

# Perceived Service Quality and Customer Revisiting Intention: The Case of “all you can eat” Asian Restaurants in Southern Taiwan

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**Abstract:** Purpose of this paper is to report on an investigation of the expected and perceived service quality at “all you can eat” restaurants in southern Taiwan. The findings of this study indicated that the service quality factors had a positive impact on overall customer satisfaction and revisiting intention. The results also showed that the “all you can eat” restaurant in Chiayi had a higher level for service related factors for “all you can eat” restaurants than Kaohsiung thus reflecting some regional differences in overall service quality. The analysis revealed a number of central and important properties attached to the consumption values associated with context of an “all you can eat” restaurant meal. Such insights can be of use to the management of restaurants in their efforts to improve the experience/quality for their customers and to increase customer loyalty. The consumer values identified here could also be used as suggestions concerning what to look for within more comprehensive empirical studies done in the future. This is the first study to are knowledge that examines “all you can eat” hospitality sector in Taiwan

**Keywords:** All you can eat, Taiwan, Service Quality

**JEL Classification:** L15, L83, L84

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## 1 INTRODUCTION

The idea of service quality includes both values and qualities and “is defined as the customer’s judgment of the overall excellence or superiority of the service” (Ha & Jang, 2009, p. 521). Mostly, service quality is associated with the satisfaction customers gain with the help of services that they buy (Jensen and Hansen 2007). In a restaurant context, quality of the food, service quality and dining experiences do affect the satisfaction of customers (Ha and Jang 2010, Fotiadis and Stylos, 2017). This is the reason why several researchers have indicated the increasing need to investigate meal experiences from the customers’ points of view (Andersson and Mossberg 2004, Jensen and Hansen 2007, Warde and Martens 2000).

Taiwan is renowned throughout Asia for its food and dining culture. In addition to the unique aspects of street food and night market stalls, there are opportunities for high end dining, local restaurants, cafés and neighbourhood eateries, it is

common to find restaurants that offer the “all you can eat” experience with both Western and Asian themes. This means that a customer may eat as much as they want after paying an initial entrance fee to the establishment. Often included in that single payment there are soft drinks, beverages, ice-creams and sweets along with a full variety of many entrees and main courses. However, the literature on this topic is noticeably absent of research on consumer values in the “all you can eat” restaurant sector, and the intention of this article is to contribute to increased insight into the consumer values involved in this aspect of the hospitality and restaurant industry. Such insights will also be useful to restaurant managers in their struggle to fulfil the preferences of their guests through their service concepts for the organisation of the meal selection and consumption process in a situation of minimum service interaction but high product involvement (Jensen and Hansen 2007).

This current study was expected to reveal a number of central and important properties about the consumption values that



are linked to service in an "all you can eat" restaurant meal context. The consumer values that will be developed here must have solid empirical support in order to obtain a strong validation, and the composition of the values will give a much-needed insight into the area of consumer requirements with particular relevance to the self-service elements of an "all you can eat" restaurant. Such an insight can also be of use to the management of restaurants in their efforts to improve service and product quality characteristics for their customers with the aim of increasing customer loyalty. Future research areas can also be highlighted to measure consumer values where the customer is intimately involved in the delivery of the service such as take-away outlets, cafeterias, food-service buffets and even self-service approaches used in such outlets as sushi bars or self-cooking options such as BBQs and Chinese hotpots. The new consumer values identified here could then be used as pre-categories and as suggestions concerning what to look for within more comprehensive empirical studies that may be addressed in future studies.

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## 2 LITERATURE REVIEW

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By the term 'services' we mean activities of the supplier during the transactional interaction with a client, and the results of the activities required in order to meet the needs of the customers. This definition implies that there is a continuum from the physical product to the pure service with most interactions containing elements of both. It, of course, finds direct application when referring to the quality of a material good that is physically produced and the tangible elements are demonstrated most clearly. However, in the hospitality sector of service provision the landscape starts to become a little bit blurred. Many service providers consider quality as the key word in the matter of competition, as this has an impact on both present and prospective consumers as more and more customers now realize the importance of quality and not just quantity. However, the quality of service provision is a concept that has attracted the interest of researchers as shown in the extensive subject literature that highlights the difficulties around both the definition and the measurement of the qualities in question, where clear universal agreement on any of the above conditions being in existence is not common (Marshall and Murdoch 2001).

