

Effect of Consumer Value on the Brand Identification and Loyalty in Airline Service

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Abstract

Background/Objectives: This study model was established to analyze the effect of consumer value on the brand identification and loyalty in the airline context. **Methods/Statistical Analysis:** 283 (94.3%) of 300 survey responses were collected and 13 cases (4.3%) were excluded due to the missing data as well as insincere answers. Final 270 cases (90%) were used as valid samples. The analysis of research model used SPSS 21.0 and AMOS 22.0 to analyze the frequency of the data and conducted examination on research hypotheses through structural equation modeling. **Findings:** The results of practical analysis were as follows. Hypothesis 1 that consumer value will impact on brand identification positively was adopted except for the sub-hypotheses 1-4. Considering them in detail, epistemic value (t value=4.806), conditional value (t value=2.283), emotional value (t value=3.371), and social value (t value=6.717) were adopted since they showed the significant t value (t value \geq 1.96). However, hypotheses 1-4 that the functional value will impact on the brand identification significantly were rejected because path coefficient was 0.077 (t value=1.384) which did not reach the significance level (t value \geq 1.96). On the other hand, the impact levels of consumer value on the brand identification were shown as the order of social value (0.527), epistemic value (0.451), emotional value (0.216), and conditional value (0.204). Therefore, the most important role on brand identification is social value. Secondly, hypothesis 2 that brand identification will impact on the loyalty positively was adopted since path coefficient was 0.350 (t value=6.669) and t value was within the significance level (t value \geq 1.96). **Application/Improvements:** Customers develop relations with the brand by satisfying the consumer value. Also, the fact was confirmed that modern consumers pursued emotional part more when they selected the products or services.

Keywords: Brand Identification, Consumer Value, Loyalty

1. Introduction

Unlike the past consumers who considered only for the utility of the products, the modern consumers purchase the products or services due to a variety of factors. Especially, the subjective values such as consumer value have been recognized as the variables to impact on the purchasing the goods. Values are the concept to impact on the behavioral estimate of the consumers and the market selection significantly, which affects the individual recognition process and purchasing behaviors on the goods comprehensively¹. The consumer value, one of the brand loyalty antecedent factors, is the concept to be the standard of decision in the human behavior, which can

be demonstrated as various forms in the consumption situations². The satisfaction level by consumption in the consumption situations depends on where we put these consumer values. In particular, the airline business is the industry to deal with personal, materialistic, and systemic services as the main items, so only the providers with the excellent values can survive in the global fierce competitions focusing on identifying the consumer values³. That means, if the airline brand is perceived to provide them with certain benefits or special values, the customers will continue to use that brand.

Values have been discussed in business administration as the concept of the customers' overall evaluation on the products or service utilities based on the perception

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what they give and take⁴.⁵ That had studied wide range of theoretical system of the consumer value suggested five organizational dimensions of perceived values including functional value, social value, emotional value, epistemic value, and conditional value. Then,⁶ developed perceived value scale (PERVAL), drawing four dimensions including emotional, quality/performance, price/value, and social ones by elaboration process.⁷ Claimed in measurement of these perceived values that it would be difficult to explain the concept of the perceived values measured as the single item like cost comparison value or functional value. Therefore, they measured these perceived values dividing by functional value and symbolic value.

The recent concept to be discussed on the business performance of the companies is brand identification. The customers do not purchase the products only for the utility anymore, but want to express themselves by similar image to develop the relationship with the brand⁸. Like this, the recent trend of the consumers shows that functional differentiation does not work anymore as the important attribute due to the development of advanced technologies, but they prefer to the products and services by the customer's value and emotional interaction with the brand which can result from the consumption of the product. Hence, consumer value, self-image congruence with the brand, and the loyalty enhancement by emotional approach are the subjects to be discussed in the consumption culture of the modern society.

