Chien-An Lin, National Kaohsiung University of Hospitality and Tourism, Taiwan

Asian Conference on Psychology and Behavioral Sciences 2015 Official Conference Proceedings

Abstract

Retaining customers has become more important since the market is so competitive. A great deal of practitioners and academics have been devoting their effort to study how to create and maintain consumers' brand loyalty because brand loyal consumers benefit a firm by reducing marketing costs. In addition, these loyal consumers are willing to pay premium prices to stay connected with a brand. Most importantly, they not only live up to their loyal behavior by undertaking repeat purchase on a brand, but also disseminate positive word-of-mouth encouraging their peers to purchase the same brand. The purpose of this study is to identify the three underlying dimensions of brand loyalty (behavioral brand loyalty, attitudinal brand loyalty and composite brand loyalty) and to examine the relationships between these three brand loyalties and their antecedents (functional value, emotional value, social value, epistemic value, and conditional value) and their consequences (purchase intention and word-of-mouth). This study provided empirical evidence in the mobile phone industry, and found that the three underlying structure of brand loyalty had been confirmed and ought to be measured simultaneously in the mobile phone industry; only functional value and epistemic value had a positive and significant associations with the three brand loyalties; there was a positive and significant relationship between composite brand loyalty and the consequences of brand loyalty (purchase intention and word-ofmouth); only composite brand loyalty served as a mediator between the antecedents and consequences of brand loyalty.

Keywords: behavioral, attitudinal, composite, brand loyalty, perceived value

iafor

The International Academic Forum www.iafor.org

Introduction

Retaining customers has become more important since the market is so competitive. A great deal of practitioners and academics have devoted their effort to study how to create and maintain consumers' brand loyalty because brand loyal consumers benefit a firm by reducing marketing costs associating with attracting new customers (Tu, Li, & Chih, 2013). In addition, these loyal consumers are willing to pay premium prices to stay connected with a brand (Porral, Bourgault, & Dopico, 2013). Most importantly, they not only live up to their loyal behavior by undertaking repeat purchase on a brand, but also disseminate positive word-of-mouth encouraging their peers to purchase the same brand (Lo, 2012).

The objectives of this research

Jacoby and Chestnut (1978) suggest that brand loyalty should be measured in multidimensional way, and can be identified as behavioral, attitudinal, and composite brand loyalty. However, there is no research done to investigate whether those three brand loyalties can serves as underlying structure of the general brand loyalty. Therefore, the first objective of this study is to verify whether the underlying structure of brand loyalty consists of behavioral, attitudinal, and composite brand loyalty.

Investigating consumer perception will be able to help marketers better understand how their consumers perceive the brand and how loyal they are. Both the consumption value theory, proposed by Sheth et al. (1991), and PERVAL model, proposed by Sweetney and Soutar (2001) explain why consumers choose a specific brand or product over another one. However, perceived value has been reported having an indirect effect on brand loyalty, and requires satisfaction serving as a mediating role in the relationship between perceived value and brand loyalty (Wang, Lo, Chi, & Yang, 2004). Hence, the second objective of this study is to identify whether perceived value is able to serves as an antecedent of brand loyalty.

A third objective of this study is to empirically examine the effects of brand loyalty on consumers' behavioral outcome. Gounaris and Stathakopoulos (2004) have demonstrated that loyal consumers might not undertake repeat purchase on a brand and non-loyal consumers might often repurchase a single brand over time. In addition, empirical researches found that repeat purchase is not the only result of brand loyalty (Tranberg & Hansen, 1986). Word-of-mouth, however, can serve as one of consequences of brand loyalty because loyal consumers always disseminate positive word-of-mouth (Lau & Lee, 1999). Thus, purchase intention and word-of-mouth should be reviewed to see whether there is an association between brand loyalty and these consequences.

Purpose of the Study

The purpose of this study is to *identify* the three underlying dimensions of brand loyalty (behavioral brand loyalty, attitudinal brand loyalty and composite brand loyalty) and to *examine* the relationships between these three brand loyalties and their antecedents (functional value, emotional value, social value, epistemic value, and conditional value) and their consequences (purchase intention and word-of-mouth).

