



Instrument Development for Consumer Attitude toward the Vegetarian Restaurants

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ABSTRACT

In order to explore consumer's attitude toward vegetarian restaurant, the study developed an instrument based on the related former research. The questionnaire covers totally seven constructs, which including demographics, satisfaction, promotion, environment, foods, service, and repurchase intention. Then the study conducted a pilot study to confirm the reliability and validity of the instrument. The results indicated that the coefficients of reliability and validity are all above the suggested value, which proved that the instrument is good for further investigation.

Keywords: *vegetarian restaurant, satisfaction, consumer attitude*

1. INTRODUCTION

As vegetarian has been a quite phenomenon in society. People are interested in vegetarian, no matter for the sake of health maintain, ecological protection, or some other factors. Vegetarian restaurants have therefore been very popular in the society of Taiwan. In order to explore consumer attitude toward the restaurants and understand the service of practitioners, the study developed a scale to evaluate consumer attitude based on the related prior documents. It is anticipated that the scale is beneficial to understand the market situation and referential for the decision makers to make competitive strategies.

2. INSTRUMENT DEVELOPMENT

The questionnaire totally covers seven constructs, which including demographics, satisfaction (price; promotion; environment; foods; service), and repurchase intention. In the demographics construct, there are gender, age, occupation, monthly income, and education six sub-constructs. In the satisfaction construct, there are price, promotion, environment, foods, and service five sub-constructs. In addition, there is only one sub-construct in repurchase intention construct. The study employed Likert-type five-point scale to evaluate the participants' opinion, 5 stands for strongly agrees while 1 represents strongly disagree. That is, the higher the score, the more positive the participants' opinion toward the items. Please refer to the following texts for the operational definition of the instrument.

A. DEMOGRAPHICS CONSTRUCT:

The study revised the demographics construct gender, age, occupation, monthly income, and education based on the former research (Kotler, 1997). The detailed item of the construct is reported as Table 1.

Table 1 Demographics of the instrument

Sub-constructs	Items		
		1. Male	2. Female
Gender			
Age	1. Under 20	2.21~30	3.31~40
	4.41~50	5.51~60	6. 61 and above

Occupation	1.Agriculture, Forestry, Fisheries and Animal Husbandry 2. Industry 3.Business 4.Government employee 5.Service 6.Students 7.Homemaker 8. None 9.Others
Monthly income	1. Under NT\$20,000 2.NT\$20,001~NT\$30,000 3. NT\$30,001~\$40,000 4.NT\$ 40,001~NT\$50,000 5.Above NT\$50,000
Education	1. High school/Junior college 2. College/University 3. Master 4.Doctor 5.Others
Are you a long-term vegetarian?	1. Yes 2. No
Motivation of vegetarian	1.Religion 2.Health 3.Ecological protection 4.Votive 5.Others

B. SATISFACTION CONSTRUCT:

The five sub-constructs of the questionnaire are described as follows:

- a) Price: Price consciousness refers to the behaviour that consumer selects to buy or not to buy. It reflects the development about the consumer's attitude toward the price (Tsai, 2014). Researchers also reported that when consumers are making purchasing decisions, if they are employing price as the selection attribute, it would drive them to search the store merchants based on the price (Mazumdar and Monroe, 1992). In addition, Zeithaml (1988) classified customers' price perception into the following four categories: A) Price is low price, the sellers could various promotion strategy to decrease the price to increase customer perceptual value; B) Price is individual demand toward the product, it is equivalent to the economic "utility". Consumers would subjectively evaluate the useful or demand satisfaction from the transaction; C) Price is the quality gained from what you have paid. Customers regard that it is a trade-off concept about what you paid and what you gained; D) Price is what you received from what you have paid.

Therefore, Voss, Parasuraman & Grewal (1998) reported that price plays a critical role in consumer satisfaction. The price of a product would have impacts on consumer overall satisfaction. The study developed the construct based on the prior research (Chang, 2015; Kuo, 2014; Liao, 2013; Lichtenstein, Ridgway & Netemeyer, 1993; Lin, 2010), and revised to be three-itemed. Please refer to Table 2 for reference.

