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A Study on the Effect of Customer Equity on Behavioral Intentions: Moderating Effect of Restaurant Type

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KEYWORDS

Customer equity,
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Restaurant type.

ABSTRACT

The value of the customer's contribution essentially becomes the value of the dining industry in Korea. Therefore, an increase in the customer's equity maximizes the assets of the business. The purpose of this study intends to examine relationships between customer equity and behavioral intentions in restaurant industry and verify the moderating effect of restaurant type. This study takes an integrated perspective on prior literature on customer equity, as well as on aspects of the general restaurant industry related to customer equity, thereby defining the concept of customer equity in a way that reflects the characteristics of the dining industry. A total of 420 patrons in Korea participated. The results showed a positive relationship between brand equity, relationship equity and behavioral intentions. There were moderating effects related to restaurant type in the causal relationships between behavioral intentions. The components of customer equity and relationship equity in casual dining restaurants, and value equity and brand equity in quickservice restaurants significantly by customers differs according to restaurant type. Limitations and future research directions are also discussed.

1. INTRODUCTION

Customer relationship and loyalty is the most central issue in service marketing (Rust & Huang, 2011). Customer is considered a powerful means of establishing firm's assets (Gupta & Lehmann, 2005). Especially the competition in the market become more severe, as the value of the customer's contribution essentially becomes the value of the business (Reichheld, 2003). Based on this background, the concept of customer equity was raised; "the total of the discounted customer life-time values summed over all of the firm's customers" (Blattberg & Deighton, 1996). In other words, an increase in the

customer's equity maximizes the assets of the business (Vargo & Lush, 2004; Boulding et al., 2005; Gupta & Lehmann, 2005; Payne and Frow, 2005; Rogers, 2005; Vogel et al., 2008).

The customer equity framework suggest that three factors are of particular importance in building a loyal customer base, value equity, brand equity and relationship equity (Rust et al., 2004). Previous empirical studies also report positive link between these customer equity drivers and loyal intentions (Rust et al., 2004; Vogel et al., 2008)-though only in order to maximize the value customers.

This situation can be applied to foodservice industry. Eating-out market has significantly grown, it faced severe compe-

* This study is based on data and literature review of my doctoral thesis at the Kyunghee University.

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tition. Accordingly, it is critical for foodservice companies to not only attract customers but also maintain and activate existing customers to generate profits. Therefore, companies must recognize the importance of customer equity as financial assets for measuring and managing customers to maximize companies' tangible and intangible assets based on customer relationships. In recently, the core competency of restaurant businesses is to strengthen customer relationships and attract customer attention (Venkatesh et al., 2003), so that profits are generated by retaining and enticing existing customers (Reichheld, 2003). Customers who evaluate a product objectively and or subjectively, might not buy it again in the future for several reasons, including changes in individual situations and the effects of other companies' marketing efforts (Oliver, 1999). In recent years, customer lifetime value (CLV) and its implications have received increasing attention (Berger & Nasr 1998; Reinartz & Kumar, 2000). Consequently, "customer equity" has been one of the most discussed concepts in the foodservice marketing literature in recent years.

Also, restaurant type is another important consideration. A casual dining restaurant is higher quality of foods and people service than a quickservice restaurant. And quickservice restaurant is faster service and cheaper price than a casual dining restaurant (Anderson, 2003). So, there is a significant difference between them. The components of customer equity which include service quality, food quality, brand awareness, and trust have different levels of influence on the intention to revisit. Therefore, it is necessary to examine the moderating effects according to restaurant type.

Some studies have been conducted in the hospitality industry regarding the components of customer equity, such as value equity (Chen and Hu, 2010; Ryu et al., 2008; Ha & Jang, 2012), brand equity (Namkung & Jang, 2013; Tasci & Guillet, 2011) and relationship equity (Hu et al., 2010; Tanford, 2013). Nevertheless, these components have synthetically effected on the customer, research on integrated customer equity is rare in hospitality industry. Unlike previous studies related to customer equity, this study's largest differentiation factor is that it synthetically examines non-financial and financial data in reviewing significant customer equity according to restaurant type. Therefore, this study needed to examine the components of customer equity and the relationship between the intention to revisit in the restaurant market conditions in which customer importance has increased and customers are perceived as the customer equity.

This current research aimed to compose value equity, brand equity, and relationship equity of the components of customer equity as sub-factors appropriate for the foodservice industry field in order to establish a hypothesized relationship between each component and behavioral intentions. In addition, in order to examine the differences between components of customer equity and structural relations according to the service levels of foodservice companies, an analysis was conducted according to restaurant types. The specific objective of this study is to examine how customer equity in restaurants (i.e., value equity, brand equity, and relationship equity) affect behavioral intentions. As well as to investigate the moderating role of restaurant type (namely, casual dining restaurant and quickservice restaurant).

2. LITERATURE REVIEW

2.1. Customer Equity

Customer equity is defined as "the total of the discounted customer lifetime values summed over all of the firm's customers" (Blattberg & Deighton, 1996, p132). Thus, customers are seen as the intangible assets a firm should measure, maintain, and maximize just like other financial assets (Blattberg et al., 2001). In one of the major studies on customer equity, Rust et al. (2000) identified customer equity drivers' model as involving three constructs: value equity, brand equity, and relationship equity.

In the context of hospitality field, several researches have attempted to understand customer equity (Hyun, 2009; Kasavana & Knutson, 2000; Severt & Palakuthi, 2008; Wong, 2013; Wu & Li, 2011).