Research Questions and Research Hypotheses

This study attempts to investigate the following question: (1) Can behavioral brand loyalty, attitudinal brand loyalty, and composite brand loyalty serve as the underlying structure of general brand loyalty? (2) Once the underlying structure are confirmed, are behavioral brand loyalty, attitudinal brand loyalty, and composite brand loyalty still have significant associations with their antecedents (five perceived values) and consequences (purchase intention and word-of-mouth).

Based on these research questions, their corresponding hypotheses can be developed as follows:

- H₁₀: Brand loyalty is not a multidimensional construct of behavioral, attitudinal, and composite brand loyalty.
 - H_{1a}: Brand loyalty is a multidimensional construct of behavioral, attitudinal, and composite brand loyalty.
- H₂₀: Functional value has no positively significant effect on behavioral, attitudinal, and composite brand loyalty.
 - H_{2a}: The higher the functional value perceived by consumers, the greater the behavioral brand loyalty.
 - H_{2b}: The higher the functional value perceived by consumers, the greater the attitudinal brand loyalty.
 - H_{2c}: The higher the functional value perceived by consumers, the greater the composite brand loyalty.
- H₃₀: Emotional value has no positively significant effect on behavioral, attitudinal, and composite brand loyalty.
 - H_{3a}: The higher the emotional value perceived by consumers, the greater the behavioral brand loyalty.
 - H_{3b}: The higher the emotional value perceived by consumers, the greater the attitudinal brand loyalty.
 - H_{3c}: The higher the emotional value perceived by consumers, the greater the composite brand loyalty.
- H₄₀: Social value has no positively significant effect on behavioral, attitudinal, and composite brand loyalty.
 - H_{4a}: The higher the social value perceived by consumers, the greater the behavioral brand loyalty.
 - H_{4b}: The higher the social value perceived by consumers, the greater the attitudinal brand loyalty.
 - H_{4c}: The higher the social value perceived by consumers, the greater the composite brand loyalty.
- H₅₀: Epistemic value has no positively significant effect on behavioral, attitudinal, and composite brand loyalty.
 - H_{5a}: The higher the epistemic value perceived by consumers, the greater the behavioral brand loyalty.
 - H_{5b}: The higher the epistemic value perceived by consumers, the greater the attitudinal brand loyalty.
 - H_{5c}: The higher the epistemic value perceived by consumers, the greater the composite brand loyalty.
- H₆₀: Conditional value has no positively significant effect on behavioral, attitudinal, and composite brand loyalty.

- H_{6a}: The higher the conditional value perceived by consumers, the greater the behavioral brand loyalty.
- H_{6b}: The higher the conditional value perceived by consumers, the greater the attitudinal brand loyalty.
- H_{6c}: The higher the conditional value perceived by consumers, the greater the composite brand loyalty.
- H₇₀: All of behavioral, attitudinal, and composite brand loyalty has no positively significant influences on purchase intention.
 - H_{7a}: The higher the behavioral brand loyalty, the greater the purchase intention.
 - H_{7b}: The higher the attitudinal brand loyalty, the greater the purchase intention.
 - H_{7c}: The higher the composite brand loyalty, the greater the purchase intention.
- H₈₀: All of behavioral, attitudinal, and composite brand loyalty has no positively significant influences on word-of-mouth.
 - H_{8a} : The higher the behavioral brand loyalty is, the greater the propensity of disseminating positive word-of-mouth.
 - H_{8b} : The higher the attitudinal brand loyalty is, the greater the propensity of disseminating positive word-of-mouth.
 - H_{8c}: The higher the composite brand loyalty is, the greater the propensity of disseminating positive word-of-mouth.

Methodology

In this study, mobile phone users in Taiwan were chosen as the targeted population. Two stages of research design were employed to gather data from mobile phone users in the study, including the pre-test to gain insight and to purify measurement, and the main study to examine the proposed hypotheses and conceptual framework. Both the pre-test and the main study took quantitative approach in the collection of data. In addition, the remained items from the pre-test were used in the main study to test the research hypotheses.