Lewis and Booms (1983) have described the provision of quality services as "a measure of whether the level of service provided meets the expectations of its customers" considering that the provision of a high-quality service means adapting to the expectations of customers on a permanent basis. However the definition of service has changed radically over the years and it has now been given more specific meanings. Lee (2009), argued that, in terms of marketing, the dividing line between manufacturing and services provision is nearly invisible. In addition, in the service sector, where production, delivery and consumption may appear at the same time, the concept of quality refers to the convergence between those elements that the customers expect and those they are experiencing. Customers evaluate the quality of services by comparing what they want or expect to what they actually receive or understand that they are given

(Ho et al. 2013, Ma et al. 2013, Udo et al. 2010, Fotiadis 2016, Fotiadis and Vassiliadis 2016). This can be termed perceived quality, and any deviation of the expected service from perceived service quality is a quality "gap" (Del Chiappa 2013, Grönroos 2004).

Consequently, the productivity and quality of the service depends not only on the performance of the staff of the service provider, but also on the performance of the consumer, which therefore makes the management of quality somewhat problematic. In addition, many services require the close personal interaction between the provider and the consumer. Whether this interaction is perceived as satisfactory or not by the consumer can depend on various factors, ranging from the external appearance of the service provider and his perceived ability to deliver the service, to the characteristics of his personality, and even as far as the interpersonal attraction between the two participants. Despite these factors contributing to heterogeneity and variability of services, it is still not easy for them to be checked in terms of quality control (Fornell 1992, Laverie and Arnett 2000, Ngai and Chan 2011, Wagenheim and Anderson 2008).

In the restaurant and hospitality industries the quality of food and service are not the only factors that are important for loyal and happy customers. First impressions of the location, the nice ambience and customers' emotions and feelings are all interconnected. Some customers feel extremely satisfied by just making a reservation or finding a parking space. Enhanced quality of the restaurant affects customers' loyalty and it can increase profits and positive recommendations by word-of-mouth (Liu and Jang 2009). It is therefore useful to note that many researchers have investigated service quality in restaurants by using the ServQual model and highlighted the key factors in the customer-provider interactions. (Barber et al. 2011, Chang et al. 2006, Cheng et al. 2012, Chou et al. 2012, Ha and Jang 2010, Hau-siu Chow et al. 2007, Jeong and Jang 2011, Liu and Jang 2009, Park 2004, Sun and Morrison 2007, Tzeng et al. 2002)

### 2.1 Measuring of the quality of services

Most semantic frames to measure the quality of service are based on tools from the cognitive fields of psychology and marketing research. These frames measure quality through the perceptions of customers (Folinas et al. 2011, Grönroos 1984, Grönroos 2004), where the prior expectations of customers do have real influence on the nature of these concepts. It is claimed that the criteria specified by customers should be the key point of reference for the measurement quality.

The quality of services is measured by the size of the gap between the expected and the perceived service delivered (Parasuraman et al. 1988). The level of confirmation or disproof of the expectations remains the predominant factor in the measurement of the quality of the service. Although various tools and measurement techniques have been developed over the last three decades, the most well-known and the one with greatest impact on academic studies was that developed by Parasuraman et al. (1988) and popularised in the SERVQUAL tool (Grönroos 2004). This standard assessment approach to the quality of services is a tool for measuring the quality of services that is still widely used by organizations providing services today, including hospitality

and gastronomic services. In their original study Parasuraman et al. (1988), through a process of qualitative research and analysis, found that there were ten important factors which characterize the perceptions of customers about a service provided. However, as a result of the quantitative research and analysis that followed (Parasuraman 2005, Parasuraman et al. 1991, Zeithaml et al. 1990, Zeithaml et al. 2002) reduced these ten dimensions of quality to the following five: tangibility / tangibles, reliability, response, security and empathy.

