

Passenger Perception Regarding Bus Service: A Deep Examination on Multi-component Concept of Loyalty

Nguyen HOANG-TUNG ^a, Aya KOJIMA ^b, Hisashi KUBOTA ^c

^{a,b,c} Graduate School Science & Engineering, Saitama University, Saitama, 338-8570, Japan

^a E-mail: tung@dp.civil.saitama-u.ac.jp

^b E-mail: kojima@dp.civil.saitama-u.ac.jp

^c E-mail: hisashi@dp.civil.saitama-u.ac.jp

Abstract: Loyalty is a preeminent concept for a company to get a higher share of customers. However, there are a few studies on loyalty within bus service context. One possible reason for the low focus on bus user loyalty is that there are different views among researchers on the concept of loyalty. To address the issue, this paper proposes a model to express the concept of loyalty in which loyalty has been decomposed into three main phases including attitudinal loyalty, conative loyalty and action loyalty. The difference between the proposed model and conventional models is that attitudinal loyalty was represented in a formative construct. In addition, an excavation on attitudinal facet of loyalty leads to a suggestion that there is a need to add up implicit loyalty as a new aspect of attitudinal loyalty. Furthermore, the study provides an empirical examination on impacts of social norm and habit toward attitudinal-behavioral relationship.

Keywords: Loyalty, Formative Construct, Bus Service

1. INTRODUCTION

Customer loyalty is a preeminent concept for a company to strengthen the beneficial relationship with customers. The concept guides managers on matters of customer retention, repurchase, long-term relationship and profitability. With such importance, the concept attracts attention from researchers. However, literature review on loyalty shows a poor in number of studies for bus service. The situation happens probably due to a low attention on bus service and an unsolved controversy in the concept of loyalty.

Different views of researchers on the concept of loyalty create an unsolved controversy. Researchers first pursued behavioral approach (e.g., Cunningham, 1956; Tucker, 1964; Kahn *et al.*, 1986) which bases on actual behavior. However, behavioral approach cannot realize spurious loyalty (Day, 1969). Also, the approach is unable to guide managers on driving customer behavior in a systematic manner (Li and Petrick, 2008). To overcome the weakness of the behavioral approach, some recent studies suggested a composite approach that attitudinal and behavioral aspect should be the two facets of loyalty (e.g., Day, 1969; Jacoby and Chesnut, 1978; Dick and Basu, 1994; Oliver, 1997, 1999). Up to date, there were probably a dominant number of researchers following the composite approach although some researchers are still loyal to one-dimensional construct (Li, 2006; Li and Petrick, 2008).

Despite the fact that the composite approach is a favorable approach of numerous researchers, the approach is still not comprehensive. First, it is inadequate for designing loyalty programs (Rundle-Thiele, 2005). In addition, the absence of a consent understanding about loyalty leads companies to unprofitable outcomes, and thus it squanders valuable marketing resources (Reizartz & Kumar, 2002). Moreover, contradict findings still exist

among researchers. Some authors suggested a predictive path leading from attitudinal loyalty to behavioral loyalty (e.g., Dick and Basu, 1994; Russel-Bennett *et al.*, 2007; Bandyopadhyay and Martell, 2007; Li and Petrick, 2008). In contrast, others did not support for the predictive path of attitudinal loyalty towards behavioral loyalty (e.g., Khatibi *et al.*, 2002; Stoel *et al.*, 2004; Bodet, 2008).

One possible reason for the intangible situation of the composite approach is that there was only a general agreement on behavioral loyalty but not on attitudinal loyalty. Researchers had the same awareness about conceptualization as well as operation of behavioral loyalty (ex., Cunningham, 1966; Dick and Basu, 1994; Hammond *et al.*, 1996). However, there was no unanimous result available for attitudinal loyalty despite the fact that most of studies exploring the concept of loyalty (e.g., Gahwiler and Havitz, 1998; Iwasaki and Havitz, 1998; Amine, 1998) originate from psychology attachment. A possible explanation for the disagreement in attitudinal loyalty concept is that there was a variety in ways of assumption when hypothesizing concept of attitudinal loyalty.

Therefore, to strengthen the composite approach, it is necessary to reexamine the concept of loyalty through its components, especially through attitudinal component. Furthermore, there is a need to have a revised structural relationship that successfully describes the essence of loyalty. A success in describing the essence of loyalty will enrich the little number of studies on loyalty within bus service context.