For the pre-test, the author of this study used convenient samples in the university where the author is working for. A total two hundreds participants from four classes of the university were acquired for the pre-test, in order to fulfill the requirement of exploratory factor analysis. For the main study, the author of the study randomly selected one university in each of northern, middle, and southern part of Taiwan as the site to undertake the surveying activity. In each university selected, one hundred questionnaires from two randomly selected classes were projected to be obtained. A total three hundreds participants from those three universities were needed for the main study to meet the threshold of structural equation modeling.

Pre-test

In the pre-testing stage, two hundreds participants were expected to participate this study. Each participant were required self-administrated in the completion of a 17-items brand loyalty questionnaire. The sample size met the requirement of Exploratory Factor Analysis (EFA) for data analysis.

Main Study

In the main study, three hundreds participants attended the surveying activity. Each participant were asked self-administrated in the completion of a questionnaire which consists of the remaining items for brand loyalty, 17-items for perceived values, 3-items for purchase intention, and 4 items for word-of-mouth. Because of that this stage employed both Confirmatory Factor Analysis (CFA), and Structural Equation Modeling (SEM) for data analysis.

Results

The results accordingly depicted the designed three stable constructs with the eigenvalue of each factor larger than one, the loading of each item more than 0.5, and communalities of each item greater than 0.5 (see Figure 1.). Reliability test were also performed to assure the consistency in measurement of the result, with the value of each coefficient alpha larger than 0.7 indicating that these multiple measures were considered highly reliable in the measurement of each construct. Therefore, the reduction of measurement items for behavioral, attitudinal, and composite brand loyalty were successfully performed by employing above analyses, resulting the three items for each construct of brand loyalty for the subsequent main study.

Item	Factor 1	Factor 2	Factor 3	Commu nalities	Cronbach's Alpha
(BBL1) I purchase the brand most often		.841		.789	
(BBL2)I consistently purchase the brand		.769		.741	
(BBL5) I have used the brand for a long time		.799		.781	.830
(ABL1) I like the brand	.862			.808	
(ABL2) I have liked the brand for a certain length of time	.772			.726	
(ABL5) I have a favorable attitude toward the brand	.761			.721	.816
(CBL1) I am loyal to the brand			.720	.767	
(CBL2) I would stay with the brand even though other brands offer better deals			.875	.806	
(CBL3) The brand is my top choice			.746	.750	.837
Eigenvalue	4.712	1.157	1.018		.884

Figure 1: EFA with 9 remained items (pre-test).

AMOS 6.0 was utilized to test the goodness of fit for the model with several criteria, including Chi-square, root mean square of approximation error (RMSEA), comparative fit index (CFI), goodness of fit index (GFI) (Byrnne, 2001; Hair et al, 1998). As Figure 4-1 exhibits, the results (χ^2 =69.0, df= 24, p=0.000, GFI=0.952, CFI=0.98, RMSEA=0.08) showed a good fit for the model retained from the pretest.

The χ^2 / df value of 2.875 fall within an acceptable range of 2 to 5 at 0.00 significant level. In addition, the values for both GFI and CFI were greater than 0.9 and RMSEA value was equal to 0.08, revealing an excellent goodness of fit indexes. Moreover, all of estimates after standardization showed distinct factor loadings. Although the estimates among behavioral brand loyalty, attitudinal brand loyalty, and composite brand loyalty were slightly high in-between, it was reasonable because composite brand loyalty can serve as the assemblage of behavioral brand loyalty and attitudinal brand loyalty (Jacoby & Chestnut, 1978). Based on the evidences found in Figure 2, brand loyalty can be considered as a multidimensional construct of behavioral brand loyalty, attitudinal brand loyalty, and composite brand loyalty. Hence, the Hypothesis H₁ was accepted. Moreover, the results of the confirmatory factor analysis provided support for the reliable measurement for behavioral brand loyalty, attitudinal brand loyalty, and composite brand loyalty, which enabled the author of this study to examine the succeeding hypotheses of this study.



Chi-square=69.0, df=24, P=0.000, GFI=0.952, CFI=0.98, RMSEA=0.08

Figure 2: Confirmatory Factor Analysis (CFA) Result for the Main Study

Figure 3 showed the modified model. It included the additional paths between social value and purchase intention and between social value and word-of-mouth in order to measure the direct effect. The purpose of adding paths instead of deleting paths is to prevent the analysis from the suppressing effect, the phenomenon when the omitted variable might cause coefficients in the model been underestimated rather than overestimated.