Consumers perceive specific brand and evaluate whether the brand corresponds with their image and at this moment, brand identification is formed⁹. In¹⁰ published that brand identification was not what the brand itself had but what it was affected by consumer value.¹¹ Commented that the customers would purchase the products due to not only their inborn values but also the symbolic values, and they proved that the symbolic consumer values affected the brand identification. Also,¹² mentioned self-image congruence could affect the brand loyalty, and¹³ suggested the self-image congruence with the brand affected the brand loyalty positively by brand community. Hence, as the brand identification is higher, that brand is recommended more positively developing emotional attachment so as to have higher potential to continue to use it. Therefore, this study suggests that the consumer value could affect the brand identification and loyalty based on the previous studies.

H 1: Consumer value will impact on brand identification positively.

H 2: Brand identification will impact on the loyalty positively.

2. Data Collection and Analysis

This study aimed to investigate the effect of consumer value on the brand identification and loyalty. The measurement items of this study were described to meet the objectives of this study based on the previous studies. The survey results from the customers who used the airline less than 3 times a year were excluded in the practical analysis since it was determined from the pilot test that the applicable frequency for the study on the airline brand identification should be at least 3 to 5 times. The survey questionnaires were distributed to the passengers who were waiting in Incheon International Airport from February 10 to 12, 2015, and they were rewarded by the small gifts to secure the reliability of the survey. 283 (94.3%) of 300 survey responses were collected and 13 cases (4.3%) were excluded due to the missing data as well as insincere answers. Final 270 cases (90%) were used as valid samples. The analysis of research model used SPSS 21.0 and AMOS 22.0 to analyze the frequency of the data and conducted examination on research hypotheses through structural equation modeling.

3. Results

3.1 General Characteristics

Table 1 shows the demographic characteristics of the respondents. Of the total respondents, 167 (61.9%) are female and 103 (38.1%) are male. By age, the respondents in their 30s are 130 (48.1%), which is the most. And almost half (180 or 66.7%) of total respondents are employees in occupation.

3.2 Reliability and Validity

For the selection and elaboration of measurement categories, reliability analysis was conducted using AMOS 22.0. Construct reliability with higher than 0.7 is generally recognized as high construct reliability in measurement categories and all factors used in this study were identified to have higher than 0.9¹³. The values of construct reliability are suggested in Table 2. Next, confirmatory factor analysis was conducted to test the reliability of measurement categories. When the fit indexes for model are strictly

applied, it is considered that RMR should be lower than 0.05, GFI, NFI and CFI should be higher than 0.9, and AGFI should be higher than 0.8¹⁴. Indexes in confirmatory factor analysis suggested in table 2 shows the model fit indexes after the categories which hinder the validity are removed. Model fit indexes were identified as $\chi^2=811.162$ (df=307, p=0.000), $\chi^2/df=2.642$, RMR=0.031, GFI=0.880, AGFI=0.847, NFI=0.905, IFI=0.972, CFI=0.967 and these values can be accepted except χ^2 values¹⁵ which are sensitive to sample size.

Table 1. General Characteristics

		Frequency	Percentage (%)
Gender	Female	167	61.9
	Male	103	38.1
Age	29 less	96	35.6
	30-39 less	130	48.1
	40-49 less	36	13.3
	50 and over	8	3.0
Education	High school graduate	4	1.5
	College graduate	48	17.8
	University Graduate	187	69.3
	Attending postgraduate	6	2.2
	Doctoral degree	25	9.3
Occupation	Employee	180	66.7
	Public Official	32	11.9
	Professional	7	2.6
	Student	45	16.7
	Other	6	2.3
Income	200 less	55	20.4
	201-300	103	38.1
	301-400	81	30
	400 over	31	11.5
Frequency of airline use (within last 1 year)	3-5	65	24.1
	6-7	87	32.2
	8-10	97	35.9
	10 over	21	7.8
Purpose	Vacation	109	40.4
	Business Trip	149	55.2
	Hometown visit	9	3.3
	Other	3	1.1
Total		270	100

Recommended values in squared multiple correlation (SMC) values are higher than 0.5 in general and

the categories which could not meet this condition were removed after convergent validity test. Total of 2 questions were regarded as convergent validity hindering category and removed. Removed questions are 'This airline provides joy and pleasure' (0.246) in emotional value category and 'Use of this airline helps improve my pride' (0.199) in social value category. All standardized factor loading values which are connected to items and related factors show higher than 0.5 and AVE which measures the explained dispersion by study unit is higher than 0.50 as well. Convergent validity in measured questions was identified as all t-values showed higher than 1.96 of acceptance level¹⁶.