2. LITERATURE REVIEW

2.1 Determinants of Individual Behavior

The concept of loyalty should be put into a broad view which involves in determinants of individual behavior. A core argument for the composite approach of loyalty is to use attitudinal and behavioral aspect to describe loyalty of an individual. In other words, it is desirable to get the insight understanding on an attitudinal-behavioral relationship. Therefore, an adequate awareness how an individual result his behavior toward a given subject will help to reveal how his loyalty is being established.

Customer behavior has been studied under several theoretical frameworks such as Technology Acceptance Model (TAM; Davis, 1989), Theory of Planned Behavior (TPB; Ajzen, 1991), Health Action Process Approach (HAPA; Schwarzer, 1992) and Four-stage loyalty model (Oliver, 1997). Technology Acceptance Model (TAM; Davis, 1989) deals with antecedents of attitude, attitude, behavioral intention, and actual system use. Theory of Planned Behavior (TPB; Ajzen, 1991) seeks for structural relationship between attitude, social norms, perceived behavioral control, intention and behavior. Health Action Process Approach (HAPA; Schwarzer, 1992) considers motivational self-efficacy, outcome-expectancies and risk perception as predictors of intention. Toward the actual use, recovery-self-efficacy and planning are mediators of motivational self-efficacy and intention respectively. Four-stage loyalty model (Oliver, 1997) focuses on consequent connection between cognitive loyalty, affective loyalty, conative loyalty and action loyalty.

It is realizable that intention takes an essential role in each of the mentioned models. Particularly, the authors tried to explore how human perception transfers to intention and later becomes actual behavior. There was only Oliver (1997) does not use the term "intention", however, the definition of his conative loyalty is an overlap of intention. Thus, it could help to confirm the existence of intention and its mediated role toward attitudinal-behavioral relationship.

Moreover, there was a notion of social norm in TPB model as well as in some new versions of TAM (e.g., Schepers and Wetzels, 2007). Social norm has impacts on intention, thus, it indirectly influences to the inconsistency between attitude and behavior (Wicker, 1969; Ajzen and Fishbein, 1980; Dick and Basu, 1994). In addition, transport researches confirmed the role of social norm in mode choices (e.g., Bamberg *et al.*, 2003; Health and Gifford, 2002). Therefore, it is possible to assume that an action's owner drives his behavior by attitude and social influences. This is in accordance with the explanation of social impact theory (Latane, 1981) and a theory of social custom (Akerlof, 1980). To conclude, it is necessary to test the effect of social norm on the attitudinal- behavioral relationship.

Literature has already recorded the impact of habit on a view of switching mode (e.g., Chen and Chao, 2011; Chen and Lai, 2011). Also, as suggested by Dick and Basu (1994), situational factors may introduce the an inconsistency linkage between attitudinal loyalty and behavioral loyalty. In addition, stable situational contexts are often considered as a necessary condition for individual to nourish habits (Bamberg *et al.*, 2003). Therefore, it is reasonable to examine the effect of habit on the attitudinal-behavioral relationship.

To sum up, the concept of loyalty should be described via a consequential process of individual behavior. The process includes three main phases. The initial phase comes up with an establishment of attitudinal loyalty. The second phase is a mediated phase with the role of conative loyalty (intention). The last phase results action loyalty (actual behavior). Beside, social norm and habit have their impacts on the second phase. Among those phases, the initial phase receives different views from researchers. Therefore, it should be deeply examined in coming studies.

2.2 Attitude Study

Supporting a core point that the essence of attitudinal loyalty is an attitude (Hartel and Russell-Bennett, 2010), it is possible to confirm the multi-facet construct of attitudinal loyalty. In recent studies, researchers argued that it is not appropriate to have only a single attitude toward a given object. Some researchers provided evidences for multiple attitudes toward a given object (e.g., McConnell *et al.*, 1997; Haddock and Zanna, 1998; Ajzen, 2001). The idea of multidimensional construct of attitude is in accordance with a well-known conceptualization of attitude, the expectancy-value model (Fishbein & Ajzen, 1975; Feather, 1982). Recent development of the expectancy-value model concluded that attitude relies on both affection and cognition (Ajzen, 2001).