## 2.2 Hypotheses Development

The importance of understanding satisfaction is primarily based on its potential outcomes, such as: loyalty and commitment, word-of-mouth communication, complaining behaviour, and repurchase intentions. Satisfaction is created more from feelings-based criteria than from cognitive criteria, yet it tends to relate as much to perceptions of the intermediate steps of personal exchange during the process of service delivery as it does to the actual results of the service interaction. A number of researchers in this domain have suggested there are several key antecedents of revisit intentions and theoretical and empirical findings are quite consistent in suggesting satisfaction is one that is positively related (Choo and Petrick 2014, González et al. 2007, Kozak and Rimmington 2000, Lan-Lan et al. 2014). High quality service produces higher levels of customer satisfaction, which in turn leads to higher levels of positive consumption behaviours, such as revisiting, positive word-of-mouth comment, and recommending a restaurant to others (Ha and Jang 2010). Several other studies concluded that food quality is a critical factor (Roosbeh Babolian 2016) influencing customer loyalty and other loyalty-related behaviours in the restaurant settings (Andersson and Mossberg 2004, Anthopoulou 2010, Ha and Jang 2010, Park 2004). Service quality together with food quality and price is therefore one of the most influential elements for customer loyalty in terms of restaurant choice. It is a significant component driving other loyalty-related behaviours such as revisit intention, spreading of positive word-of-mouth, and willingness to recommend to others (Evanschitzky et al. 2006). Based on these, apparently causal relationships, this current study proposes the following hypothesis:

Hypothesis 1: Service quality positively influences customer revisiting intention.

On the basis of the above elements an evaluation of the gap between desired and actual performance can be made, along with a classification of the importance of the dimensions of the service, where the SERVQUAL model takes into account the perceptions of customers about the importance of the various characteristics of the service (Ladhari 2009). This allows a company to establish priorities, to use its resources to improve the most important features of its services and to maximize the quality of the services while, at the same time, controlling the service cost. According to a study done by Parasuraman et al. (1988) it was concluded that there was no consequences on the side of the customers regarding the scoring of two dimensions of service provision, regardless of the type of industry. In particular, the customers considered

reliability as the single most important factor contributing to the evaluation of quality of services and also suggested that tangibility was a factor of minimal importance. The implementation of a quality management system in the services sector requires that customer expectations should be the main factor taken into account in the form of high-quality programming. In addition, the administration should promote their corporate culture in terms of quality in order to ensure the provision of a high-quality service, since the nature of any service enterprise is not tangible but is perishable and heterogeneous and the performance of the services are not easily quantifiable, but are connected directly with customer perception. The gap between perceived quality and the expected level of service is the key determinant in the customer's evaluation of performance. Therefore, the ability of employees, their motivation and training are very important factors that can ensure the quality of services provided, while good facilities and support can create a favourable working environment which are conducive to excellent performance by service staff.

Based on the literature the following hypotheses were created:

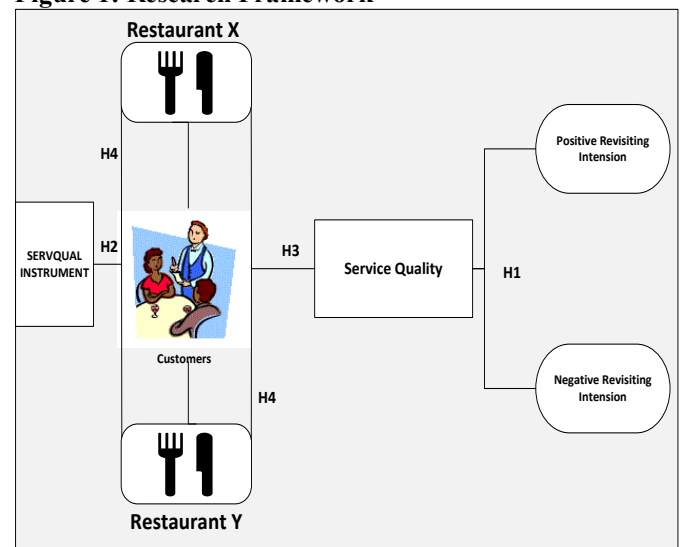
Hypothesis 2: There are significant differences in perceived service quality between different demographics groups in "all you can eat" restaurants in Taiwan.