- b) Promotion: Kotler (2000) defined promotion as the combination of various incentive tools. It is one of the requirements of promotion. Promotion is usually short-term and with the aim of increasing consumer purchasing desire. The objective of promotion is mainly stimulating consumers to purchase (Aaker, 1996). Meanwhile, Shimp (1993) also reported that promotion is the way to reward and make consumers to purchase as well as encourage the sellers to promote goods actively. Kotler (2000) classified promotion into the following types: A) coupon; B) lottery drawing; C) free sample; D) free gifts; E) cash back; F) bonus packs; G) competition; H) product insurance; I) member set points discount; J) purchasing point display and exhibition; K) promotional campaign; L) joint and cross promotion

The study finally revised the construct to be a four-item construct based on the fore-stated reports, please refer to the following table for reference.

- c) Environment: Environment refers to the degree when consumers go to the store. No matter it is visible or invisible, the environment dose have impacts on consumer purchase intention (Kuo, 2014). The study revised the construct to be a seven-item construct based on the former research (Chang, 2015; Chiou, 2009; Kisang Ryu Dinescap, 2005; Kuo, 2014; Lin, 2010; Liao, 2013). Please refer to Table 1 for reference.

- d) Foods: Foods play the most important role in terms of a restaurant's operation. No matter how typical a restaurant is, eventually everything has to go back to the essence. If the foods are not on point, it will bring management problems in the future (Kuo, 2014). Customers usually evaluate the foods that provided by the restaurant based on their taste, material, and nutrition (Cardelloell, Bell and Kramer, 1996). Therefore, foods quality is the necessity to meet customer demands and expectation (Peri, 2006). The study revised the former research (Chang, 2015, Kuo, 2014; Liao, 2013; Lin 2010; Namkung & Jang, 2007;) and finally make the construct to be five- itemed. Please refer to the following table for reference.
- e) Service: Lovelock & Wright (2002) defined service as the action or perceived performance provided by one side to the other side. Though the process could be maintained on the solid products, service performance is basically invisible and usually could not be attributed to any factor of the production process. In other words, service is the key point to keep customer consuming behavior, satisfaction, and purchasing intention. Ostrom & Iacobucci (1995) reported that service is the relative judgment about satisfaction and dissatisfaction when consumers received quality and benefits through purchasing. In addition, the efforts that they paid when consuming as well as the relative cost they have paid for purchasing are also included. According to Ostrom & Iacobucci (1995), customer satisfaction response is the judgment of product/service features or product/service itself; it is a kind of pleasant behavior, which including higher or lower than satisfaction. It could be regarded as a satisfaction phenomenon about affection and psychology. The study developed the construct based on the prior research (Chang, 2015; Chiou, 2009; Kuo, 2014; Lin2010, Parasuraman, Zeithaml, & Berry, 1988) and finally made the construct to be four-itemed.

3. PILOT STUDY

The study totally sends 70 copies of questionnaire to the consumers of two famous vegetarian restaurants in Taiwan for pilot study. All of the participants aged above 18 years old, which insured that they have enough ability to sully understand the item wording. The investigation finally collected a total of 59 copies, which yielded the effective rate of return to be 84%. The objective of the pilot study is to confirm the consistency, stability, and reliability of the instrument. Sequentially, the study analyzed the results by utilizing SPSS. The results of the study are reported as follows:

A. RELIABILITY ANALYSIS

- a) Satisfaction construct: The Cronbach's Alpha value of the construct is 0.757, which implies that the reliability is high.
- b) Promotion construct: The Cronbach's Alpha value of the construct is 0.767, which reflects that reliability is satisfactory.
- c) Environmental construct: The Cronbach's Alpha value of the construct is 0.780, which explains that the reliability is good.
- d) Foods construct: The Cronbach's Alpha value of the construct is 0.720, which indicates that the reliability is good.
- e) Service construct: The Cronbach's Alpha value of the construct is 0.726, which describes that the reliability is high.
- f) Repurchase construct: The Cronbach's Alpha value of the construct is 0.606, which reports that the reliability is acceptable.