Figure 3: Structural Equation Modeling (SEM) Result for the Main Study: Modified

Model

Cause Effect		Estimates	Estimates _e				
FUN→BBL	H2a(+)	5.792	3.850	****			
FUN→ABL	H2b(+)	3.609	2.681	****			
FUN→CBL	H2c(+)	4.268	3.149	****			
EMO→BBL	H3a(+)	-5.804	- 3.936	0.002**~			
EMO → ABL	H3b(+)	-3.173	- 2.405	0.006**~			
EMO→CBL	H3c(+)	-4.103	- 3.089	0.003**~			
SOC→BBL	H4a(+)	876	- 0.595	0.178↩			
SOC→ABL	H4b(+)	743	- 0.564	0.072+			
SOC→CBL	H4c(+)	534	- 0.403	0.265↔			
SOC→WOM		.523	0.444	****			
SOC→PI		.157	0.126	0.062+			
EPI→BBL	H5a(+)	2.448	1.678	0.010**⊷			
EPI → ABL	H5b(+)	1.809	1.386	0.003**↩			
EPI→CBL	H5c(+)	1.950	1.484	0.005**↩			
BBL→PI	H7a(+)	154	-0.182	0.093↔			
ABL→PI	H7b(+)	026	-0.028	0.809₽			
CBL→PI	H7c(+)	.853	0.909	****			
BBL → WOM	H8a(+)	122	-0.152	0.153₽			
ABL → WOM	H8b(+)	.082	0.092	0.419↩			
CBL→WOM	H8c(+)	.458	0.515	****			
لي ا							
ų.							
Goodness of fit statistics:		$x^{2}(408) = 972.780, p=0.000 \leftrightarrow$					
		$GF1 = 0.8204^{-1}$					
		$CFI = 0.908 \leftrightarrow$					
		RMSEA = 0.069	1				
Model Comparis	on ↓						
Model One vs. N	lodel Two $[\Delta x^4]$	$(\Delta q j)$]: 31.98(2), p	-v 000.0=				
FIDI C				DT 1			
a. FUN: function	al value, EMO:	emotional value, SC	DC: social value, E.	PI: epistemic			
value, BBL: be	enavioral brand	ioyaity, ABL: attitu	dinal brand loyalty	, CBL: compos			
orand loyalty,	P1: purchase int	ention, WOM: word	1-01-mouth€				

Figure 4 reported the structural estimates from the modified model with the following statistics: $x^2(408) = 972.780$, GFI= 0.820, CFI= 0.908, RMSEA=0.069. In order to depict the efficiency of the modified model, a comparative fit statistics were undertaken. Chi-square decreased 31.98 while degree of freedom was down to 408, indicating the modified model is slightly parsimonious and fits seems better than the hypothesized model. Thereby, the modified model provided a better basis for hypotheses testing. In addition, based on the modified model, it should be noticed that social value only produced a significant direct effect on word-of-mouth, indicating that social value were unable to be used to predict either attitudinal brand loyalty or purchase intention.

The following hypotheses were tested based on the modified model:

- H₂: Functional value has no positively significant effect on behavioral, attitudinal, and composite brand loyalty.
 - H_{2a}: The higher the functional value perceived by consumers, the greater the behavioral brand loyalty.
 - H_{2b}: The higher the functional value perceived by consumers, the greater the attitudinal brand loyalty.
 - H_{2c}: The higher the functional value perceived by consumers, the greater the composite brand loyalty.

The effect of functional value on behavioral brand loyalty was positively significant at the p<0.001 level with an unstandardized estimate value of 5.792 (p=0.000). It also had positively significant effect on both attitudinal brand loyalty (unstandardized estimate = 3.609, p=0.000) and composite brand loyalty (unstandardized estimate = 4.268, p=0.000) at the p<0.001 level. Hence, the null hypothesis H2 was rejected and supports were found for the alternative hypotheses H2a, H2b, and H2c, which meant that the higher the functional value perceived by consumers, the greater the behavioral, attitudinal, and composite brand loyalty.