Kasavana and Knutson (2000) frequent diner programs allow restaurants to gain valuable marketing insights while rewarding customer loyalty. A logical extension of point-of-sale technology, frequent diner software is a major key to effectively reducing marketing costs at the same time it builds relationship marketing. Severt and Palakuthi (2008) found that to determine the value a convention center provides its customers, the brand the center offers, and the importance of the customer/business relationship. Value, brand, and relationship equity are components of customer equity. This study is the first study to identify the drivers and sub-drivers of customer equity in the convention industry. Meeting planners confirmed value equity as the most important in the customer to business exchange. Relationship equity followed with brand

equity as the least important of the three. Meeting planners identified the sub-drivers included: reputation and awareness of the convention center. Relationship equity sub-drivers included: the interactions, responsiveness, and special treatment received from the convention center personnel. Hyun (2009) found that to create and test a model of customer equity model for chain restaurant brand formation. It has long been acknowledged that managing and enhancing customer equity influences a company's shareholder value, which is a reflection of long-term financial performance. Wu and Li (2011) found that 688 effective questionnaires produces two main findings. Customer relationship marketing (CRM) has a positive influence on relationship quality has a positive influence CLV. Consumer groups with different hotel preferences reveal a partial interference effect on the relationships among CRM, relationship quality, and CLV. In other words, different hotel preferences create significant differences in the strength of partial relationship paths. Wong (2013) found that exploring customer equity and the role of service experience in the casino service encounter. This article adopts the customer equity framework to study how service experience shapes customer satisfaction and loyalty in the casino service encounter. An empirical model is developed to examine the direct and indirect roles of service experience equity, relationship equity, brand equity, and customer satisfaction on loyalty outcomes.

2.2. Drivers of Customer Equity and Behavioral Intentions

2.2.1. Value Equity

Value equity is "the customer's objective assessment of utility of brand based on perceptions of what is sacrificed for what is received" (Rust et al., 2000, p 59). It is based on the customer's perceived value of a product or service quality (Zeithaml, 1988). Three key elements that comprise value equity: quality, price, and convenience (Rust et al., 2001). Quality refers to consumers' perceptions of the overall excellence or the superiority of a product (Zeithaml, 1988). Price represents the monetary costs for purchasing a product and convenience relates to consumers' time and search costs (Rust et al., 2000). However, these key elements are inadequate for the restaurant industry. Previous researchers used multidimensional attributes; food quality, service, physical evidence, to measure restaurants' quality. (Namkung & Jang, 2008; Ryu and Han, 2010). In this context, Hyun (2009) suggest that value equity is composed of quality of food, service quality, price

of a restaurant, convenience of restaurant and environment. Thus, this study integrates four items to measure value equity: food quality, service quality, physical evidence, and price.

Previous studies have also provided empirical evidence with respect to the positive impact of value equity on consumers' behavioral intentions in various service settings, including retail stores (Sweeney et al., 1999), airlines (Sirdeshmukh et al., 2002). Several researchers have found that perceived value had a positive impact on behavioral intentions in the restaurant industry (Kwun & Oh, 2004; Ryu & Han, 2011; Tam, 2004).

Based on these results, this study assumes that value equity positively affects behavioral intention, as indicated in the following hypothesis:

Hypothesis 1: Value equity is positively related to behavioral intentions.

2.2.2. Brand Equity

Brand equity is defined as a set of symbols, that add to or subtract from the value provided by a product or service to a firm and/or to the firm's customers (Aaker, 1991, p5). Keller(1993, p2) stated that brand equity is "the differential effect of brand knowledge on customer response to the marketing of the brand."

Previous studies have demonstrated that the brand/store image has a significant impact on customers' perceived value, satisfaction, and revisit intention (Andreassen & Lindestad, 1998; Bloemer and Reyter, 1998; Cretu and Brodie, 2007; Lai et al., 2009; Patterson and Spreng, 1997; Ryu et al., 2008).

The relationships between brand equity and behavioral intentions were examined by Washburn and Plank (2002), who found significant correlations among the dimensions of brand equity and behavioral intentions. In addition, Kim et al. (2008), the authors discovered that hotels with a high level of brand awareness/association will be patronized by their loyal customers. In other words, hotel brand equity is positively related to behavioral intentions. Three dimensions of brand equity (brand awareness, image, and attitude) have a significant impact on behavioral intentions. Brand Equity levels are known to lead to higher consumer preferences and purchase intentions (Cobb-Walgren et al., 1995). Brand attitude should be an antecedent of customer satisfaction and behavioral intentions when it is treated as a pre-purchase construct. Empirical studies have also supported the impact of brand attitude on behavioral intentions (e.g. Hellier et al.,

2003; Suh & Yi, 2006). For example, Hellier et al. (2003) examined satisfaction, and behavioral intentions using data collected from 6,923 retail customers. According to the results of the structural equation modeling analysis, although customer satisfaction does not influence behavioral intentions directly, it does so indirectly via brand attitude. Suh and Yi (2006)'s study replicated and further extended this research by examining the relationships among customer satisfaction, attitude toward advertising, corporate image, brand attitudes, and loyalty in retail industry settings. The study analyzed data collected from 420 consumer panels and found that brand attitude fully mediates the effects of advertising attitude and corporate image on loyalty. It was concluded that brand attitude has a positive impact on customer behavioral intentions.

Hypothesis 2: Brand equity is positively related to behavioral intentions.

2.2.3. Relationship Equity

Relationship equity is defined as "the tendency of the customer to stick with the brand, greater than the customer's objective and subjective assessment" (Rust et al., 2000, 2004, p54). Compared to a relationship-quality theory, Relationship equity refer to a large extent to the relationship between the customers and the enterprise. For example, Rust et al. (2001) suggested that Relationship equity involves the elements that link a customer to a brand or a company, and Sawhney and Zabin (2002) proposed that relationship equity takes a broader view of relationships to include relationship with all key stakeholders with which the firm relates, Vogel et al. (2008) point out that relationship equity is commonly built around financial and recognition incentives. Therefore, relationship equity is a key determinant of customer equity in the sense that building a customer relationship increases the possibility that the customer will continue to choose the company, thereby increasing customer loyalty (Blattberg et al., 2001; Reichheld, 1996).