Discriminant validity means when individually different concepts are measured, correlation between obtained values should be low. In order to analyze the discriminant validity in measurement model as is suggested at below table 3, square root AVE values and correlation coefficient values were compared and the discriminant validity was secured as the condition that 'square root AVE value should be larger than correlation coefficient value' was met¹⁶. Through the above various analyses, reliability, convergent validity and discriminant validity in this study were verified.

3.3. Testing the Conceptual Framework

In this study, structure equation model was applied to identify the effects of consumer value on brand identification and loyalty in the airline context. Examining the test results in overall structure model, the model with $\chi^2=785.595$ (p=0.000), GFI=0.894, AGFI=0.866, NFI=0.912, RMR=0.031 was drawn. This model is considered to be appropriate because it shows appropriate levels when compared with general evaluation indexes in covariance structure analysis¹⁵. Standard chi-square index was approximately 2.5($\chi^2/df(309)=2.542$) which showed very suitable Goodness of Fit. Test results of research hypotheses are like Table 4.

To investigate the relation among consumer value, brand identification and loyalty in this study, structural equation modeling was performed. The outcomes of path analysis are shown in Table 4. Hypothesis 1 that consumer value will impact on brand identification positively was adopted except for the sub-hypotheses 1-4. Considering them in detail, epistemic value (t value=4.806), conditional value (t value=2.283), emotional value (t value=3.371), and social value (t value=6.717) were adopted since they

Table 2. Confirmatory factor analysis (CFA) for the measurement model

Factor	Measurement category	Std. factor loading	C.R. (t-value)	SMC	AVE
EPV	This airline gives us the new image.	.775	-----	.801	0.671
	The image of this airline is fresh.	.781	28.811**	.975	
	The services of this airline are unique.	.784	29.254**	.801	
CV	This airline is exposed in the mass media so frequently.	.988	22.723**	.845	0.598
	This airline provides a variety of special events.	.883	21.829**	.833	
	This airline is recommended by my friends or relatives.	.870	-----	.723	
EV	This airline makes me feel comfortable.	.809	28.223**	.711	0.821
	This airline makes me feel safe.	.724	22.708**	.678	
	This airline makes me feel convenient.	.791	-----	.803	
FV	This airline provides the advantages, value for money.	.804	-----	.709	0.773
	This airline provides the excellent quality compared to the fare.	.772	22.118**	.899	
	The fare of this airline is reasonable.	.778	20.011**	.873	
SV	Use of this airline gives the good impression to others.	.816	22.100**	.808	0.702
	Use of this airline makes me enhance the social status.	.926	20.462**	.844	
	Use of this airline makes me feel to be respected.	.901	-----	.772	
BI	Good fit to my image.	.881	-----	.676	0.721
	Good fit to my life style.	.882	27.115**	.673	
	Good fir to my values.	.667	21.223**	.832	
	Good fit to my characteristics	.899	20.224**	.655	
	Provides me with confidence	.801	13.498**	.601	
LOY	Recommend this airline to others	.799	-----	.522	0.654
	Choice of this airline is to be wise.	.811	13.564**	.776	
	Will use again regardless of others' opinion.	.773	13.897**	.697	

$\chi^2=811.162$ (df=307, p=0.000), $\chi^2/df=2.642$, RMR=0.031, GFI=0.880, AGFI=0.847, NFI=0.905, IFI0.972, CFI=0.967, **:p<0.01

Construct Reliability: EPV 0.902, CV 0.922, EV 0.932, FV 0.971, SV 0.955, BI, 0.945, LOY 0.951

*EPV: epistemic value CV: conditional value EV: emotional value

FV: functional value SV: social value BI: brand identification LOY: loyalty

Table 3. Correlation Matrix

	EPV	CV	EV	FV	SV	BI	LOY
EPV	.819						
CV	.351	.773					
EV	.622	.356	.906				
FV	.352	.238	.374	.879			
SV	.328	.543	.417	.407	.837		
BI	.522	.610	.474	.442	.665	.849	
LOY	.455	.521	.245	.268	.511	.521	.808