- H₃: Emotional value has no positively significant effect on behavioral, attitudinal, and composite brand loyalty.
 - H_{3a}: The higher the emotional value perceived by consumers, the greater the behavioral brand loyalty.
 - H_{3b}: The higher the emotional value perceived by consumers, the greater the attitudinal brand loyalty.
 - H_{3c}: The higher the emotional value perceived by consumers, the greater the composite brand loyalty.

The unstandardized estimate for the effect of emotional value on behavioral brand loyalty was -5.804 (p=0.002), the effect on attitudinal brand loyalty was -3.173 (p=0.006), and on composite brand loyalty was -4.103 (p=0.003).Hence, the null hypothesis H3 was accepted meaning that emotional value has no positively significant effect on behavioral, attitudinal, and composite brand loyalty. Although the p values for those three hypotheses were lower than 0.01 indicating the significant effect of emotional value on those three brand loyalties. However, all of the estimates were showed negative. Based on the result from the modified model, emotional value had a higher correlation of 0.95 with functional value, while epistemic value and social value had a lower but still notable correlation with emotional value.

Thus, the paths between emotional value and the three brand loyalties produced suppressed effects and subsequently caused a multicollinearity problem.

- H₄: Social value has no positively significant effect on behavioral, attitudinal, and composite brand loyalty.
 - H_{4a}: The higher the social value perceived by consumers, the greater the behavioral brand loyalty.
 - H_{4b}: The higher the social value perceived by consumers, the greater the attitudinal brand loyalty.
 - H_{4c}: The higher the social value perceived by consumers, the greater the composite brand loyalty.

The effects of social value on all of behavioral, attitudinal, and composite brand loyalty were found insignificant and negative. The unstandardized estimate between social value and behavioral brand loyalty was -.876 (p=0.178), while between social value and attitudinal brand loyalty was -.743 (p=0.072) and between social value and composite brand loyalty was -.534 (p=0.265). In other word, the null hypothesis H4 was accepted, which indicated that social value has no positively significant effect on behavioral, attitudinal, and composite brand loyalty.

- H₅: Epistemic value has no positively significant effect on behavioral, attitudinal, and composite brand loyalty.
 - H_{5a}: The higher the epistemic value perceived by consumers, the greater the behavioral brand loyalty.
 - H_{5b}: The higher the epistemic value perceived by consumers, the greater the attitudinal brand loyalty.
 - H_{5c}: The higher the epistemic value perceived by consumers, the greater the composite brand loyalty.

Three positively significances were found, at the p<0.01 level, between epistemic value and three brand loyalties (behavioral, attitudinal, and composite) with the unstandardized estimates of 2.448(p=0.010), 1.80(p=0.003), and 1.950(p=0.005). The null hypothesis H5 was rejected and supports were found for the alternative hypotheses H5a, H5b, and H5c. That is, the higher the epistemic value perceived by consumers, the greater the behavioral, attitudinal and composite brand loyalty.

- H₇: All of behavioral, attitudinal, and composite brand loyalty has no positively significant influences on purchase intention.
 - H_{7a}: The higher the behavioral brand loyalty, the greater the purchase intention.
 - H_{7b}: The higher the attitudinal brand loyalty, the greater the purchase intention.
 - H_{7c}: The higher the composite brand loyalty, the greater the purchase intention.

Two negatively insignificant sign were found between behavioral brand loyalty and purchase intention (the unstandardized estimate = -0.154, p=0.093) and between attitudinal brand loyalty and purchase intention (the unstandardized estimate = -0.026, p=0.809). In contrast to behavioral brand loyalty and attitudinal brand loyalty, composite brand loyalty had a positively significant effect on purchase intention (the unstandardized estimate=0.853, p=0.000), at the p<0.001 level. Hence, the null hypothesis H7 was rejected and supports was found for the alternative hypothesis H7c, which was the higher the composite brand loyalty, the greater the purchase intention.

- H₈₀: All of behavioral, attitudinal, and composite brand loyalty has no positively significant influences on word-of-mouth.
 - H_{8a} : The higher the behavioral brand loyalty is, the greater the propensity of disseminating positive word-of-mouth.
 - H_{8b}: The higher the attitudinal brand loyalty is, the greater the propensity of disseminating positive word-of-mouth.
 - H_{8c}: The higher the composite brand loyalty is, the greater the propensity of disseminating positive word-of-mouth.