In conceptualizing relationship equity, consist of the trust (Dwyer et al., 1987; Crosby et al., 1990; Hennig-Thurau & Klee, 1997; Rust et al., 2004; Hyun, 2009), commitment (Hennig-Thurau and Klee, 1997; Hyun, 2009), loyalty program (Rust et al., 2004; Mascarenhas et al., 2006) and commitment (Morgan and Hunt, 1994; Goodmans & Dion, 2001; Leu & Hsieh, 2000).

In the context of restaurants, several researchers have attempted to understand relationship equity. Rust et al. (2004)

proposed that frequent buyer card (loyalty program), sense of community, and waitstaff's knowledge of customers' names, and the menu are key factors in evaluating relationship equity. Hyun (2009) found that relationship equity is formed by trust, affective commitment, satisfaction, and conflict. Thus, this study integrates three items to measure relationship equity: a loyalty program, trust, and an affective commitment. In previous research, these factors have been shown to relate to behavioral intentions.

Trust means that the customers believe sales personnel will provide them with long-term benefits and service (Crosby et al., 1990). Lee and Kim (1999) asserted that trust is a customer's confidence in the quality and reliability of the service provided by the organization. Loyalty programs are becoming increasingly important for service organizations to promote relationships and to achieve sustainable loyalty (Mascarenhas et al., 2006). Finally, commitment to the relationship on the part of both partners is a key factor in successful relationship quality in the long run, and helps enhance long-term benefits (Morgan & Hunt, 1994). Moorman et al. (1993) and Goodmans and Dion (2001) concluded that commitment occurs when one of the partners wants to continue and reinforce the relationship. Leu and Hsieh (2000) found that Relationship quality has a significant influence on customer usage quantity, loyalty, product purchase intentions and on word of mouth. Thus relationship quality is formed by commitment, trust, and satisfaction.

In the context of restaurants, several researchers have attempted to understand relationship equity. Hyun (2009) found that relationship equity in restaurant, examines items measuring four factors: trust, affective commitment, satisfaction, and conflict.

Based on previous studies on relationship equity, this study assumes that relationship equity will have a significant effect on behavioral intentions and following hypotheses are presented:

Hypothesis 3: Relationship equity is positively related to behavioral intentions.

2.3. Moderating Effect of Restaurant Type

Depending on the type of restaurant, there is a difference in the service level: quickservice service restaurant and casual dinning restaurant.

Jang and Mattila (2005) results were consistent across res-

restaurant type (quick-service versus casual dining). The findings of this study suggest that restaurant operators in the casual dining and fast-food segments should consider employing immediate, necessary, and monetary rewards as opposed to points-system, luxury, and non-monetary rewards. In terms of motivation to join loyalty reward programs, the study results indicate that casual dining patrons are looking for exciting and entertaining rewards in addition to mere cost savings.

Ha and Jang (2012) applied a means-end chain approach to identify underlying consumer values across three different restaurant segments. The participants responded to questions in a one-on-one interview procedure regarding attributes of restaurants, consequences, and values. The results suggested that attributes of quick-service restaurants were largely associated with convenience, success, and economic values; attributes of casual dining restaurants were related to emotional and belonging value; and attributes provided by fine dining restaurants were linked to emotion and quality life values.

A quick-service restaurant emphasizes prompt service and relatively low food costs, and customers expect to eat their food directly from disposable containers. Previous studies examining perceived quality or customer satisfaction indicated that customers visiting fast food restaurants considered several attributes important, such as low prices, friendliness of personnel, prompt service, convenience, business hours, take-out service, location, etc (Bonjanic, 2007; Gilbert et al., 2004; Knutson, 2000). These attributes of quick-service restaurants emphasize convenience and efficiency, which are the most prominent characteristics of the quick-service segment. Customer equity drivers are likely to have similar influences on purchase intention as well (Kim & Ko, 2011). Based on the above review, the following hypotheses are proposed:

Hypothesis 4: The relationship among customer equity drivers and behavioral intentions in restaurant type are different.

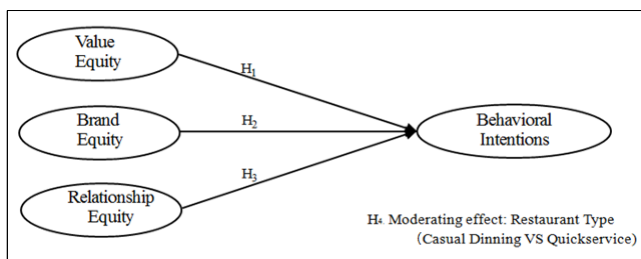


Fig. 1. A proposed model of value equity, brand equity, relationship equity, behavioral intentions.

3. METHODS

3.1. Sample and Data Collection

The data used for the current study were collected from customers in casual dining restaurants in Seoul, the capital of Korea, in 2012. In order to comply with our objectives and test our research hypotheses, we designed a study based on a personal survey of the casual dining restaurant and quick-service restaurant customers. Five ranked casual dining and quick-service restaurants were chosen in terms of sales in 2011. A pilot test using 50 customers was conducted to ensure the reliability of the scales, and several modifications were made based on feedback from the pilot test. The final questionnaire instrument included 31 items divided into four parts. The data collection was carried out in the period from 1 to 15 February 2012. With the cooperation of the managers of the casual dining restaurants involved, a questionnaire survey was conducted on customers waiting for their dessert. A total of 500 questionnaires were distributed to visitors of these casual dining and quick-service restaurants. We told the participants either verbally in groups, or in cover letters, that their responses were anonymous. We assured respondents there were no right or wrong answers to maximize the likelihood that we would receive honest answers and from them. After eliminating unusable responses among the completed questionnaires, 420 responses were coded for data analysis (82% response rate).

