estimated marginal means for willingness-to-pay (WTP) and intention to patronise (ITP) – Ambiance

Restaurant type	Ambiance quality level	Intention to patronise (mean)	% change	Willingness-to-pay (mean)	% change
Limited service	Low ambiance quality	4.31	24	138	5.1
	High ambiance quality	5.34		145	
High-end	Low ambiance quality	3.97	35	1180	29.0
	High ambiance quality	5.36		1522	

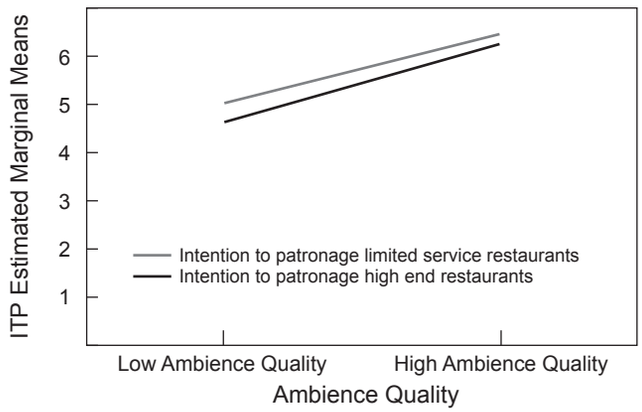

Figure 5: Estimated marginal means for ITP and ambiance

Figure 6: Estimated marginal means for WTP and ambiance (WTP) is measured in Kenya Shillings (KShs.)

Discussion

The findings suggest, however, that, contrary to common belief (DiPietro et al., 2011), the three key restaurant attributes are neither equal nor necessarily always significant in their relationship to consumer intention. The relationship between food quality and ITP/WTP are positive both in high-end and limited service restaurants, but that is not the case with reference to service quality and ambiance.

With respect to service quality and ambiance, consumer preferences for high-end and limited service restaurants differ. In upscale restaurants, the relationship between attributes quality and ITP as well as WTP is positive and significant. Service quality and ambiance remain unpredictable in limited service restaurants. Unlike food quality, in case of limited service restaurants, both service quality (i.e. personalisation) and ambiance have positive and nonsignificant relationships with WTP but it is significant in case of ITP.

The three key restaurant attributes thus have very unique influences on consumers' behavioural intentions, both in the high-end restaurants and limited service restaurants. This is an interesting finding which deserves further investigation. It confirms the questionable universality of consumer preferences across the different sectors of the restaurant industry supporting studies (Mattila, 2001a/b; Min & Min, 2011; Namkung & Jang, 2007).

The differences in the influences of service quality between upscale and limited service restaurants could be partially attributed to the unique differences in customer expectations related to these different types of restaurants. Customers of limited service restaurants usually focus on a limited number of service dimensions such as convenience, speed of service, order accuracy, menu simplicity, ease of product ordering, high use of technology in service delivery, drive-through access, and other speed-related attributes (Grönroos, 1984). In addition, consumers at limited service restaurants spend less time with the service staff and, therefore, may not really place emphasis on personalisation of the service process. Most of the limited service restaurant exchanges are transactional in nature, leaving less scope for service personalisation, and thus it can be expected that ITP and WTP do not significantly change as service personalisation varies from low to high. Similarly, the above discussion can be extended to ambiance and consumer intention in high-end and limited service restaurants.

On the other hand, customers of high-end restaurants display their preference for personalisation of service by the great difference in the means for the low and high service personalisation. They expect high quality food as well as personalisation of service. Consumers of high-end restaurants invariably patronise high-end, upscale restaurants for a totally emotional experience that is beyond the simple physiological gratification provided by food alone. In other words, consumers of upscale restaurants are seeking physiological gratification (food) followed by emotional satisfaction (service) and conspicuous consumption (ambiance). In high-end restaurants, all three service attributes (food, service and ambiance) are important in achieving high consumer patronage.

Conclusions

This study intended to investigate the effect of service attributes on consumer patronage and willingness-to-pay. In particular, it investigated the preferences of consumers in the developing economy of Kenya, with respect to three major attributes in the restaurant industry: food quality, service quality, and ambiance. The study finds that food quality is the only attribute to have a positive and significant relationship with both consumer patronage and willingness-to-pay, in high-end as well as limited service restaurants. Service quality and ambiance both have positive and significant relationships with consumer intentions in high-end restaurants. Moreover, in high-end restaurants, increase in ambience was found to increase patronage and willingness-to-pay with a significant amount if service quality was also increased. When ambiance was improved in upscale restaurants the WTP improved by 29% compared to the 5% in limited service restaurants. This is definitely a significant difference worthy of further investigation.

When service was improved, the upscale restaurant WTP improved by 47% compared to the 19% in limited service restaurants. This is definitely a significant difference. Similarly, the change in the ITP for both the upscale and limited service restaurants was significant with the values for upscale (70.6%) and limited service (34%) restaurants. This clearly shows that service has significant impact on restaurant patronage

and willingness to pay. Interestingly, in the case of limited service restaurants, the relationship between service and consumers' intentions were mixed. The WTP was positive but not significant and the ITP was positive and significant. These findings also indicate, in the case of limited service restaurants, that when service improves, even though consumers are willing to patronise more, they are not willing to pay more. In other words, limited service restaurants can expect higher revenues through repeated patronage but not necessarily higher revenues per customer.

Similarly, the relationship between ambiance and WTP and ITP are different for high-end restaurants and limited service restaurants. The relationship was positive and significant for high-end restaurants and positive but insignificant for limited service restaurants for WTP and significant for ITP. Similar to service, in the case of limited service restaurants, with an increase in ambiance quality the consumers' ITP improved (24%) manyfold compared to WTP (5%), but, in the case of high-end restaurants, it remained consistent for ITP (35%) and WTP (29%).

This study has a few limitations. First of all, it includes only two levels of service attributes, when in reality attribute levels do exist as a continuum versus a dichotomy. It is a scenario-based study with stated preferences, thus the findings could be further explored with secondary data from the industry (i.e. revealed preferences). The data were collected from a developing economy, limiting its generalisability to other developed nations and across cultural boundaries. Furthermore, the three service attributes – food quality, service quality (i.e. personalisation) and ambiance – that were examined, are strongly correlated, and thus any tentative conclusion about any one attribute in isolation may not be prudent unless the influence of the inter-attribute impact is also better understood. In other words, expectation of high ROI for service improvements may not be realistic without proportional improvements in food quality and ambiance. Further studies are required to better understand these complex relationships, including measurement of the slope for change in consumer patronage when service attributes change from low to high. Suggested studies measuring the slope would demonstrate the direction as well as the magnitude of the relationships.

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