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The Relationship between Shopping Mall Attributes, Customer Satisfaction and Positive Word-Of-Mouth: China Visitors in Hong Kong

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I. Introduction

Along with economic development and the change in consumer culture, shopping malls in Hong Kong, as in western countries, have gradually replaced traditional department stores and retail outlets and have become the major venues for shoppers. The shopping mall industry has traditionally operated in a relatively stable environment in Hong Kong. However, since introduction of the individual visitor scheme (IVS) in 2003 by China's central government to boost mainland Chinese visitors' flow to Hong Kong, the industry is characterized by dramatically aggressive competition. The IVS visitors have direct effects on the Hong Kong economy as demand for products and services has increased sharply. The retail industry in general and shopping malls in particular have benefitted handsomely from the increased demand.

In the past, retail industry of Hong Kong used to focus on tourists from western countries and Japan. However, since 2003, almost all large shopping malls in Hong Kong have undergone a significant transformation and adjusted their operational strategies to cater to the considerably large and growing number of IVS visitors as it is commonly known that IVS visitors are now the main source of revenue for shopping malls.

In spite of the rapid development of the shopping mall industry in Hong Kong and the importance of IVS visitors' positive word-of-mouth recommendation to the shopping mall industry, perceptions of IVS visitors have not been adequately studied numerically. Specifically, the aim of this study is to:

1. examine the influence of five shopping mall attributes on customer satisfaction; and
2. examine the influence of customer satisfaction on positive word-of-mouth recommendation.

II. Research Model and Hypotheses

Many researchers have acknowledged the importance of positive word-of-mouth recommendation concept in marketing theory and practice and have made attempts to investigate antecedents of customer satisfaction and relationships between customer satisfaction and positive word-of-mouth recommendation. However, the complex interrelationships among these constructs are still not well understood (Yang and Peterson, 2004; Walsh et al., 2008). Based on a review of literature (Brown et al., 1993; Chebat et al., 2009; Keng et al., 2007; Leung et al., 2005; Zafar, 2007), a research model which links shopping mall attributes, customer satisfaction and positive word-of-mouth recommendation is developed (Figure 1).

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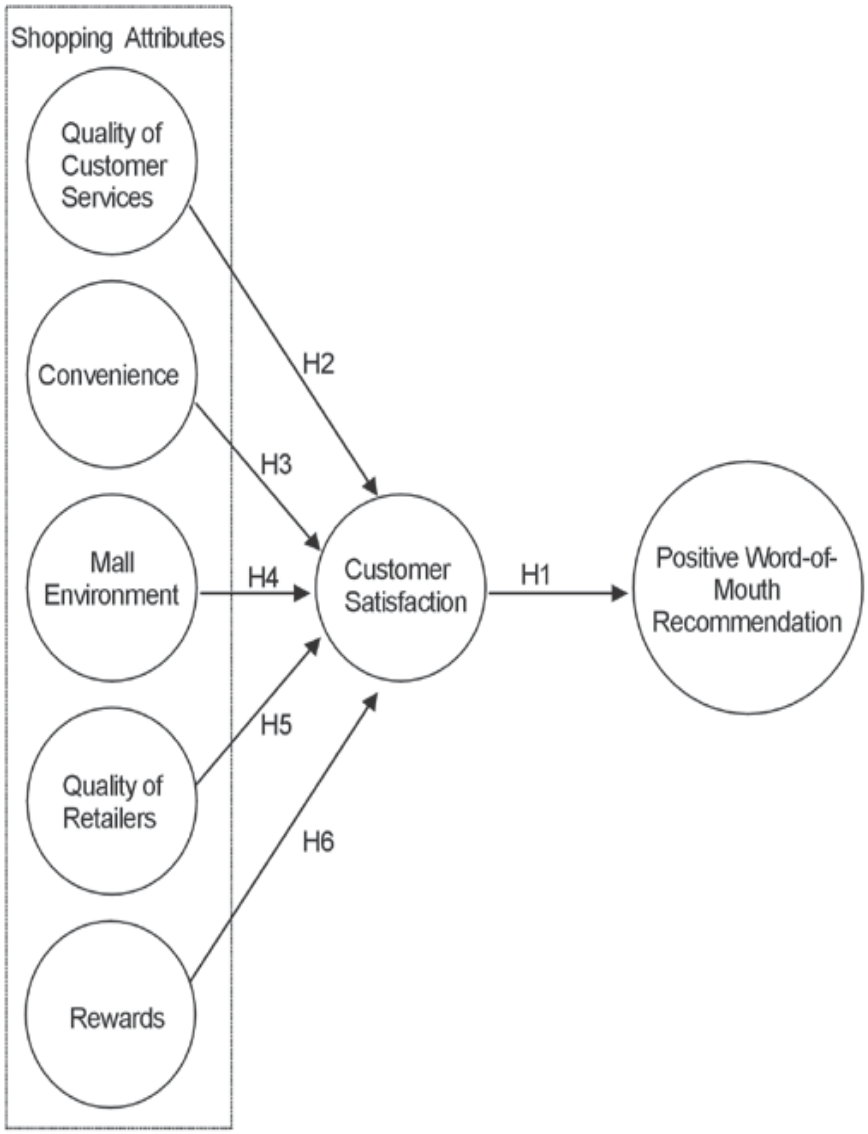