3.2. Instrument Development

Multiple items scales were used to measure each construct in this study. The survey instrument for this study was comprised of four parts. The first three parts pertained to Customer Equity (value equity, brand equity, relationship equity) of customers, behavioral intentions. (Likert 7-point scale was used to measure). Part four contained questions about participant demographic information (e.g., gender, age, education level and visiting frequency in a month).

3.3. Customer Equity

The definitions and measures for customer equity by Rust et al. (2004), Vogel et al. (2008) and Hyun (2009) were adopted in the instrument used for this study. This study examines three dimensions of value equity, brand equity, relationship equity. Value equity was measured using twelve items including: "Food presentations is attractive (food qua-

lity)", "Employees are always willing to help me (service quality)", "The price is reasonable (price)", "The environment is clean (physical evidence)" and so on. Brand Equity was measured seven items including: "I can recognize the restaurant brand among other competing brands (awareness)", "The restaurant brand has a different image from other restaurant brands (image)", "I have seen advertising about this restaurant (activity)" and so on. Relationship equity was measured using nine items including: "This restaurant provide loyalty program (loyalty program)", "I can trust the restaurant to treat me fairly (trust)", "I feel emotionally attached to this restaurant (affective)" on a 7-point scale (1:strongly disagree to 7: strongly agree) based on Rust et al. (2004), Vogel et al. (2008) and Hyun (2009).

3.4. Behavioral Intentions

Behavioral intentions were examined in terms of future return intentions, and word-of mouth(WOM) recommendations. Each behavioral intention was measured using four item (1:strongly disagree to 7: strongly agree), including "I will certainly visit this restaurant again" (revisit intention); "I will recommend this restaurant to friends and acquaintances" (WOM recommendation).

3.5. Data Analysis

Descriptive statistics were performed to profile the respondent demographic questions. Following the two-step approach recommended by Anderson and Gerbing (1988), a confirmatory factor analysis (CFA) with maximum likelihood was first performed to estimate the measurement model, which determined whether the manifest variables reflected the hypothesized latent variables. Once the measure was validated, a structural equation model(SEM) was utilized to test the validity of the proposed model and hypotheses.

4. RESULTS

4.1. Descriptive Statistics of The Sample

The profiles of the sample are presented in Table 1. Respondents were 33.3% male and 66.7% female. In terms of age, 42.4% of the respondents were 20~29 years old, 34.3% were 30~39, and 23.3% were 40 or older. Most respondents (82.6%) were highly educated, holding at least a university degree. The majority (61.9%) of respondents visited a restaurant 1~2

Table 1. General characteristics of samples

Characteristics		N	%
Gender	Male	140	33.3
	Female	280	66.7
Age	20~29	178	42.4
	30~39	144	34.3
	40~	98	23.3
Education level	College	63	15.0
	University	262	62.4
	Graduate Univ.	85	20.2
Average number of visit to a restaurant	3~ /1 week	125	29.8
	1~2 /1 week	135	32.1
	1~2 /1 month	112	26.7
	1~2 /2 month	48	11.4
Total		420	100

times per week.

4.2. Validity and Reliability Test

Following Anderson and Gerbing's (1988) two-step approach, a CFA was first undertaken to assess the fit of the five-factor model, which was comprised of customer satisfaction, loyalty, switching intent, variety-seeking orientation, and purchase decision involvement. Based on CFA results, we analyzed convergent validity, discriminant validity, and reliability of all the multi-items, following the guidelines in previous research (Nunnally, 1978; Fornell & Larcker, 1981; Anderson and Gerbing, 1988).

As shown in Table 2, the level for internal consistency in each construct was acceptable, with Cronbach's alpha estimates ranging from 0.835 to 0.911 (Nunnally, 1978). Composite reliabilities, ranging from 0.685 to 0.968, were considerable acceptable (Fornell & Lacker, 1981; Nunnally and Bernstein, 1994). In addition, all variance extracted estimates, ranging from 0.667 to 0.804 exceeded the recommended 0.50 threshold (Fornell & Larket, 1981).

Convergent validity was confirmed because all confirmatory factor loading exceeded 0.70 and all were significant at the alpha level of 0.001 (Anderson & Gerbing, 1988). Discriminant validity was assessed by comparing the average variance extracted (AVE) with the squared correlation between constructs (Fornell & Larcker, 1981). Discriminant validity was evi-