Hypothesis 3: Customers have a positive perception of "all you can eat" restaurants in Taiwan

Hypothesis 4: Different locations of "all you can eat" restaurants have different levels of perceived service quality in Taiwan.

As we can see in Figure 1, perceived service quality at "all you can eat" restaurants is compared between Chiayi in central Taiwan and Kaohsiung in southern Taiwan. More specifically it examines which service quality factors are thought to be the most and least important for the customers. The role of expectations and the actual experience of customers who visit this type of restaurant is also indicated in the framework. A modified SERVQUAL based questionnaire was used to examine the gap between expectations and experience and how important that gap is for customers revisiting intention.

**Figure 1: Research Framework**



### 3 RESEARCH METHODOLOGY

#### 3.1 Location of the Study

Two famous “all you can eat” restaurants in Chiayi (Restaurant X) and Kaohsiung (Restaurant Y) were chosen for this study. A quantitative questionnaire was administered face-to-face in order to collect the necessary data. The survey questionnaire was administered to the respondents by using the Chinese version developed from literature (Barber et al. 2011, Cheng et al. 2012, Ha and Jang 2010, Liu and Jang 2009, Nam and Lee 2011) in order to gather the relevant data in the local language of the main customer group.

#### 3.2 Sampling Procedures

This research study adopted convenience sampling as the procedure by which to collect data from a selection of customers at these two ‘all-you-can-eat’ restaurant. In this method, the researcher approaches subjects that are easy to reach, and, as the name describes, are chosen because of convenience. For this study, the target population can be stated as being composed of customers of the “all you can eat” restaurants in Taiwan who possess the following characteristics:

- a) Being older than 16 years old
- b) Having visited other restaurants except “all you can eat” ones
- c) Giving their main reason for visiting the restaurant as to eat and not just to spend time there.

All items except demographics were measured on a 7-point Likert scale with the scale end-points of strongly disagree and strongly agree.

#### 3.3 Measurement Scales

The SERVQUAL model’s approach was considered the most appropriate in order to evaluate the level of services offered by the “all you can eat” restaurants. The questionnaire was divided into three parts. The first one examines customers opinion by using the ServQual instrument created from the literature, the second part consists of questions related to revisiting intention and the third one covered the demographic characteristics (Appendix 1). As the SERVQUAL dimensions are used in this study, coding was necessary to allow the quantitative analysis of data collected. Moreover, revisiting intentions were coded as well for the purpose of analysis. The survey results were analysed through SPSS 18.0 software which start with the task of identifying if the questionnaire was valid and reliable.

Because the questionnaire originates from literature written in English we establish face validity based on the literature review and a panel of experts (Malhorta and Birks 2006, McTavish 1997). The panel of experts comprised of three senior managers of the restaurants and they all reported back that our questionnaire seemed to be a good measurement tool for measuring perceived service quality. In parallel, we conducted an inter-rater reliability analysis using the Cronbach Alpha method to see whether our questionnaire

was regarded as reliable by all evaluators. In order to draw conclusions regarding the five dimensions of the ServQual model and revisiting intention we used the gap analysis method and paired-samples t-test to define if perceptions and expectations of service quality among the quality dimensions were significant ( $p < .05$ ). Exploratory Cluster Analysis was used to identify the different demographic groups and their average service perceptions scores.

### 4 FINDINGS

The research hypotheses were tested with data collected via surveys in two “all you can eat restaurants” located in Chiayi and Kaohsiung, Taiwan. Although the sample was not randomly selected, the selection process of subjects was as systematic as possible. Respondents were not offered incentives for completing the survey. Researchers received 230 surveys out of the 250 distributed; after deleting questionnaires with incomplete responses a total of 213 surveys were available for final analysis (an 85.2% nominal response rate). Table 1 summarizes the demographic profile of the respondents. The sample consisted of 41.8% male and 58.2% female. The average age for the customers was 25.49 years. The lowest age was 16 years and maximum 64 years. Almost three quarters (72.8%) of respondents were single which was mainly related to the fact that most of the respondents were students (56.3%). Also, most of the respondent had a university degree (70.9%) and almost one third had a high school degree (22.5%). A large majority (53.1%) of respondents had a monthly income less than 20,000 NTD (500€) per month and only a small percentage (5.6%) were earning more than 60,000 NTD (1.500€). Most of the respondents were from Chiayi (44.8%) and the others mainly from Kaohsiung or other areas around Taiwan.