There were several researchers advocated their efforts on the multidimensional construct of attitudinal loyalty (ex., Back and Parks, 2003; McMullan & Gilmore, 2003; Harris and Goode, 2004; Jones and Taylor, 2007; Lee *et al.*, 2007; Li and Petrick, 2008; Hartel and Russell-Bennett, 2010; Han *et al.*, 2011). Oliver (1997, 1999) introduced a four-step model of loyalty. Then the model had a subsequent test via Harris and Goode's work (2004). The model recently received support from Han *et al.* (2011) with a proposed multi-dimensional construct for each of loyalty phase. Back and Parks (2003) seek to an independent role of cognitive, affective and conative loyalty. They ignored the assumption of Oliver (1997, 1999) on a sequential order of loyalty. Rather, they argued that the three aspects are indicators of a variable named attitudinal loyalty. This idea received support from Li and Petrick (2008) who follow a widely accepted tripartite model of attitude structure (e.g., Breckler, 1984; Eagly and Chaiken, 1993). Attitudinal loyalty is also a focus of Lee *et al.* (2007). However, the authors excluded cognitive and conative loyalty out of the attitudinal due to an assumption that cognitive loyalty is more likely to be an antecedent and conation is likely to be behavioral intention. With such convincement, they supported for a

three-dimensional loyalty including attitudinal, conative and behavioral loyalty. Next, Jone and Taylors (2007) contributed to the disagreement in this topic by taking cognitive loyalty back to attitudinal loyalty, pushing conative loyalty close to behavioral loyalty, and encouraging a two-dimensional conceptualization of loyalty. Finally, the multifaceted construct of attitudinal loyalty received support from Hartel and Russel-Bennett (2010) with their effort on an adaption of Katz's (1960) model. To conclude, researchers, even with different approaches, went to the confirmation on multidimensional construct of attitude. Furthermore, the separate roles of cognition and affection were a common acceptance.

However, it is suspicious that affection and cognition are not enough to present attitudinal loyalty. Katz (1960) defined four motivational bases for attitude including utilitarian function, value-express function, ego-defensive function and knowledge function. Hartel and Russell-Bennett (2010) then used the four functions to examine roles of cognitive loyalty and affective loyalty (via emotional loyalty). Their results showed that not all the hypotheses get support from data. This failure raises a hypothesis that cognition and affection are insufficient to capture the essence attitudinal loyalty.

The above argument has a good base in term of conceptualization. There was a general acceptance on the definition of cognition and affection. Cognition develops from attributes of a product/service. Affection implies an emotion and satisfaction related to a product/service (Oliver, 1997, 1999). A closer view showed that emotion relates to pleasurable responses when using product/service and satisfaction is a judgment of perceived difference between expectation and actual product/service quality (Han *et al.*, 2009). The definitions make cognitive loyalty and affective loyalty close to product/service quality. Thus, it is possible to assume that cognition and affection solely cover an object's attribute-related aspect of loyalty. However, there exist non-attribute-related factors that are separate with current service/product quality (via attributes), for example, stimulated concern or hidden pressures if using service/product. The existence of the non-attribute-related factors is compatible with an argument proposed by Sojka and Giese (1997) that involvement and risk may have impacts to individual's actual processing.

In addition, related to a multidimensional construct, literature in forming a construct suggested two types of model. They are formative and reflective model. According to Jarvis *et al.* (2003), the key factor when deciding a construct is formative or reflective in nature is based on the conceptual definition of construct. The authors also provided other suggestions. The first was to examine whether the indicators define characteristic of the construct or not. The second was to check whether changes in the indicators will cause changes in the construct and vice versa or not.

Recent development in the concept of attitude made attitudinal loyalty natural to be a formative construct. Ajzen (2001) indicated that people at the same moment of time hold two different attitudes toward a given object. In which, one of the attitudes is implicit and the other is explicit. The author also provided a consensus that attitude is a summary evaluation of a psychological object. Base on the understanding, it is natural to assume that attitudinal loyalty should be defined as a formative construct with causal factors comprising service-quality-related aspect and non-service-quality-related aspect.

3. OBJECTIVE

Based on the above discussions, there were several gaps in literature of loyalty study. First, some researchers ignored the mediated role of intention (conative loyalty) by assuming intention as a part of attitudinal loyalty (e.g., Back and Park, 2003; Li and Petrick, 2008) or as

a part of behavioral loyalty (e.g., Jone and Taylors, 2007). Others considered the mediated role of intention, but they refused the role of cognition in creating attitudinal loyalty (e.g., Lee *et al.*, 2007). Besides, a sequential order of loyalty hides the joint effect of cognition and affection (e.g., Oliver, 1997, 1999; Harris and Goode, 2004, Han *et al.*, 2011). In addition, Hartel and Russel-Bennett (2010) succeeded in proving the joint effect of affection and cognition, but they did not consider the components in a whole structure of loyalty. Finally, most of the mentioned studies did not consider formative construct of attitudinal study as well as impacts of social norm and habit toward attitudinal-behavioral relationship.

Therefore, objective of this study is to elaborate the concept of loyalty base on the consequential framework of attitudinal-intention-actual behavior with a focus on formative construct of attitudinal loyalty and impacts of social norm and habit. An excavation should be conducted on multidimensional construct of attitudinal loyalty to succeed in capturing the essence of attitudinal loyalty such as the non-service-quality-related aspect. Furthermore, the proposed concept must be well-demonstrated through a structural relationship in which the roles of intention and social norm and habit are clearly drawn.