Table 2. Confirmatory factor analysis and reliability analysis results

	Standardized loadings	t-value			Item-to-total correlation	Cronbach α
	Total	CR	AVE	CCR		
Value equity						
<i>Food quality</i>	.862					.871
VE1	.819	-	.667	.962	1.000	
VE2	.827	18.923			.693	
VE3	.850	19.546			.699	
<i>Service quality</i>	.755					.880
VE4	.853	-	.711	.857	1.000	
VE5	.851	20.545			.723	
VE6	.827	19.821-			.716	
<i>Physical evidence</i>	.775					.888
VE7	.800	-	.739	.882	1.000	
VE8	.932	21.648			.751	
VE9	.843	19.567			.646	
<i>Price</i>	.616					.911
VE10	.869	-	.779	.888	1.000	
VE11	.933	25.760			.819	
VE12	.844	22.454			.714	
Brand equity						
<i>Brand awareness</i>	.794					.839
BE1	.854	-	.723	.685	1.000	
BE2	.847	17.287			.723	
<i>Brand attitude</i>	.828					.835
BE3	.827	-	.717	.722	1.000	
BE4	.867	13.162			.717	
<i>Brand image</i>	.611					.849
BE5	.874	-	.705	.918	1.000	
BE6	.915	19.877			.809	
BE7	.675	17.498			.555	
Relationship equity						
<i>Loyalty program</i>	.819					.870
RE1	.788	-	.711	.968	1.000	
RE2	.915	16.026			.743	
RE3	.801	15.638			.603	
<i>Trust</i>	.827					.869
RE4	.875	-	.703	.843	1.000	
RE5	.806	20.352			.703	
RE6	.793	19.838			.660	
<i>Commitment</i>	.850					.858
RE7	.787	-	.700	.798	1.000	
RE8	.816	17.848			.719	
RE9	.856	18.876			.645	
Behavioral intention						.901
BI1	.879	-	.804	.927	1.000	
BI2	.915	28.080			.838	
BI3	.894	26.668			.758	
BI4	.900	27.027			.774	

Goodness-of-fit statistics: $\chi^2=1,016.876$ ($df=448$); CMIN/ $df=2.270$; GFI=.863; NFI=.908; CFI=.946; TLI=.941; RMSEA=.055; IFI=.947.

Note: All correlations are significant at $p<.001$ (2-tailed).

Table 3. Correlation analysis

	1	2	3	4
1. Value equity	1			
2. Brand equity	.645**	1		
3. Relationship equity	.552**	.591**	1	
4. Behavioral intention	.710**	.699**	.618**	1

** $p < .001$.

dent because the variance extracted estimate, ranging from 0.667 to 0.884 exceeded all squared correlations for each pair of constructs, which ranged from 0.426 to 0.804. These results indicates that the five factors are distinct and unidimensional. Also, confirmatory measurement models demonstrated the soundness of measurement properties (GFI=.863; NFI=.908; CFI=.946; TLI=.941; RMSEA=.055; IFI=.947).

4.3. Structural Equation Modeling

Structural equation modeling (SEM) was conducted to test the validity of the proposed model and the hypotheses. The structural parameter estimates are presented in Table 4. The chi-square statistic indicated that the model did not fit the data well ($\chi^2=252.376$, $df=67$, $p<.001$). Given the sensitivity

Table 4. Structural equation modeling

	Standardized estimates	t-value	p-value
Value equity → Behavioral intentions	.185	1.773	.065
Brand equity → Behavioral intentions	.399	2.634**	.009
Relationship equity → Behavioral intentions	.332	2.375*	.016

Goodness-of-fit statistics: $\chi^2=252.3763(df=67)$; CMIN/ $df=3.767$; GFI=.918; NFI=.935; CFI=.951; RMSEA=.080; IFI=.951.

* $p < 0.05$, ** $p < 0.01$.

Table 5. Moderating effect of the restaurant types

	Casual dining restaurant		Quickservice restaurant		Baseline model χ^2 ($df=134$)	Nested model χ^2 ($df=135$)	$\Delta \chi^2$ ($df=1$)
	β	t-value	β	t-value			
VE→BI	.173	1.176	.304	2.127*		300.625	.819
BE→BI	-.047	-.215	.529	2.232*	299.806	306.978	7.172*
RE→BI	.780	3.169**	.108	.562		307.813	8.007*

Goodness-of-fit statistics : $\chi^2=299.806(df=134)$; CMIN/ $df=2.237$; GFI=.904; NFI=.922; CFI=.955; RMSEA=.054; IFI=.955.

* $p < 0.05$, ** $p < 0.01$.

of the chi-square statistics to sample size (Bentler and Bonett, 1980; Hair et al., 2006), other fit indexes were also examined. Other goodness-of-fit indexes proved that the structural model fit the data reasonably well (GFI=.918; NFI=.935; CFI=.951; RMSEA=.080). The model's fit, as indicated by these indexes, was deemed satisfactory; thus, it provided a good basis for testing the hypothesized paths. The parameter estimates of the structural model exhibited the direct effects of one construct on the other. A significant coefficient at a certain level of alpha revealed a significant causal relationship between latent constructs. To examine how value equity affects behavioral intentions, hypothesis 1 was verified and, as a result, not supported ($\beta=.185$; $t=1.7737$). Hypothesis 2, which predicted a positive relationship between brand equity and behavioral intentions, was supported ($\beta=.399$; $t=2.634$; $p>.01$). As predicted by Hypothesis 3, Relationship equity had significant positive effects on behavioral intentions ($\beta=.332$; $t=2.375$; $p<.05$). This result indicated that as customer equity drivers related to behavioral intentions.

To Verify the moderating effects that restaurant type has on the relationship between casual dining and quickservice restaurants, we set an alternative model that is in a nested relationship with the study model, and we investigated the Chi-square difference that considers the degree of freedom between the two models (Table 5). The goodness of fit of the study model was $\chi^2=299.806(df=134)$; CMIN/ $df=2.237$; GFI=.904; NFI=.922; CFI=.955; RMSEA=.054; IFI=.955.

As the analysis casual dining restaurants showed a significant casual relationship in relationship equity → behavioral intentions, a significant casual relationship in this path was not found in the quickservice restaurants ($\Delta \chi^2(df=1)$, 8.007). And quickservice restaurants showed a significant casual relationship in brand equity → behavioral intentions, a significant casual relationship in this path was not found in the casual dining restaurants ($\Delta \chi^2(df=1)$, 7.172). Thus, the results found

that restaurant type had significant moderating effect the relationship between casual dining and quickservice restaurants.