**Table 1. Demographic characteristics**

	Frequency	Percent
Gender		
Male	89	41.8
Female	124	58.2
Family		
Single	155	72.8
Married	39	18.3
Divorced	13	6.1
Widow	6	2.8
Education		
Elementary	3	1.4
High School	48	22.5
University	151	70.9
Master/PhD	11	5.2
Financial		
<=20000	113	53.1
20001-30000	40	18.8
30001-40000	25	11.7
40001-50000	18	8.5
50001-60000	5	2.3
>60000	12	5.6
Occupation		
Student	120	56.3
Housekeeper	9	4.2

	Farmer	7	3.3
	Unemployed	12	5.6
	General Staff	29	13.6
	Civil Worker	8	3.8
	Executive	7	3.3
	Self-employed	4	1.9
	Retired	1	.5
	Other	16	7.5
Resident			
	Kaohsiung	45	21.1
	Tainan	21	9.9
	Taipei	17	8.0
	Chiayi	95	44.8
	Other	35	16.4
Age	Average	25.49	

All constructs included in the model were measured using multi-item scales designed to tap all relevant dimensions of the service construct. While the scales used were based on prior work, all of the items were adapted so that the item content matched those generally used in hospitality industry.

**Table 2. Reliability analysis for both expectation and performance scales**

Dimension	Number	Cronbach	Cronbach
Tangible	11	.904	.896
Reliability	5	.896	.729
Responsiveness	3	.921	.910
Assurance	6	.942	.934
Empathy	6	.837	.861

Based on the review of the literature thirty-one items were developed to measure the five elements of services quality and three items were developed to measure revisiting intention. Reliability of the scores for each of the five factors was estimated by calculating Cronbach's alpha coefficient using SPSS Version 18.0. Since all of Cronbach's alpha coefficients (Table 2) for the scales were greater than .60, the scales were deemed acceptable (Nunnally 1978). Moreover examining the Cronbach alpha coefficients for each item shows all the items in both cases are reliable since none of them falls under 0.7 as some researchers suggest (Cortina 1993, Netemeyer et al. 2003).

#### Validity

Gay (1996) considered that validity can be appropriately measured and verified by experts in the field. As mentioned in the discussion of the methodology, the questionnaire was given to "all you can eat restaurants" experts' to be evaluated (academic experts in service quality and two restaurant managers). Based on the managers opinion three questions were modified so they would be more suitable for this research and two questions were deleted since it was considered that there was no need to ask about them.

The highest scores are for two tangible items, "all you can eat restaurants have restrooms that are thoroughly clean" (5.53) and "all you can eat restaurants have a dining area that is comfortable and easy to move around in" (5.48) are naturally expected since for both, when someone is visiting an "all you can eat" restaurant, he/she expects that you can move and pick up products such as ice-creams, refreshments and other items whenever you wish and that the toilets are clean and hygienic. The next two best scores are also for tangibles items where the expectations "a menu that is easily readable" (5.44) and "dining areas that are thoroughly clean" (5.43). The

lowest mean scores are noticeable for two empathy items "all you can eat restaurants have employees who are sympathetic and reassuring if something is wrong" (4.54) and "all you can eat restaurants seems to have the customers' best interests at heart" (4.61) which are followed by two tangibles items, "all you can eat restaurants have visually attractive building exteriors" (4.77) and "all you can eat restaurants have visually attractive parking areas" (4.64).