* all correlations are significant at p<0.01(2-tailed), diagonal value: square root AVE

* EPV: epistemic value CV: conditional value EV: emotional value FV: functional value SV: social value BI: brand identification

LOY: loyalty

Table 4. Structure model path analysis

H	Path	Estimate	S.E	C.R	P value
1-1	EPV→BI	.451	.094	4.806**	.000
1-2	CV→BI	.204	.089	2.283**	.022
1-3	EV→BI	.216	.064	3.371**	.000
1-4	FV→BI	.077	.039	1.384	.166
1-5	SV→BI	.527	.056	6.717**	.000
2	BI→LOY	.350	.052	6.669**	.000

**:=t-statistic (≥ 1.96) sig. level of $p < 0.05$

*EPV: epistemic value CV: conditional value EV: emotional value FV: functional value SV: social value BI: brand identification

LOY: loyalty

showed the significant t values ($t \text{ value} \geq 1.96$). However, hypotheses 1-4 that the functional value will impact on the brand identification significantly were rejected because path coefficient was 0.077 ($t \text{ value} = 1.384$) which did not reach the significance level ($t \text{ value} \geq 1.96$). On the other hand, the impact levels of consumer value on the brand identification were shown as the order of social value (0.527), epistemic value (0.451), emotional value (0.216), and conditional value (0.204). Therefore, the most important role on brand identification is social value. Secondly, hypothesis 2 that brand identification will impact on the loyalty positively was adopted since path coefficient was 0.350 ($t \text{ value} = 6.669$) and t value was within the significance level ($t \text{ value} \geq 1.96$).

4. Discussion

This study model was established to analyze the effect of consumer value on the brand identification and loyalty in the customers who are using domestic airlines in South Korea. Based on previous research, the variables were selected and structural equation model was used to investigate the relations among variables. The results of practical analysis were as follows.

First, hypothesis 1 that consumer value will impact on brand identification significantly was adopted. That means as consumer value is perceived higher, self-image congruence becomes higher. As the airline users are perceived to receive more benefits compared to their paid cost or to receive better values compared to other airlines, they perceive the airline brand to fit well to their lifestyles, values or images more. As such, the customers develop the relation with the brand by satisfying the consumer value that they value, and they try to demonstrate themselves by the brand using the airline that they perceive to fit in their self-images.

Considering the relation of impact among variables, the impact levels of consumer value on the brand identification were shown as the order of social value (0.527), epistemic value (0.451), emotional value (0.216), and conditional value (0.204), which reflected that the most impactful one on the brand identification was social value. This means that using this airline could give the others good impression. As they perceived their social status was increased and respected by using the airline more, the level of brand identification was increased more. Therefore, if the airline provided with the customer services in consideration of this consumer value, I think this could help maintain the loyal customers ultimately.

In summary, the customers will develop the relation with the brand by satisfying the consumer value that they value. Hence, the airlines should continue to conduct the studies that the customers value in order to enhance consumer value. Since each route may have different features of the customers, providing the customized services to satisfy the perceived consumer value could improve the brand identification by market segmentation. In addition, conducting continuous studies on the customers' needs in each route and providing with differentiated services by feedback after the direct service offering could expand the business quantitatively as well as qualitatively by systemic procedure within the airlines.

Second, hypothesis 2 that brand identification will impact on the loyalty positively was adopted. This meant that consumer value of the airline users would improve their brand loyalty by brand identification. The fact was confirmed that modern consumers pursued emotional part more when they selected the products or services. By using the airline brand that was consistent with their self-image or coincided with their values or lifestyle, they developed the relation with the brand, selecting the airline that could fit well to their characters and provided the confidence. Therefore, the airlines are required to strengthen their own image not only by the advertisements but also by event supports closely related to their brand features, and it is important to suggest the emotional offering so as for the consumers to feel the attachment to the brand.

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