Figure 1: Research Model

a) Customer satisfaction as a driver of positive word-of-mouth recommendation

Cronin et al. (2000) described customer satisfaction to be an evaluation of an emotion, reflecting the degree to which the customer believes the service provider evokes positive feelings. Numerous studies in the service sector have hypothesized and empirically validated the link between satisfaction and behavioral intentions such as customer retention and word-of-mouth (Anderson and Sullivan, 1993; Bansal and Taylor, 1999; Cronin et al., 2000; Rucci et al., 1998). Indeed, this link is fundamental to the proposition that satisfying customer needs and wants is the key to ensuring repeat purchases (Kotler et al., 2002). Using the aforementioned literature, the first hypothesis was formulated:

H1: The higher the level of customer satisfaction, the higher the level of positive word-of-mouth recommendation.

b) Quality of customer services as a driver of customer satisfaction

Research supports a positive relationship between service quality and customer satisfaction as better service implies better performance, an increased likelihood of expectations being fulfilled and correspondingly higher levels of satisfaction (Caruana et al., 2000). Over the past two decades, service quality has been regarded as one of main factors affecting customer satisfaction and customer loyalty. Empirical findings support the view that service quality is one of the primary determinants of customer satisfaction (Anderson and Sullivan, 1993; Anderson et al., 1994; Athanassopoulos, 2000; Cronin et al., 2000; Fornell et al., 1996; Parasuraman et al., 1994). Using the aforementioned literature, the second hypothesis was formulated:

H2: The higher the level of quality of customer services, the higher the level of customer satisfaction.

c) Convenience as a driver of customer satisfaction

Consumer markets have become more sharply segmented than ever before, requiring retail marketers to appeal to distinct target groups (Chebat at el., 2009). To gain the loyalty of shoppers, malls must appeal to consumers' social motives and experiential needs, not simply provide access to desired goods (Keng et al., 2007). In response to changing consumer needs, malls have grown larger and the convenience of one-stop shopping has expanded to include service outlets and entertainment providers (Yiu and Yu, 2006). Shopping malls today offer fast-food courts, restaurants, video arcades, movie theaters, beauty salons, dental clinics and more. Malls have also become important meeting places, especially for young people and seniors (Wagner, 2007). Using the aforementioned literature, the third hypothesis was formulated:

H3: The higher the level of convenience, the higher the level of customer satisfaction.

d) Mall environment as a driver of customer satisfaction

Ambient features may be an extension of product display and are chosen to modify buyers' knowledge and mood, thereby affecting behaviors, and to enhance the mall or store image to differentiate it from others (Yiu and Yu, 2006). Wakefield and Baker (1998) conducted a study to indicate that architectural design had the strongest positive influence on excitement generated by a mall, while interior decoration had the strongest positive effect on the desire to stay. These studies revealed that music and layout were positively related to the excitement a mall generates and the desire to stay. Using the aforementioned literature, the fourth hypothesis was formulated:

H4: The better the level of mall environment, the higher the level of customer satisfaction.

e) Quality of retailers as a driver of customer satisfaction

The importance of quality of retailers in customers' purchasing decision has been recognized in the case of durable goods (Brucks at el., 2000). Parasuraman et al. (1994) and Cronin et al. (2000) suggested that future research should include some consideration of quality of retailers, thereby emphasizing the significance of quality of retailers in consumers' decision-making process. Using the aforementioned literature, the fifth hypothesis was formulated:

H5: The higher the level of quality of retailers, the higher the level of customer satisfaction.

f) Reward as a driver of customer satisfaction

Looking more specifically at different components of loyalty programmes and their influence on repeat purchases, Kendrick (1998) found that consumers who received benefits such as gifts or discounts were more loyal than those who were given only a complimentary note. In addition, consumers who received branded gifts were found to be more loyal than those receiving a discount of equivalent value. Wirtz and Chew (2002) found that offering incentives such as discounts, free items, coupons, gift vouchers and accumulation of reward points to satisfied consumers increased their likelihood of engaging in word-of-mouth behavior. Bridson et al. (2008) assessed the relationship between loyalty programmes' attributes, satisfaction and loyalty. Their research results indicated that response to reward attributes is positive and constitutes a driver of customer satisfaction. Using the aforementioned literature, the last hypothesis was formulated:

H6: The higher the level of reward, the higher the level of customer satisfaction.

III. Research Methodology

a) Questionnaire design

A questionnaire survey was employed for data collection. Questions were first written in English. Chinese version of the questionnaire was then developed by applying Brislin's (1980) recommendation to minimize the problem of lack of equivalence between English and Chinese versions. Specifically, English version of the questionnaire was first translated into Chinese by a Chinese translator and was then translated back into English by another Chinese translator to check the translation's accuracy. When a major inconsistency was observed in the translation, differences were reconciled by discussions between the two translators. The precise wording of the questionnaire was based on the original English language version and was adjusted such that it was smooth and natural sounding, as well as equivalent, in both languages.