5. DISCUSSION AND CONCLUSIONS

This study attempted to look into the effect of value equity, brand equity, relationship equity on behavioral intentions. This study found that brand, relationship equity had a significant, positive effect on behavioral intentions. These findings support previous work (Bolton & Lemon, 1999; Gustafson et al., 2005; Reynolds and Beatty, 1999; Vogel et al., 2008; Hyun, 2009). In consequence, High brand value and relationship equity enhances behavioral intentions (Reynolds & Beatty, 1999; Vogel et al., 2008).

This study takes an integrated perspective on prior literature on customer equity, as well as on aspects of the general restaurant industry related to customer equity, thereby defining the concept of customer equity in a way that reflects the characteristics of the dining industry. Furthermore, this study primarily includes the customer as an important variable in assessing the profits of a business operating in the dining industry. Hence, this paper is a significant exploratory study on customer equity.

Furthermore, reorganizing the major elements primarily used in research on the foodservice industry into a sub-factor of customer equity, and then presents an integrated multi-dimensional model. This means that various elements that were considered as important in prior literature, such as service, quality, price, brand image, brand awareness, loyalty program, trust, and affective commitment, have all become the major elements of customer equity. However, unlike preceding research projects where studies were conducted on a one to one basis, such as value vs. satisfaction, or trust vs. relationship quality, as in Rust et al. (2000), this paper reclassifies the components of customer equity into the sub-factor of value equity, brand equity, and relationship equity, and conducts an integrated study.

The study showed that there are moderating effects of restaurant type on relationship between customer equity drivers and behavioral intention, and this present various marketing strategy for restaurant managers. The findings of this study showed that the components of customer equity and relationship equity in casual dining restaurants, and value equity and brand equity in quickservice restaurants signifi-

cantly influenced behavioral intentions, indicating that the equity perceived as valuable by customers differs according to restaurant type. Therefore, the basic elements of restaurants such as quality, physical environment, price, and brand image are more important for quickservice restaurants, while marketing activities that form relationships with customers are more important for casual dining restaurants.

Based on the results of this study, the following the managerial implication:

First, in today's fiercely competitive market, customer equity is the core competency for dining businesses to gain a competitive edge in the market. Although businesses are launching various marketing activities to maintain existing customer relationships and to attract new customers, such marketing activities are not yet proven in terms of their effectiveness in influencing customer revisit intention and customer equity development. Therefore, the development of customer equity through value equity, brand equity, and relationship equity would be important criteria for measuring the effectiveness of the marketing activity of a business. This study could prove its significance by demonstrating the development process of how marketing activities relating to value equity, brand equity, and relationship equity turn into business assets and how they are perceived by customers.

Second, this study could suggest guidelines for developing a significantly unique marketing strategy for the struggling casual dining restaurants and quickservice restaurants. The results from this research show that amongst value equity, brand equity, and relationship equity, each element differed in significance relative to others, depending on the type of restaurant. Relationship equity was the most effective element for casual dining restaurants, while brand equity was the most important element of customer equity for quickservice restaurants. Considering the fact that businesses cannot possibly maintain high levels of quality for each element of customer equity, the results indicate the areas where each business should focus on, as well as the steps through which a business could devise its marketing strategy to target specific areas.

Third, the study's results could facilitate in a realistic estimation of customer equity that could be used in marketing activities, using data-driven measures such as the number of customer visits and customer expenditure per visit. Unlike conventional studies that examine revisit intention through customer satisfaction surveys, this study could help in the

development of a precise marketing strategy, and help to predict the market more accurately through studying customer expenditure patterns based on actual data such as expenditure per visit. Therefore, in a world where the importance of a long-term customer relationship is continuously being emphasized, this study is significant in providing elementary information to enable the development of appropriate business strategies for the dining industry.

Despite its contributions and managerial implications, several limitations of this study need to be addressed. First, this study a problem about the representative characteristic may be doubted due to placing limit targeting the casual dining and quickservice restaurant customer, who dwell in Metropolitan Area, in sampling. In addition, since the casual dining and quickservice restaurants selected as study subjects in this study cannot be judged to be representative food service businesses, it can be said that there is also a problem of the representativeness of samples.

Second, this study viewed the effect of relationship equity on customer satisfaction and behavioral intentions. By the way, Relationship equity is component of customer equity (Rust et al., 2004). Therefore, future research should address other components of customer equity in restaurant, such as value equity, brand equity and the relative impact of customer satisfaction.