Based on the former research (Wortzel, 1979), if the Cronbach's alpha value is less than 0.35, the reliability is low; if the reliability falls between 0.35 and 0.70, it is acceptable; if the reliability is higher than 0.70, the reliability is high. The reliability of the study is 0.901, which is higher than 0.70 and represents that the reliability is quite good. The item reliability of the instrument is reported as follows:

Table 2 Reliability analysis of the questionnaire

Constructs	Items	Alpha value if item deleted	α value
Price	1. The high price would have impacts on my dining satisfaction.	0.659	0.757
	2. The rational price would increase my dining satisfaction.	0.642	
	3. The thing that the restaurant would not increase the price at their will would increase my dining satisfaction.	0.716	
Promotion	4. The restaurant discount card would increase my dining satisfaction.	0.723	0.767
	5. The free beverage of the restaurant would increase my dining satisfaction.	0.714	
	6. The free deserts of the restaurant would increase my dining satisfaction.	0.702	
	7. The full discount coupon of the restaurant would increase my dining satisfaction.	0.705	

Environment	8. The inconvenient parking would have impacts on my dining satisfaction.	0.780	0.780
	9. The convenient traffic would increase my dining satisfaction.	0.752	
	10. The clean and hygiene environment of the restaurant would increase my dining satisfaction.	0.778	
	11. The features of the internal decorate would increase my dining satisfaction.	0.745	
	12. The external architecture features of the restaurant would increase my dining satisfaction.	0.715	
	13. The wide space and smooth moving line of the restaurant would increase my dining satisfaction.	0.729	
	14. The tender lights and lighting of the restaurant would increase my dining satisfaction.	0.758	
Foods	15. The diversified foods of the restaurant would increase my dining satisfaction.	0.664	0.720
	16. The not-oily foods of the restaurant would increase my dining satisfaction.	0.688	
	17. The tasty foods of the restaurant would increase my dining satisfaction.	0.619	
	18. The food display way of the restaurant would increase my dining satisfaction.	0.695	
	19. The often-changed foods of the restaurant would increase my dining satisfaction.	0.692	
Service	20. The service team of the restaurant is pretty professional, they understand customers' demands.	.581	.726
	21. The service team of the restaurant is kind and polite, which would increase my dining satisfaction.	.627	
	22. The service personnel would notify me while they are serving, which made me with the feeling of being respected.	.723	
	23. The tidy and neat clothing and grooming of the service personnel would have impacts on my dining satisfaction.	.639	
Repurchase intention	24. The restaurant gave me good impression; I will recommend my friends to come to dining here.	.556	.606
	25. The taste of the restaurant is unique; I will come to dining again.	.511	
	26. The feeling after dining is good, which would increase my repurchase intention.	.601	
Total α value		0.901	

B. VALIDITY ANALYSIS

a) Factor loadings

Construct validity refers that the degree that the item measures the theoretical construct. There are two categories of construct validity: convergent validity and discriminate validity. To confirm if the scale is with construct validity, the higher the factor

loadings, the better the construct validity (the suggested value is 0.5). It is recommended that the factor loadings should all be higher than 0.5 (Hair, et al., 1998) .

The six constructs of the instrument all present factor loadings between 0.514 and 0.923, which is pretty good. All of the items were therefore kept for further investigation. Please refer to the following table for details.

Table 3 Factor loading results of the constructs

Constructs	Factor loadings
Price	0.923
Promotion	0.752
Environment	0.737
Foods	0.710
Service	0.611
Repurchase intention	0.514

b) Average variance extracted (AVE)

Average variance extracted is the value that a variable can measure the percentage of a latent variable; it is a good way to evaluate reliability as well as convergent validity. Researchers (Bagozzi and Yi , 1988; Fornell & Larcker, 1981) suggested that the average variance extracted should be higher than 0.5.

Based on the fore-stated data, the average variance extracted of the six constructs all fall between 0.500 and 0.641, which indicated that the convergent validity of the items are all good. Please refer to the following table for details.

Table 4 Average variance extracted results of the constructs

Constructs	AVE
Price	0.585
Promotion	0.560
Environment	0.537
Foods	0.500
Service	0.641
Repurchase intention	0.618

4. CONCLUSION

The results above indicated that the reliability and validity of the instrument is quite satisfied, which implies that the scale is ideal for the advanced investigation of the issue. In the era of competition, it is expected that the results would be beneficial for the related decision makers to make competitive strategy and practitioners to be survival forever.

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