The final version of the questionnaire was pilot tested to ensure appropriateness of questions' wording, format and structure. The pilot study was undertaken in two stages. In stage one, both initial English and Chinese versions of the questionnaires were constructed on the basis of discussions with shopping mall management experts to develop an understanding of shopping mall attributes, customer satisfaction and positive word-of-mouth recommendation in the context of shopping behavioral intention. The experts included two academic lecturers in Marketing Strategy and Property Management disciplines, four postgraduates in Marketing and Property Management, two qualified property managers and two qualified marketing managers. The question-by-question approach was adopted in the pilot study. Each participant was asked to interpret the questions, to ensure that the measure of the question was comprehended in a manner conducive to reliable responses. They were encouraged to comment on the questionnaire critically and to spell out any problems they could identify in the questions, as if they were the respondents. If problem areas were detected, all participants were encouraged to suggest

alternatives for handling the identified problems. On the basis of their comments, some questions were rephrased.

In stage two, a pilot test was undertaken among IVS visitors. The target respondents were required to have shopping experience in Hong Kong. A total of fifty respondents were recruited by the convenience sampling method at tourist spots in Hong Kong. The respondents were invited to complete the questionnaire and to comment on wordings of questionnaire items. The pilot test brought to light some of the problems in comprehension and completion of survey questions. Recommendations were obtained to solve the problems identified by the pilot test. As a result, fifteen items were retained for measurement of influence of shopping mall attributes on customer satisfaction, three items were retained for the measure of customer satisfaction with mall shopping in Hong Kong, three items were retained for the measure of the extent of customer satisfaction required to encourage positive word-of-mouth recommendation, and three items were retained for the measure of demographics.

b) Measures

This research adapted measures of shopping mall attributes and the relationship between customer satisfaction and positive word-of-mouth recommendation that had been used successfully in the past (Babin et al., 2005; Bridson et al., 2008; Chebat et al., 2009; Zafar et al., 2007). Generally each construct was measured using a three-item, seven point Likert-type scale with anchors "1 = strongly disagree" and "7 = strongly agree". Mean value of score of each construct was calculated. Table 1 summarizes items used for measuring the constructs:

Table 1: Summary of Measures of Constructs

Construct	Items	Adapted from
Convenience (C)	C1: This shopping mall is easy to reach.	Chebat et al. (2009)
	C2: This shopping mall remains open for long hours.	Zafar et al. (2007)
	C3: This shopping mall is a one-stop shopping place where I can buy all my needs.	
Quality of Retailers (QR)	QR1: Retailers at this shopping mall sell high quality products.	Chebat et al. (2009)
	QR2: Retailers at this shopping mall provide me good after sales service.	
	QR3: Retailers at this shopping mall are reputable.	
Quality of Customer Service (QCS)	QCS1: This shopping mall provides me good customer services.	Chebat et al. (2009)
	QCS2: This shopping mall provides me good information.	
	QCS3: Customer service staff of this shopping mall is responsive and friendly.	Zafar et al. (2007)
Mall Environment (ME)	ME1: This shopping mall's environment is spacious.	Zafar et al. (2007)
	ME2: This shopping mall is trendy and has good interior decoration.	
	ME3: This shopping mall is tidy and clean.	
Rewards (R)	R1: This shopping mall provides me discounts.	Bridson et al. (2008)
	R2: This shopping mall provides me gift vouchers.	
	R3: This shopping mall provides me cash coupons.	
Customer Satisfaction (CS)	CS1: I am satisfied with my decision to shop at this mall.	Babin et al. (2005)
	CS2: I feel very satisfied after shopping at this mall.	
	CS3: I am 100% satisfied with shopping at this mall.	

Positive Word-of-Mouth Recommendation (WOM)	WOM1: I will say positive things about this shopping mall to other people.	Babin et al. (2005)
	WOM2: I will recommend this shopping mall to someone who seeks my advice.	
	WOM3: I will encourage friends and relatives to shop at this mall.	

IV. Results

Participation in the survey was voluntary. The mass survey was conducted from 16 March 2010 to 30 March 2010. The data of this research was collected by interviewing IVS visitors at three popular shopping malls. After one month, 750 valid responses were collected successfully. The number of responses was considered sufficient for data analysis. As Alreck and Settle (1985) stated, for populations of 10,000 and more, most experienced researchers would probably consider a sample size between 200 and 1,000 respondents. Overall, 43.3% of respondents were male and 56.7% were female. Most respondents (60.2%) were aged 26-59 years. Also, 87.1% of respondents had income above RMB 5000 per month.

a) Construct validity and reliability tests

In order to ensure the adapted seven constructs of word-of-mouth, customer satisfaction, quality of customer services, convenience, mall environment, quality of retailers and rewards validated in previous research were also valid in this research, a two stages factor analysis, factor extraction and factor rotation, was performed, as suggested by Green et al. (2000). The primary objective of the first stage was to make an initial decision about the number of factors underlying a set of measured variables. The goal of the second stage was twofold: (1) to statistically manipulate (i.e. to rotate factors) the results to make the factors more interpretable; and (2) to make final decisions about the number of the underlying factors.