REFERENCES

- Aaker, D. A. (1991). *Managing brand equity*. New York: The Free Press.
- Anderson, J. (2003). Quick-casual flavors. Retrieved January 2, 2007, from <http://www.flavor-online.com/2003/>
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice : A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411-423.
- Andreassen, T. W., & Lindestad, B. (1998). Customer loyalty and complex services: the impact of corporate image on quality, customer satisfaction and loyalty for customers with varying degrees of service expertise. *International Journal of Service Industry Management*, 9(1), 7-23.
- Berger, P. D., & Nasr, B. N. (1998). Customer lifetime value: Marketing models and applications. *Journal of Interactive Marketing*, 12(1), 17-29.
- Blattberg, R. C., & Deighton, J. (1996). Manage marketing by the customer equity test. *Harvard Business Review*, 74(4), 136-144.
- Blattberg, R. C., Getz, G., & Jacquelyn, S. (2001). *Customer equity: Building and managing relationships as valuable assets*. Harvard Business School Press.
- Bloemer, J., & Ruyter, K. D. (1998). On the relationship between store image, store satisfaction and store loyalty. *European Journal of Marketing*, 32(5/6), 499-513.
- Bolton, R. N., & Lemon, K. N. (1999). A dynamic model of customer's usage of services: Usage as an antecedent and consequence of satisfaction. *Journal of Marketing Research*, 36(May), 171-186.
- Bonjanic, D. C. (2007). Customer profile of the "carryout" segment for restaurants. *International Journal of Contemporary Hospitality Management*, 19(1), 21-31.
- Bouling, W., Staelin, R., Ehret, M., & Johnston, W. J. (2005). A customer relationship management roadmap: What is known, potential pitfalls, and where to go. *Journal of Marketing*, 69(4), 155-166.
- Chen, P. T., & Hu, H. H. (2010). The effect of relational benefits on perceived relation to customer loyalty: An empirical study in australian coffee outlets. *International Journal of Hospitality Management*, 29(3), 405-412.
- Cobb-walgreen, C. J., Ruble, C. C., & Donthu, N. (1995). Brand equity, brand preference and purchase intent. *Journal of Advertising*, 24(3), 25-41.
- Cretu, A. E., & Brodie, R. J. (2007). The influence of brand image and company reputation where manufacturers market to small firms: A customer value perspective. *Industrial Marketing Management*, 36(2), 230-240.
- Crosby, L. A., Evans, K. R., & Cowles, D. (1990). Relationship quality in service selling: An interpersonal influence perspective. *Journal of Marketing*, 54(3), 68-81.
- Dwyer, F. R. (1997). Customer lifetime valuation to support marketing decision making. *Journal of Direct Marketing*, 11(4), 7-13.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- Gilbert, G. R., Veloutsou, C., Goode, M. M. H., & Moutinho, L. (2004). Measuring customer satisfaction in the fast food industry: A cross-national approach. *The Journal of Services Marketing*, 18(5), 371-383.
- Goodman, L. E., & Dion, P. A. (2001). The determinants of commitment in the distributor-manufacturer relationship. *Industrial Marketing Management*, 30(3), 287-300.

- Gupta S., & Lehmann D. R. (2005). *Managing customers as investments: the strategic value of customers in the long run*, Wharton School Publishing.
- Gustafsson, A., Johnson, M. D., & Roos, I. (2005). The effects of customer satisfaction, relationship commitment dimensions, and triggers on customer retention. *Journal of Marketing*, 69(4), 210-218.
- Ha, J., & Jang, S. S. (2012). The effects of dining atmospherics on behavioral intentions through quality perception. *Journal of Services Marketing*, 26(3), 204-215.
- Hellier, P. K. (2003). Customer repurchase intention: a general structural equation model. *European Journal of Marketing*, 37(11/12), 1762-1800.
- Hennig-Thurau, T., & Klee, A. (1997). The impact of customer satisfaction and relationship quality on customer retention: A critical reassessment and model development. *Psychology & Marketing*, 14(8), 737-764.
- Hu, H., Huang, C., & Chen, P. (2010). Do reward programs truly build loyalty for lodging industry. *International Journal of Hospitality Management*, 29(1), 128-135.
- Hyun, S. (2009). Creating a model of customer equity of chain restaurant brand formation. *International Journal of Hospitality Management*, 28(4), 529-539.
- Jang, D. J., & Mattila, A. S. (2005). An examination of restaurant loyalty programs: what kinds of rewards do customers prefer? *International Journal of Contemporary Hospitality Management*, 17(5), 402-408.
- Kasavana, M. L., & Knutson, B. J. (2000). Investing in customer equity: using technology to build your frequent diner programs. *Journal of Hospitality & Leisure*, 7(1), 63-74.
- Keller, K. L. (1993). Conceptualizing, measuring and managing customer-based brand equity. *Journal of Marketing*, 67 (January), 1-22.
- Kim, K. H., Kim, K. S., Kim, D. Y., Kim, J. H., & Kang, S. H. (2008). Brand equity in hospital marketing. *Journal of Business Research*, 61(1), 75-82.
- Kim, A. J., & Ko, E. (2011). Do social marketing activities enhance customer equity? An empirical study of luxury fashion brand. *Journal of Business Research*, 65(10), 1480-1486.
- Knutson, B. J. (2000). College students and fast food: How students perceive restaurant brands. *The Cornell Hotel and Restaurant Administration Quarterly*, 41(3), 68-74.
- Kwun, J. W., & Oh, H. (2004). Effect of brand, price, and risk on customers' value perceptions and behavioral intentions in the restaurant industry. *Journal of Hospitality and Leisure Marketing*, 11(1), 31-49.
- Lai, F., Griffin, M., & Babin, B. J. (2009). How quality, value, image, and satisfaction create loyalty at a Chinese telecom. *Journal of Business Research*, 62(10), 980-986.
- Leu, H. D., & Hsieh, I. W. (2000). Relationships among customer satisfaction, brand equity and customer lifetime value. *Chung Yuan Journal*, 28(2), 31-41.
- Liu, Y. A., Chen, R. F., Chen, H. B., & Wan, C. S. (2007). Customer relationship management in the travel web site. *Journal of Sport and Recreation Research*, 2(2), 1-25.
- Mascarenhas, O., Kesavan, R., & Bernacchi, M. (2006). Lasting customer loyalty: a total customer experience approach. *Journal of Consumer Marketing*, 23(7), 397-405.
- Moorman, C. R., Zaltman, G., & Deshpande, R. (1992). Relationships between providers and users of market research: the dynamics of trust within and between organizations. *Journal of Marketing Research*, 29(3), 314-328.
- Morgan, R. M., & Hunt, S. D. (1994). The commitment-trust theory relationship marketing. *Journal of Marketing*, 58 (July), 20-38.
- NamKung, Y., & Jang, S. (2008). Are highly satisfied restaurant customers really different? A quality perception perspective. *International Journal of Contemporary Hospitality Management*, 20(2), 142-155.
- Namkung, Y., & Jang, S. (2013). Effects of restaurant green practices on brand equity formation: do green practices really matter?. *International Journal of Hospitality Management*, 33(2013), 85-95.
- Nunnally, J. (1978). *Psychometric theory*. 2nd ed. McGraw-Hill. New York. NY.
- Oliver, R. L. (1999). Whence consumer loyalty?. *Journal of Marketing*, 63(Special Issue), 33-44.
- Patterson, P. G., & Spreng, R. A. (1997). Modeling the relationship between perceived value, satisfaction and repurchase intentions in a business-to-business, service context: An empirical examination. *International Journal of Service Industry Management*, 8(5), 414-434.
- Payne, A., & Frow, P. (2005). A strategic framework for customer relationship management. *Journal of Marketing*, 69 (Oct), 167-176.
- Reichheld, F. F. (1996). *The loyalty effect the hidden force behind growth, profit and lasting value*. Boston: Harvard Business School Press.
- Reichheld, F. F. (2003). The one number you need to grow.