4. THE PROPOSED MODEL

4.1 Conceptual Development

The major purpose of setting loyalty concept is to help managers to recognize a customer's pattern toward a given service. Seeking to the purpose, the concept must be a comprehensive representative of reality as well as customer psychology attachment. The requirement has a certain effect on a popular composite approach with attitudinal and behavioral aspect of loyalty. With such, to assure the originality of loyalty and to be close to the requirement of practice, the definition of attitudinal loyalty must be adhered with attitude and the definition of behavioral loyalty should not be away from actual behavior.

This study provides definitions of loyalty as the follows. Attitudinal loyalty implies a general evaluation of a person toward a given service in which the evaluation covers two bases, one is a motivation originated from current perceived service quality and the other comes from related experiences, whereas, behavioral loyalty is termed as a behavior-oriented feedback of a person appeared after perceiving a general evaluation toward a given object. An original idea for the proposed behavioral loyalty rises from an argument that actual behavior is not the only construct to show-off the loyalty. Rather, the loyalty yet exposes via intention. The natural meaning of intention allows defining itself as a spiritual behavior. It means that when a person has intention, he has already performed an action in his mind and waiting for necessary conditions to transfer it into the real life. Finally, based on Dick and Basu (1994)' definition, this study defines loyalty as the relationship between attitudinal loyalty and behavioral loyalty. The difference compared with Dick and Basu (1994)'s definition is that general evaluation and behavior-oriented feedback replace relative attitude and repeat patronage respectively. Hence, within a setting of service context, a "true loyalty" customer has a strong positive in general evaluation and a strong behavioral feedback that ends up with a high in actual use.

4.2 The Proposed Structural Relationship

The proposed conceptual model of loyalty includes attitudinal loyalty and behavioral loyalty. Attitudinal loyalty is a higher-order formative construct. The construct stands for a final

emotional product resulted after a struggle between cognitive loyalty, affective loyalty and a new aspect named implicit loyalty. Implicit loyalty refers to people's perception which is not activated by attributes of a subjective product/service. The perception may be resulted from a complicated psychological process involving both mental and physical aspect of an individual. For example, attitude of a person toward a bus service may be influenced by his traveling experiences related to other bus services. Besides, behavioral loyalty is a behavioral product originated from other struggle that aims to find out a respective feedback respect to the general evaluation. The later struggle is consecutive rather than simultaneous. It begins with conative loyalty and has an end with action loyalty. Figure 1 illustrates the whole structure of concept.

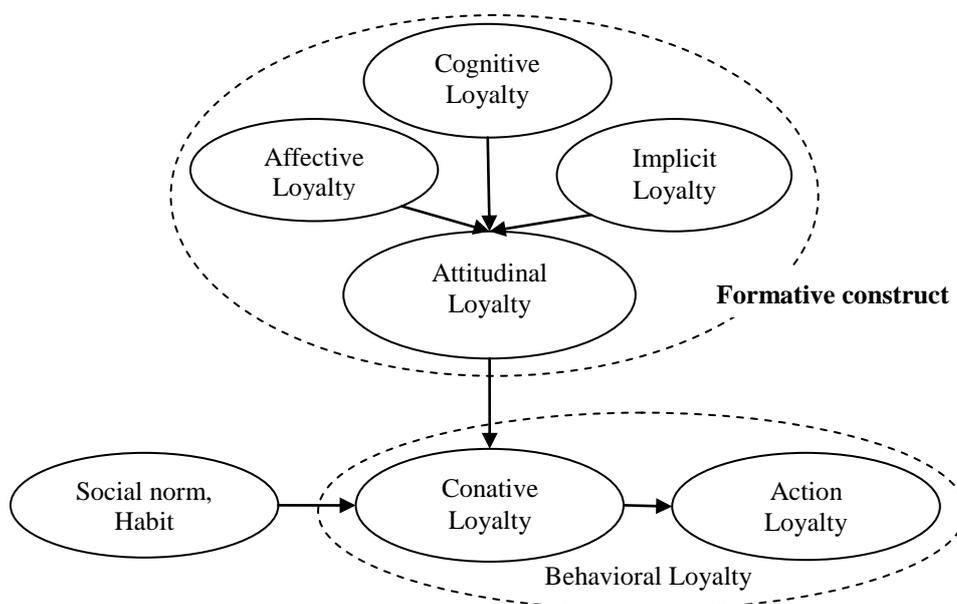


Figure 1. Proposed structure of loyalty

With regard to suggestions provided by literature review and the proposed definitions, this study claims that service-quality-related aspect and non-service-quality-related aspect are partial causes of attitudinal loyalty. Affection and cognition are the two facets representing for service-quality-related aspect of attitudinal loyalty, whereas, implicit loyalty presents for the non-service-quality-related aspect of the construct. To conclude, attitudinal loyalty should be defined as a formative construct with three causal factors including cognitive loyalty, affective loyalty and implicit loyalty.