i. *Factor Extraction*

As part of the first decision to determine the number of extracted factors, eigenvalues based on the principal components analysis was used to assess absolute and relative magnitudes. Table 2 lists eigenvalues for Components 1 to 21. The total amount of variance of variables in an analysis is equal to the number of variables (in the research, 21). The extracted factors (or components because principal components analysis was used as the extraction method) account for variance among these variables. An eigenvalue is the amount of variance of a variable accounted for by a factor. An eigenvalue for a factor should be greater than or equal to zero and cannot exceed the total variance (in this research, 21). Percent variance of variables accounted for by the factor is equal to the eigenvalue divided by the total amount of variance of variables times 100. For example, the eigenvalue associated with the first factor is 3.579 and percent total variance accounted for by the first factor is (3.579 / 21) x 100 = 17.045 (as shown in the first row in Table 2).

Eigenvalues are helpful in deciding how many factors should be used in the analysis. Many criteria have been proposed in the literature for deciding how many factors to extract, based on values greater than 1. However, it may not always yield accurate results (Green et al., 2000). Another criteria is to examine the plot of the eigenvalues, also known as the scree test, and to retain all factors with eigenvalues in the sharp descent part of the plot before the eigenvalues start to level off. This criterion yields accurate results more often than the eigenvalue-greater-than-1 criterion. Based on the scree plot (Figure 2), it can be concluded that seven factors should be rotated.

Table 2 : Initial Statistics from Factor Extraction Procedure
Extraction Method: Principal Components Analysis

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.579	17.045	17.045	3.579	17.045	17.045
2	2.108	10.038	27.082	2.108	10.038	27.082
3	2.045	9.737	36.819	2.045	9.737	36.819
4	1.914	9.116	45.935	1.914	9.116	45.935
5	1.766	8.411	54.346	1.766	8.411	54.346
6	1.639	7.804	62.149	1.639	7.804	62.149
7	1.286	6.125	68.274	1.286	6.125	68.274
8	0.767	3.650	71.925			
9	0.707	3.367	75.292			
10	0.637	3.032	78.323			
11	0.619	2.949	81.273			
12	0.583	2.777	84.049			
13	0.529	2.518	86.567			
14	0.487	2.318	88.885			
15	0.455	2.165	91.050			
16	0.372	1.773	92.823			
17	0.347	1.654	94.477			
18	0.334	1.590	96.067			
19	0.300	1.429	97.496			
20	0.284	1.350	98.846			
21	0.242	1.154	100.000			

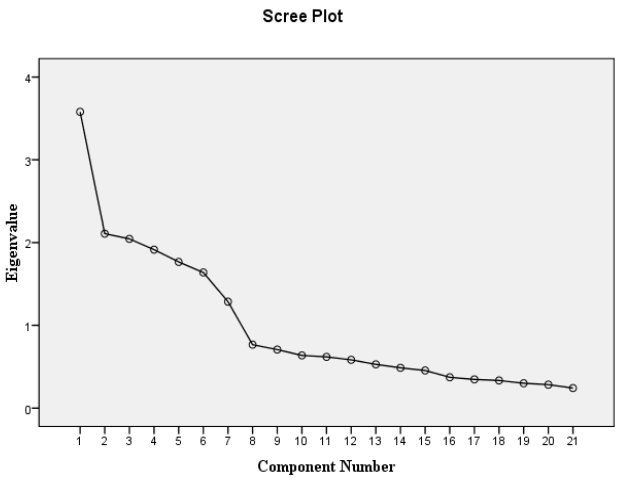

Figure 2 : Scree Plot of the Eigenvalues
Extraction Method: Principal Components Analysis

ii. *Factor Rotation*

The next stage of factor analysis is to rotate a seven-factor solution. The rotated factor matrix is shown in Table 3. This matrix shows factor loadings, which are the correlations between each variable and the factors for a varimax rotation. The criteria used to identify and interpret factors were: each item should load 0.50 or greater on one factor and 0.35 or below on the other two factors (Igbaria et al., 1995). The factors are interpreted by naming them based on the size of the loadings. As shown in Table 3, the three variables (ME1, ME2 and ME3) are associated with the first factor. The three variables (QR1, QR2, QR3) are related strongest to the second factor. The three variables (C1, C2, C3) are related strongest to the third factor. The three variables (QCS1, QCS2, QCS3) are related strongest to the fourth factor. The three variables (CS1, CS2, CS3) are related strongest to the fifth factor. The three variables (R1, R2, R3) are related strongest to the sixth factor. Finally, the remaining three factors (WOM1 and WOM2 and WOM3) are associated with the seventh factor. On the basis of the content of these seven sets of factors, the first factor was named as mall environment, the second factor was named as quality of retailers, the third factor was named as convenience, the fourth factor was named as quality of customer services, the fifth factor was named as customer satisfaction, the sixth factor was named as rewards, and the seventh factor was named as positive word-of-mouth.