- Harvard Business Review*, 81(12), 46-54.
- Reinartz, W. J., Thomas S., & Kumar, V. (2005). Balancing acquisition and retention resources to maximize customer profitability. *Journal of Marketing*, 69(1), 63-79.
- Reynolds, K. E., & Beatty, S. E. (1999). Customer benefits and company consequences of customer-salesperson relationship in retailing. *Journal of Retailing*, 75(1), 11-32.
- Rogers, M. (2005). Customer strategy: observations from the trenches. *Journal of Marketing*, 69(Oct), 262-263.
- Rust, R. T., Lemon, K. N., & Zeithaml, V. A. (2001). Driving customer equity: Linking customer lifetime value to strategic marketing decisions. Marketing Science Institute Working Paper, Report No. 01-108, Cambridge, MA.
- Rust, R. T., Lemon, K. N., & Narayandas, D. (2004). *Customer equity management*. Pearson Prentice Hall p.149.
- Rust, R. T., Zeithaml, V. A., & Lemon, K. N. (2000). *Driving customer equity: How customer lifetime value is reshaping corporate strategy*, Free Press, New York.
- Ryu, K., & Han, H. (2010). Influence of the quality of food, service, and physical environment on customer satisfaction in quick casual restaurants: Moderating role of perceived price. *Journal of Hospitality & Tourism Research*, 34(3), 310-329.
- Ryu, K., & Han, H. (2011). New or repeat customers: how does physical environment influence their restaurant experience? *International Journal of Hospitality Management*, 30(3), 599-611.
- Ryu, K. S., Han, H. S., & Kim, T. H. (2008). The relationship among overall quick-casual restaurant image, perceived value, customer satisfaction, and behavioral intentions. *International Journal of Hospitality Management*, 27(3), 459-469.
- Sawhney, M., & Zabin, J. (2002). Managing and measuring relational equity in the network economy. *Journal of Academy of Marketing Science*, 30(4), 313-332.
- Severt, K. S., & Palakuthi, R. (2008). Applying customer equity to the convention industry. *International Journal of Contemporary Hospitality Management*, 20(6), 631-646.
- Sirdeshmukh, D., Singh, J., & Sabol, B. (2002). Consumer trust value, and loyalty in relational exchanges. *Journal of Marketing*, 66(January), 15-37.
- Suh, J. C., & Yi, Y. (2006). When brand attitudes affect the customer satisfaction-loyalty relation: The moderating role of product involvement. *Journal of Consumer Psychology*, 16(2), 145-155.
- Sweeney, J. C., Soutar, G. N., & Johnson, L. W. (1999). The role of perceived risk in quality-value relationship: A study in retail environment. *Journal of Retailing*, 75(1), 77-105.
- Tam, J. M. (2004). Customer satisfaction, service quality and perceived value: An integrative model. *Journal of Marketing Management*, 20(7/8), 897-917.
- Tanford, S. (2013). The impact of tier level on attitudinal and behavioral loyalty of hotel reward program members. *International Journal of Hospitality Management*, 34, 285-294.
- Tasci, D. A., & Guillet, B. D. (2011). It affects, it affects not: a quasi-experiment on the transfer effect of co-branding on consumer-based brand equity of hospitality products. *International Journal of Hospitality Management*, 30(4), 774-782.
- Vargo, S. L., & Lusch, R. F. (2004). Evolving to a new dominant logic for marketing. *Journal of Marketing*, 68(1), 1-17.
- Venkatesh, S., Smith, A., & Rangaswamy, A. (2003). Customer satisfaction and loyalty in online and offline environments. *International Journal of Research in Marketing* 20(2), 153-175.
- Vogel, V., Evanschitzky, H., & Ramaseshan, B. (2008). Customer equity drivers and future sales. *Journal of Marketing*, 72(6), 98-108.
- Washburn, J. H., & Plank, R. E. (2002). Measuring brand equity: an evaluation of a consumer-based brand equity scale. *Journal of Marketing Theory and Practice*, 10(1), 46-62.
- Wong, I. K. A. (2013). Exploring customer equity and the role of service experience in the casino service encounter. *International Journal of Hospitality Management*, 32(March), 91-101.
- Wu, L., & Wang, C. (2012). Satisfaction and zone of tolerance: the moderating roles of elaboration and loyalty programs. *Managing Service Quality*, 22(1), 38-57.
- Wu, S., & Li, P. (2011). The relationships between CRM, RQ, and CLV based on different hotel preferences. *International Journal of Hospitality Management*, 30(2), 262-271.
- Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence. *Journal of Marketing*, 52(3), 2-22.

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