For the ratings of perceptions of 'all-you-can-eat' restaurants we note that the high mean scores for "all you can eat restaurant have a menu that is easily readable" (5.24), "all you can eat restaurant provides an accurate guest check" (5.23), "all you can eat restaurant makes you feel comfortable and confident in your dealings with them" (5.23), "all you can eat restaurant quickly corrects anything that is wrong" (5.16). In contrast, lower mean scores for perceptions are found for the following items: "all you can eat restaurant has visually attractive parking areas" (3.91), "all you can eat restaurants anticipates your individual needs and wants" (4.54), "all you can eat restaurants have visually attractive building exteriors" (4.66), "all you can eat restaurant seems to have the customers' best interests at heart" (4.67). These results suggest that we can accept *Hypothesis 3: Customers have a positive perception for "all you can eat" restaurants in Taiwan*, since in all the cases we can see that customer's on average have a positive perception of "all you can eat" restaurants in Taiwan.

In addition to these individual items we examined the mean scores for all the items in each dimension as we can see in Table 3. The most important dimensions for the customers' expectations are tangibility, assurance and responsiveness. The least important dimensions for expectations are reliability and empathy.

**Table 3. The most important dimensions.**

N	Dimension	Items per	Mean	Mean
1	Tangible	11	5.26	5.03
2	Reliability	5	5.15	5.09
3	Responsiveness	3	5.17	5.00
4	Assurance	6	5.23	5.06
5	Empathy	6	5.13	5.04

As shown in Table 3 as well, the perception dimension that is most important for the customers is the reliability while assurance and empathy follow at a lower level. The least important dimension is responsiveness.

#### 4.1 Revisiting Intention

Hypothesis 1 describes how we want to investigate if service quality positively influences customer revisiting intention. Overall, the results are positive with most customers indicating they are planning to revisit each of these "all you can eat restaurant" in the near future (5.24). Additionally, customers are planning to bring their family and friends to visit the "all you can eat restaurants" on a future outing (5.13) but they not as positive about whether these restaurants would be their first choice over other alternative styles and types of restaurants (4.44).

We used a t-test to see if there were significant differences between negative revisiting and positive revisiting intentions of customers. As we can see (Table 4), in all service dimensions customers with negative revisiting intention have lower mean scores than positive revisiting intention customers. In addition, assurance expectations and perceptions are the most important ones for ‘positive’ revisiting intention customers. For negative revisiting intention customers the highest means are for tangible and empathy expectations.

Table 4 below shows that in all the cases there is a statistically significant difference between these two behavioural segments in terms of their service expectations and perception dimensions. As these results show, we are accepting them as support for Hypothesis 1 that ‘service quality positively influences customer revisiting intention’.

**Table 4. T-Test, revisiting intention, expectations and perception.**

	Will NOT Revisit	Will Revisit	t statistic	P
Tangibles Expectation	4.8933	5.5708	2.124	.000
Reliability Expectation	4.5694	5.6383	1.195	.000
Responsiveness Expectation	4.6020	5.6580	1.653	.000
Assurance Expectation	4.6034	5.7580	.103	.000
Empathy Expectation	4.6497	5.5362	1.573	.000
Tangibles Perception	4.5207	5.4656	.003	.000
Reliability Perception	4.4367	5.6452	.014	.000
Responsiveness Perception	4.2653	5.6203	.188	.000
Assurance Perception	4.6034	5.7580	.103	.000
Empathy Perception	4.4915	5.4986	4.035	.000

NR – Negative revisiting intention, PR– Positive revisiting intention

Hypothesis 4 addressed the issue of variability in restaurant performance in different localities and whether different locations in Taiwan for “all you can eat restaurants” give rise to different levels of perceived service quality. We are using a t-test to examine if there are significant differences at either the <0.01 and <0.05 level (Table 5).

**Table 5 . T-Test for different locations of “all you can eat restaurants”**

	Kaohsiung	Chiayi Expectation	Expectation T	Kaohsiung	Chiayi Perception	Perception
TA1	4.38	4.82	.082	3.91	3.91	1.423
TA2	4.38	5.04	.166*	4.33	4.88	.932
TA3	4.61	5.43	3.744*	4.46	5.25	.648*
TA4	4.57	5.62	7.414	4.60	5.50	5.275
TA5	4.61	5.40	3.889	4.49	5.22	7.441
TA6	5.06	5.78	8.319	4.76	5.57	2.931*