These results confirmed that the seven constructs, validated in previous studies (Babin et al., 2005; Bridson et al., 2008; Chebat et al., 2009; Zafar et al., 2007), are uni-dimensional, factually distinct and applicable in the shopping mall context in Hong Kong. The proportion of variance accounted for by each of the rotated factors is frequently reported in literature to indicate the relative importance of each factor. As reported in Table 3, the first, second, third, fourth, fifth, sixth and seventh factors accounted for 8.791%, 8.565%,

8.170%, 7.619%, 7.593%, 7.437% and 7.234%, respectively, of variance of the twenty one variables. In total, the seven factors accounted for 55.408% of the variance. This percentage does not match the percentage based on the initial eigenvalues because the initial extraction was based on principal components and not maximum likelihood extraction method.

iii. *Reliability Test*

Examining the coefficient alpha listed in the final column, estimates for the seven scales are from 0.706 to 0.810. Since the coefficient alpha of each scale is above the acceptable value of 0.700 (Nunnally, 1978), all seven scales are considered reliable.

Table 3 : The Rotated Factor Matrix from the Factor Analysis

Factor/Item Label	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Rotation Sums of Squared Loadings			Coefficient Alpha
								Eigen Value	% of Variance	Cumulative %	
Factor 1											
ME2	0.915	0.041	0.062	0.009	0.084	0.004	0.058	1.846	8.791	8.791	0.810
ME3	0.780	0.035	0.046	0.031	0.086	0.020	0.071				
ME1	0.589	0.041	0.032	0.014	0.055	0.017	0.047				
Factor 2											
QR2	0.028	0.912	0.042	0.012	0.057	0.039	0.064	1.799	8.565	17.356	0.799
QR3	0.081	0.741	0.022	-0.036	0.071	0.051	0.034				
QR1	0.014	0.602	0.070	-0.018	0.090	0.106	0.021				
Factor 3											
C2	0.075	0.037	0.906	0.004	0.094	0.029	0.029	1.716	8.170	25.526	0.778
C3	0.085	0.044	0.696	-0.008	0.101	0.049	0.000				
C1	-0.012	0.051	0.595	0.070	0.081	0.059	-0.008				
Factor 4											
QCS2	-0.014	0.000	0.038	0.973	0.050	0.019	-0.012	1.600	7.619	33.144	0.717
QCS1	0.025	-0.023	0.000	0.556	0.125	0.042	-0.009				
QCS3	0.025	-0.013	0.036	0.544	0.071	-0.012	0.022				
Factor 5											
CS2	0.075	0.121	0.087	0.098	0.866	0.076	0.090	1.594	7.593	40.737	0.760
CS1	0.051	0.059	0.118	0.104	0.622	0.177	0.099				
CS3	0.117	0.072	0.106	0.122	0.577	0.001	0.130				
Factor 6											
R2	0.011	0.070	0.044	0.003	0.067	0.870	0.128	1.562	7.437	48.174	0.735
R1	-0.006	0.095	0.035	0.046	0.106	0.623	-0.019				
R3	0.031	0.029	0.054	-0.003	0.032	0.589	0.055				
Factor 7											
WOM2	0.029	0.022	0.040	0.023	0.106	0.060	0.933	1.519	7.234	55.408	0.706
WOM1	0.045	0.003	0.014	0.020	0.113	0.047	0.554				
WOM3	0.069	0.067	-0.026	-0.025	0.043	0.034	0.520				

b) Assessment of the Fit of the Proposed Research Model

The research model depicted in Figure 1 was analysed using Structural Equation Modeling (SEM), a second-generation data analysis technique with substantial advantages over first-generation techniques such as principal components analysis, factor analysis, discriminant analysis or multiple regression (Chin, 1998). This technique allows modeling of relationships among multiple independent and dependent constructs (Gefen et al., 2000). Structural Equation Modeling using the maximum likelihood estimation method was applied to the sample data through a software package called AMOS (version 18.0). William (1992) proposed general guidelines for interpreting the 'significance' of correlation: < 0.20 slight correlation, almost no relationship; 0.20-0.40 low correlation, small relationship; 0.40-0.70 moderate correlation, substantial relationship; 0.70-0.90 high correlation, marked relationship; and > 0.90 very high correlation, solid relationship. The research model was tested with the entire sample for model fit and parameter estimates. The output of AMOS version 18.0 produces multiple fit indices from various families. Ideally, every fit index should be used when estimating how well the model fits the data set. Nevertheless, many of these indices are either sample size dependent, or influenced by the complexity of the model (Anandarajan, 2001).