A negative and insignificant relationship was found between behavioral brand loyalty and word-of-mouth (the unstandardized estimate=-0.122, p=0.153). A positive and insignificant association was also observed between attitudinal brand loyalty and word-of-mouth (the unstandardized estimate=0.082, p=0.419). As same as purchase intention, word-of-mouth was found being positively influenced by composite brand loyalty at the p<0.001 level (the unstandardized estimate=0.458, p=0.000). Therefore, the null hypothesis H8 was rejected and supports was found for the alternative hypothesis H8c, which was the higher the composite brand loyalty, the greater the word-of-mouth.

The above results provided the information that all of three brand loyalties did not serve as a mediator between social value and purchase intention and between social value and word-of-mouth. However, the additional paths in the modified model, the effect of social effect on word-of-mouth, showed a positive significance (the unstandardized estimate=0.523, p=0.000) at the p<0.001 level. Thus, social value did not directly or indirectly produce any effect on purchase intention, but had a direct effect on word-of-mouth.

In addition, based on the Hypothesis 2c and Hypothesis 7c, the path estimates showed that composite brand loyalty was an important mediator between functional value and purchase intention. By the same token, composite brand loyalty also mediated the relationship between epistemic value and purchase intention, according to Hypothesis 5c and Hypothesis 7c. Similar to Hypothesis 7c, Hypothesis 8c contributed the mediating effect to the relationship between functional value and word-of-mouth and between epistemic value and word-of-mouth, based on the findings from Hypothesis 2c, Hypothesis 5c, and Hypothesis 7c.

Conclusion

This study provided empirical evidence in the mobile phone industry. Based on the aforementioned discussion, the findings of this study can be summarized as: (a) The underlying structure of brand loyalty had been confirmed. Therefore, behavioral brand loyalty, attitudinal brand loyalty, and composite brand loyalty ought to be measured simultaneously in the mobile phone industry; (2) of the antecedents of brand loyalty, only two perceived values (functional value and epistemic value) had a positively significant association with three brand loyalties (behavioral brand loyalty, attitudinal brand loyalty, and composite brand loyalty), (3) there was a positively significant relationship between composite brand loyalty and the consequences of brand loyalty (purchase intention and word-of-mouth); (4) only composite brand loyalty.

References

Gounaris, S. & Stathakopoulos, V. (2004). Antecedents and consequences of brand loyalty: An empirical study. Journal of Brand Management, 11(4), 283.

Jacoby, J., & Chestnut, R. (1978). Brand loyalty: Measurement and management. New York, NY: John Wiley and Sons.

Lau, G. T. & Lee, S. H. (1999). Consumers' trust in a brand and the link to brand loyalty. Journal of Marketing, 4(4), 341.

Lo, S. (2012). Consumer decisions: The effect of word-of-mouth. International Journal of Organizational Innovation, 4(3), 88-196.

Porral, C., Bourgault, N., & Dopico, D. (2013). Brewing the recipe for beer brand equity. European Research Studies, 16 (2), 82-97.

Sheth, J. N., Newman, B. I., and Gross, B. L. (1991). Why we buy what we buy: A theory of consumption values. Journal of Business Research, 22, 159-170.

Sweeney, J. C., & Soutar, G. N. (2001). Consumer-perceived value: The development of a multiple-item scale. Journal of Retailing, 77(2), 203-220.

Tranberg, H. & Hansen, E. (1986). Patterns of brand loyalty: Their determinants and their role for leading brands. European Journal of Marketing, 20, 81.

Tu, Y., Li, M., & Chih, H. (2013). An empirical study of coporate brand image, customer perceived value and satisfaction on loyalty in shoe industry. Journal of Economics and Behavioral Studies, 5 (7), 469-483.

Wang, Y., Lo, H. P., Chi, R., & Yang, Y. (2004). An integrated framework for customer value and customer-relationship-management performance: A customer-based perspective from China. Managing Service Quality, 14(2/3), 169.

Contact email: anguson@mail.nkuht.edu.tw