TA7	4.79	5.29	7.149*	4.57	5.25	3.767*
TA8	4.89	5.50	10.817	4.55	5.33	5.652
TA9	5.00	5.89	45.472	4.78	5.34	4.128
TA10	7	7	0	7	7	0
TA11	5.00	5.74	11.372	4.77	5.42	1.536*
RL1	4.95	5.56	.276	4.61	5.31	1.313
RL2	4.68	5.39	3.934	4.86	5.37	2.422**
RL3	4.48	5.20	.142	4.46	5.21	1.023*
RL4	4.80	5.56	2.425**	4.82	5.52	2.770**
RL5	4.61	5.55	11.556	4.78	5.37	2.883*
RE1	4.80	5.52	2.741**	4.57	5.37	4.843
RE2	4.82	5.53	.506*	4.59	5.40	2.265**
RE3	4.63	5.34	4.754	4.34	5.25	.259
AS1	4.72	5.55	.108*	4.64	5.43	.072
AS2	5.07	5.67	.163	4.70	5.59	.373*
AS3	4.74	5.45	2.966**	4.48	5.26	.012
AS4	4.63	5.46	1.060*	4.30	5.32	.033
AS5	4.64	5.52	.525	4.53	5.43	.126
AS6	4.77	5.63	.765*	4.74	5.37	.923*
EM1	4.83	5.54	.455	4.62	5.27	.148
EM2	7	7	0	7	7	0
EM3	4.60	5.21	.361*	4.31	5.13	.233
EM4	4.18	4.79	.487	4.16	4.80	3.959*
EM5	4.25	4.86	.703	4.24	4.96	.010
EM6	4.55	5.21	5.653*	4.41	5.11	1.257**

\* Significant at 0.05% level, \*\* Significant at 0.01% level

In many cases we can see that there is statistically significant difference between the two locations of “all you can eat” restaurants involved in our study. If we examine expectation among Kaohsiung and Chiayi we can see that customers in Chiayi have much higher expectations than customers in Kaohsiung. The same situation is also noted for perceptions where customers in Chiayi have higher perceptions than customers in Kaohsiung. For three items we found that customers in Kaohsiung have higher scores for perceptions than expectations. Kaohsiung customer stated that in the “all you can eat” restaurant they visit that the “staff members were clean, neat and appropriately dressed” at a higher level than they expected. A similar situation was found to occur with the items “all you can eat restaurants quickly corrects anything that is wrong”, “all you can eat restaurants provides an accurate guest check” and “all you can eat restaurants serves your food exactly as you ordered”. In Chiayi the perceptions in three items are higher than expectations. Customers in Chiayi have a higher level of expectations for “all you can eat restaurants are dependable and consistent”, “they anticipates your individual needs and wants” and “have employees who are sympathetic and reassuring if something is wrong”. Based on the preceding remarks we accepted

Hypothesis 4 that states that different locations of “all you can eat restaurants” have different level of perceived service quality.

In Hypothesis 2 we propose that there are significant differences in perceived service quality between different demographics groups (gender, income, age etc.) in “all you can eat” restaurants in Taiwan. To examine this proposition more deeply, as we mentioned in the methodology section, we conducted a cluster analysis to see if there are specific demographics group and investigate if these groups do have significant differences in customers’ expectations and perceptions. This approach, where demographic segments are identified by cluster analysis can indicate what are the important factors that should be take care of by “all you can eat” restaurant managers. Cluster analysis was conducted first with all demographic characteristic of the respondents. In order to find out the number of clusters, a two-step cluster analysis was conducted with the help of SPSS 18.0. Then the most common non-hierarchical clustering technique (K-means Cluster) was used since the data set was greater than 200 cases ( $n > 200$ ) (Vareiro et al. 2012).

Groups related to the demographic characteristics are separated into two clusters; the first group consists of 117 customers (54.9%) and the second 96 customers (45.1%). Group 1 is entitled “Youngers” and consists mainly of young, single, females who have a university degree, and mainly come from Kaohsiung with an income level less than 20,000 thousand NTD per month. Group 2 consists mainly of females and they are older customers than in the previous group which is why we named this group “oldies”. Most of the customers in this group are married, have a university or high school degree, earn more than 20,000 NTW per month. In both groups most of the customers are students.