Among fit indices produced by the AMOS programme is the Chi-square statistic, which is the test of absolute fit of the model. The Chi-square statistic and the degrees of freedom; the difference between the number of distinct parameters to be estimated are usually used as tests of absolute fit. However, Kline (1998) and D'Amico (2001) have cautioned that the Chi-square statistic is too sensitive to the size of the sample for it to be interpreted as a significance test. These authors have argued that the Chi-square statistic usually becomes significant even though the differences between observed and model implied covariances are slight. Moreover, Kline (1998) has argued that the Chi-square statistic has no upper bound, making interpretation of its values difficult. He has argued for use of the ratio of the Chi-square and the degrees of freedom (DF); a ratio of less than 3 is desirable. However, the statistic is likewise vulnerable to the effects of sample size. The Table 4 shows the Chi-square statistic and the degrees of freedom for the research model in this study are 324.777 and 183 respectively, and a relative chi-square value of 1.775 ($p < 0.01$).

Given this uncertainty and unreliability of the Chi-square statistic in large sample sizes such as the ones employed in this study, many researchers have turned to other fit indices that are relatively less sensitive to sample size. These are also known as indices of relative fit and are presented in Table 3. Not all indices of fit are commonly used and, therefore, those chosen for consideration in this study are the Goodness of Fit Index (GFI), the Adjusted Goodness of Fit Index (AGFI), the Comparative Fit Index (CFI), the Tucker-Lewis index (TLI) and the Root Mean Square Error of Approximation (RMSEA). Overall model fit measures are reported in Table 4; except the low p value, all goodness of fit indices are well above the desired levels.

The AMOS programme computes the Goodness of Fit Index (GFI) and the Adjusted Goodness of Fit Index (AGFI). Values of these indices range from 0 (which indicates poor fit) to 1 (indicating perfect fit) (Schumacker and Lomax, 1996; Sobolewski and Doran, 1996). The GFI is analogous to a squared correlation in so far as it indicates the proportion of the observed covariances explained by the model-implied covariances, while the AGFI, calculated from the GFI, includes an adjustment for model complexity (Sobolewski and Doran, 1996; Kline, 1998). The GFI is a relative measure of how well the data fit the model (Sobolewski and Doran, 1996). Recommended values should be greater than 0.90. Table 3 shows that values for the GFI and AGFI in the default model in this study are 0.961 and 0.951, respectively, indicating that there is model-data correspondence.

CFI is an index proposed by Bentler (1990). CFI values close to 1 indicate a very good fit. The Comparative Fit Index (CFI) is an incremental fit index which indicates the proportion of improvement of the overall fit of the final model relative to the independence (null) model (Kline, 1998; and D'Amico, 2001). For instance, the CFI value for the research model in this study is 0.970, which indicates that the relative overall fit of the model is 97 per cent better than the independence model estimated with the same sample data. Recommended values are those greater than 0.90. In the Tucker-Lewis Index (RHO2 TLI), values of 0 and 1 indicate total lack of fit and perfect fit, respectively, i.e. intermittent values indicate the magnitude of fit. D'Amico (2001) recommended a TLI value of 0.96 or higher. However, Schumacker and Lomax (1996) contended that values close to 0.90 reflect a good model fit. The value for the final model in this study is 0.965. The Root Mean Square Error of Approximation (RMSEA), with its lower and upper confidence interval boundaries, is another very valuable fit index that is commonly reported. The recommended values for this fit statistic are below 0.06 (Schumacker and Lomax, 1996; D'Amico, 2001). The value for the final model is 0.032, which indicates a good model fit.

Table 4 : Goodness of Fit of the Hypothesized SEM Model

Fit Indices	SEM Model	Desired Levels
Chi-square	327.777	--
Degree of freedom (df)	183	--
p-value	0.000	> 0.05
Chi-square/df	1.775	< 3.00
Goodness of Fit Index (GFI)	0.961	> 0.90
Adjusted GFI (AGFI)	0.951	> 0.90
Comparative Fit Index (CFI)	0.970	> 0.90
Tucker-Lewis Index (TLI)	0.965	> 0.90
Root Mean Square Error of Approximation (RMSEA)	0.032	< 0.06

c) Testing of Hypotheses

In order to test the hypotheses, path coefficients and their significance values were estimated with AMOS 18.0 (results in Table 5).

Table 5 : Path Coefficients and their Significance Values with Variables

			Standardized Coefficient	Unstandardized Coefficient	S.E.	C.R.	P
Customer Satisfaction	→	Word-of-mouth	0.277	0.235	0.042	5.589	< 0.01
Convenience	→	Customer Satisfaction	0.195	0.201	0.044	4.566	< 0.01
Quality of Retailers	→	Customer Satisfaction	0.172	0.168	0.041	4.089	< 0.01
Quality of Customer Services	→	Customer Satisfaction	0.187	0.250	0.057	4.424	< 0.01
Mall Environment	→	Customer Satisfaction	0.175	0.160	0.038	4.184	< 0.01
Rewards	→	Customer Satisfaction	0.177	0.235	0.057	4.101	< 0.01

*Significant at $p<0.01$ level

Consistent with Hypothesis H1, customer satisfaction is positively related to positive word-of-mouth ($p<0.01$). According to the proposed model, five variables (convenience, quality of retailers, quality of customer services, mall environment and rewards) were hypothesized to affect customer satisfaction. Consistent with previous studies, all five hypotheses (H2-H6) have positive significant effects on customer satisfaction ($p<0.01$). In summary, path coefficients of the proposed model confirmed all hypothesized relationships. The path coefficients and their significance values with estimates are shown in Table 6. Figure 3 illustrates the significant structural relationships among the studied variables.

Table 6 : Path Coefficients and their Significance Values with Estimates

			Standardized Coefficient	Unstandardized Coefficient	S.E.	C.R.	P
CS1	→	Customer Satisfaction	0.677	1.000			
CS2	→	Customer Satisfaction	0.852	1.239	0.081	15.232	<0.01
CS3	→	Customer Satisfaction	0.626	0.917	0.064	14.273	<0.01
WOM1	→	Word-of Mouth	0.590	1.000			
WOM2	→	Word-of Mouth	0.903	1.447	0.131	11.017	<0.01
WOM3	→	Word-of Mouth	0.542	0.878	0.073	11.972	<0.01
QCS3	→	Quality of Customer Services	0.560	1.000			
QCS2	→	Quality of Customer Services	0.952	1.659	0.154	10.794	<0.01
QCS1	→	Quality of Customer Services	0.575	1.072	0.084	12.694	<0.01
C3	→	Convenience	0.711	1.000			
C2	→	Convenience	0.912	1.263	0.081	\15.50 6	<0.01
C1	→	Convenience	0.602	0.855	0.057	15.085	<0.01
ME3	→	Mall Environment	0.801	1.000			
ME2	→	Mall Environment	0.910	1.163	0.061	19.149	<0.01
ME1	→	Mall Environment	0.602	0.763	0.047	16.385	<0.01
QR3	→	Quality of Retailers	0.753	1.000			
QR2	→	Quality of Retailers	0.911	1.199	0.069	17.474	<0.01
QR1	→	Quality of Retailers	0.619	0.821	0.051	16.186	<0.01
R3	→	Rewards	0.579	1.000			
R2	→	Rewards	0.910	1.650	0.141	11.663	<0.01
R1	→	Rewards	0.615	1.074	0.082	13.086	<0.01

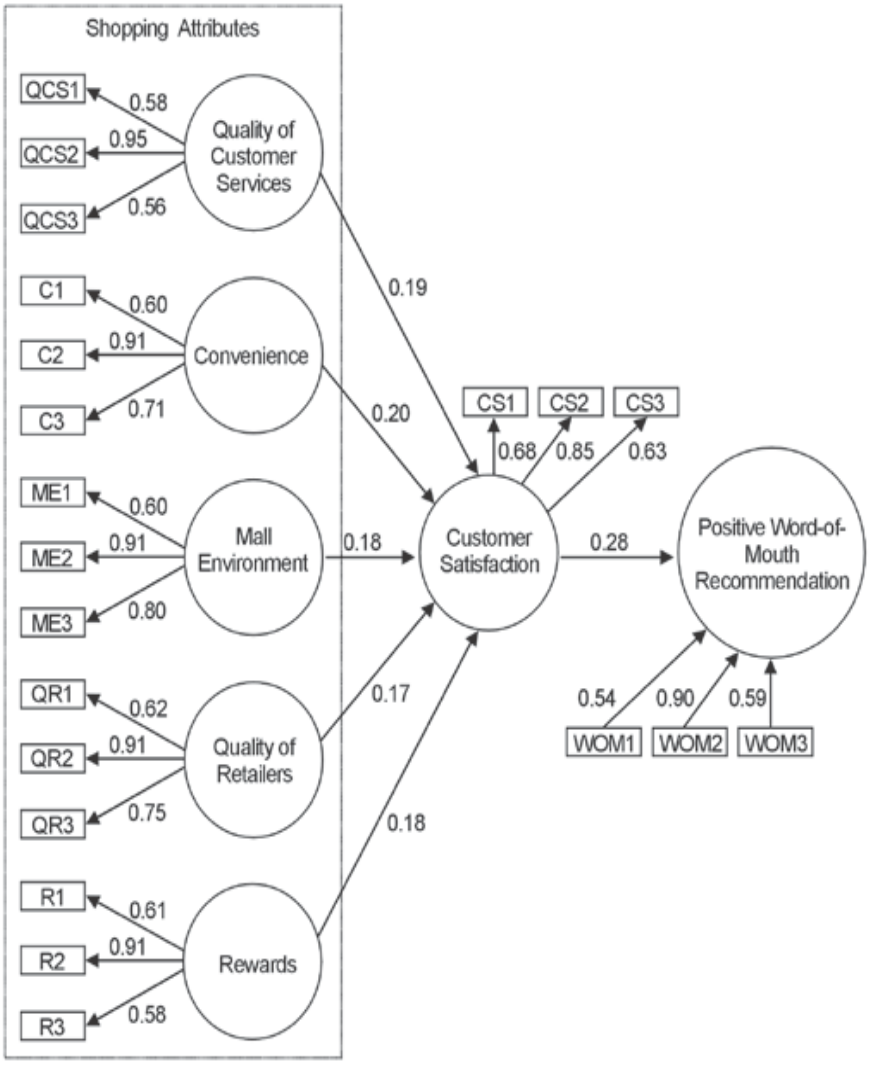

Figure 3 : Structure Equation Results – Positive Word-of-Mouth Model

V. Conclusions

The objective of this study was to examine the influence of shopping mall attributes on satisfaction of IVS visitors, and the relationship between customer satisfaction and positive word-of-mouth recommendation. This empirical research was conducted in the context of IVS visitors after their shopping experiences in Hong Kong. Consistent with previous research findings, the research findings support all hypotheses of this study.