Based on these two groups we examined, using a series of t-tests, if there is statistical difference between the ratings for expectations and perceptions. There are differences between all the dimensions of service quality for the two demographic groups. For all service quality dimensions expectations and perceptions for the “oldies” group are higher than “youngers” groups. This is to be expected since it is natural for older customers with higher income to not only have higher expectations but also higher levels of perception of the service provided. Overall the above results makes it obvious that demographic characteristics are affecting customers’ expectations and perceptions, which is why Hypothesis 2 has been accepted.

To conclude, the results let us say that all hypotheses are accepted and that those results can be a very good indicator for “all you can eat” restaurants managers looking to manage or improve the services they provide that appeal to specific groups within the population.

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## 5 CONCLUSIONS

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In this study, the five dimensions of service quality (tangibles, reliability, responsiveness, assurance, and empathy) developed by Parasuraman et al. (1988) and adapted for use in this study were found to be highly significant in the customers’ assessment of service quality in

“all you can eat” restaurants. By administering a modified SERVQUAL questionnaire to customers, a restaurant operator can obtain the respondents’ opinion of how they view the restaurant’s quality, identify where problems are, and become motivated to resolve them. If restaurateurs, owners, and staff are educated about these dimensions, that together make up service quality, they may be able to gain a better focus when identifying their individual shortcomings and improve service in their restaurants.

The results of this research indicated that traditional service quality items were reasonable representations of consumer evaluations and that Cronbach’s alpha ( $< 0.70$ ) indicated a high level of reliability for the scales devised. The findings of this study indicated that the service quality factors had a positive impact on overall customer satisfaction and revisiting intention. These findings are in agreement with previous findings that customer satisfaction is influential in predicting repeat purchase behaviour. The results also showed that the “all you can eat” restaurant in Chiayi had a higher level for service related factors for “all you can eat” restaurants than Kaohsiung thus reflecting some regional differences in overall service quality. The effects of service quality indicate that “all you can eat” restaurants should measure customer’s behavioural intentions to gain valuable insights into why and how to invest in service quality improvements. From the perspective of service quality attributes and customers’ demographic profiles (gender, age, marital status, occupation, and per capita expenditures for each meal), there were significant differences in customers’ assessment of service quality attributes. These findings are in agreement with literature and the previous findings that there are significant differences in expectation and perception of service quality due to age, education, and income (Abel et al. 2007) and geographic location (Caroline Lego and Natalie 2009).

### *Managerial Implications*

This study also provides operational information to managers in Taiwan and offers insights concerning the differences in perception of service quality between customers in Chiayi and Kaohsiung. It identifies the level of scores for dimensions of service quality and the difference between expectations and performance (i.e. the service quality gap). Understanding demographic variables may help “all you can eat” restaurants managers in Taiwan better understand the perceptions of the attributes of service quality. This study also confirms findings demonstrated in previous published research; service quality influences both customer satisfaction and customer loyalty (word-of-mouth endorsements and repurchase intention) (Cheng et al. 2012, Hau-siu Chow et al. 2007, Kuo 2004, Lee 2009, Lewis and Booms 1983, Tsai et al. 2011).

### *Limitations and Future Research*

The present study has some limitations and the recognition of these should help refine future research efforts. First, the study is limited to the two locations studied and is not representative of all “all-you-can-eat” restaurants located in Taiwan. Second, the survey questionnaires were distributed to respondents during the winter season when outside dining is not as comfortable, thereby introducing a possibility that there might be differences at other times of the year. Third, a full description of the population statistics of “all you can eat”

restaurants is not available in Taiwan at the time of collecting the data which suggests that a comprehensive restaurant visitation study conducted at an overall industry level should be a future objective for hospitality researchers and hospitality academic and training institutions. Only then can future research examine and compare service quality in different types of restaurants such as fast food restaurants and fine dining restaurants throughout Taiwan. This is important as improved service may enable restaurants to attract new customers to new dining options and would help "all you can eat" businesses, in particular, to retain their current customers and grow their customer base.

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