a) Implications for researchers

This research has identified certain significant implications for researchers and shopping mall owners. First, Zafar et al. (2007) recommended that research of shopping mall characteristics in future should take wider international perspectives into account in order to enable comparisons, benchmarking and setting standards. This research targeted at surveying mainland China visitors shopping in Hong Kong. Results of this research may be of interest to field researchers wanting to further explore traditional theoretical assumptions applied in the eastern context. Lee and Kacen (2007) recommended that researchers and practitioners need to be aware of cultural differences when applying western-based research findings to consumers in other countries. In this research targeted respondents were Chinese customers who came from Mainland China. As eastern economies expand, more customers from collectivist cultures are expected to indulge in impulse buying. This presents marvelous opportunities to marketing researchers who can further explore how best to enhance consumer satisfaction.

b) Implications For Shopping Mall Owners

Research in psychology and organizational behavior areas has long recognized the importance of human motivation under different degrees of abstraction (Wagner, 2007). Apart from location convenience and product quality factors, prescriptive tactics of shopping

malls are also expected to provide customers unforgettable shopping experiences, ensuring high satisfaction level and re-purchase behavior. From a managerial perspective, customers' perceived experiential value can be improved and satisfaction can be enhanced by increasing quality of personal service encounters, attractive rewards and updating the layout and design of service facilities and environment frequently. Simply and effectively, listening to customer demands and resolving their problems are critical to retaining current customers and promoting positive word-of-mouth recommendation. Shopping mall management should lead from not only the top but also from the front, by showing frontline service staff how to be responsive and energetic in their customer interactions. Shopping mall promotion teams should consider not only customers' recreational shopping needs but also efficiency-related needs, including time constraints, particularly in case of single-day trips of IVS visitors. In addition, it is worth considering technology investments (i.e. Internet, mobile phone and personal portable devices) instead of the traditional textual messages with simple visual cues and signs to improve communication with customers.

c) Limitations

There are some limitations of methodology adopted in this research. First, it was difficult to motivate respondents to provide true personal information and opinion on each question. Though this has been a common problem encountered in research field, it is worth exploring ways of persuading respondents to express their true viewpoints. Second, data collection points were no more than three shopping malls because these shopping malls have features that connect with a public area in front of their main entrances. This encouraged mall owners to allow the survey. Had this interview survey been extended to other shopping malls without similar public areas, it would have been time consuming to obtain consent from mall owners. Third, it was complicated to distinguish respondents from South China and North China. Consumer preferences and attitudes in these two broad regions of Mainland China differ significantly. If data with such greater details can be collected for further analysis, consumption patterns can be identified in line with income levels.

d) Future Research

This research represents one of the very few empirical inquiries into a phenomenon of great managerial and academic interest. First and foremost, though this research does reveal certain aspects of positive word-of-mouth recommendation upon a certain extent of satisfaction after mall shopping in Hong Kong, there is still room for further research for ascertaining and enriching the findings. First, since the retail industry relies heavily on maintaining relationships with customers (Barnes, 1997), the theoretical model of this research can be applied and further examined in the context of other kinds of shopping mall attributes, such as quality of hygiene and security, in order to enhance generalizability of common shopping mall attributes. Second, while requirements of minimum sample size have been met, all associations between variables in the population may not have been detected. It is highly recommended that future research consider a broader demographic profile representing multiple visitors (i.e. not only Mainland China visitors) coming from Asian countries such as India and Taiwan. Zafar et al. (2007) identified that consumers' shopping-related perceptions and expectations are likely to differ across countries or cultures throughout the world. Finally, Guanxi (literally, interpersonal connections) has been identified as one of the key factors leading to business success in Mainland China (Abramson and Ai, 1999; Davies et al., 1995; Lee et al., 2001; Luo, 1997; Tsang, 1998; Yeung and Tung, 1996). Hofstede (1980) stated that China is a collectivist culture where guanxi reflects norms involving social interdependence. Guanxi is based on the notion that relationships in the traditional Chinese society are hierarchical. This relationship hierarchy reflects social norms between ruler-subject, father-son, husband-wife, brother-brother and friend-friend. The norms that guide successful guanxi are that the humble cannot assail the noble, the distant cannot overrun the closer, and the individual cannot override the group (Yeung and Tung, 1996). Therefore, in the Chinese society, guanxi transcends business relationships to encompass all social relationships (Ambler, 1995). Future research in relation to Chinese customers should explore the guanxi factor. Furthermore, it is important to note that there are significant cultural differences between Southern and Northern China (Huang et al., 1994) because economic development of coastal provinces and in-land provinces has been uneven (Cui and Liu, 2000).

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