According to the new defined, behavioral loyalty includes conative loyalty and action loyalty. It does not restrict within only actual behavior with regard to an assumption of various researchers (Hammond *et al.*, 1996; Russel-Bennett *et al.*, 2007). Conative loyalty is as behavioral intention (Oliver, 1997), whereas, action loyalty is as actual action. Theory of Planned Behavior (Ajzen, 1991) strengthened the independent roles of conative loyalty and action loyalty as well as the predictive path from conative loyalty to action loyalty. Furthermore, the proposed model implements suggestions provided in literature by considering impacts of social norm and habit toward conative loyalty.

Another effort of the model is to expand a loyalty topology proposed by Dick and Basu (1994) from one phase into two phases. Dick and Basu (1994) suggested a typology created by relative attitude and repeat patronage. Each of relative attitude and repeat patronage has a

low and a high. The combination between the two dimensions brings four types of loyalty including no loyalty, spurious loyalty, latent loyalty and loyalty. This study comes up with an additional consideration on phases of time. Based on the nature that intention (conative loyalty) appears separately compared with actual behavior, it is reasonable to argue that users' loyalty will change accordingly toward different moments of time. Therefore, there should have two typologies. One typology shows a combination between attitude and intention. Other typology is created by attitude and action loyalty (see Figure 2). As such, when transferring from intention into actual use, some users having a high in intention may become a low in actual use and reversely, some users having a low in intention can come with a high in actual use. Situational factors (Dick and Basu, 1994) and Planning (Schwarzer,1992) are perhaps the causes of the problem due to their extraneous characteristics.

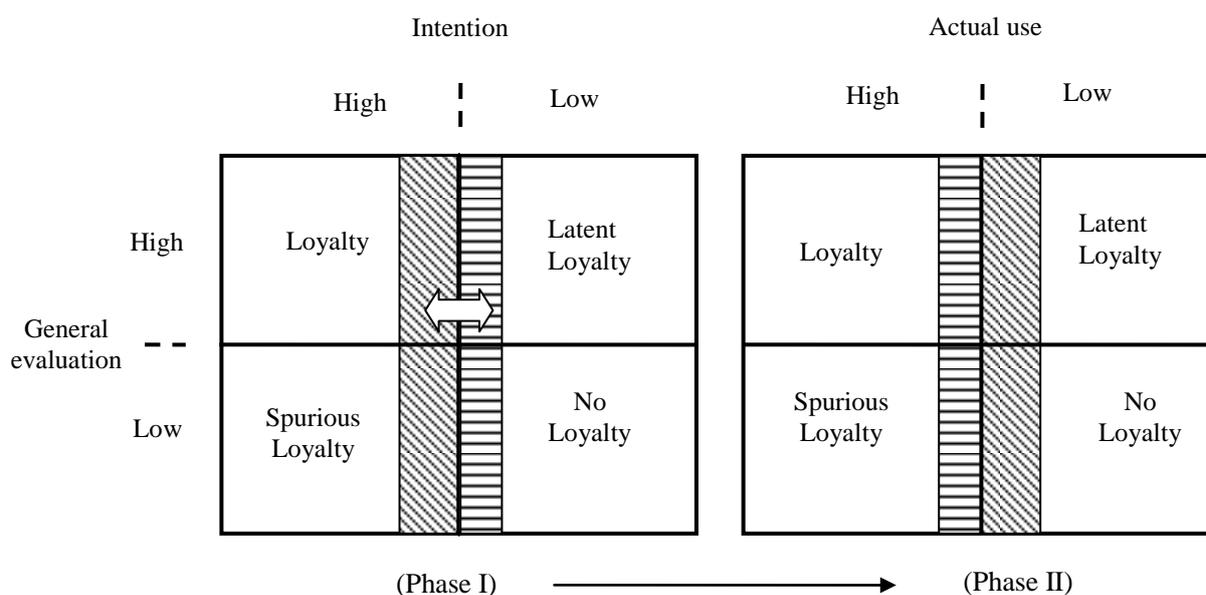


Figure 2. Categories of users' loyalty

5. METHOD

5.1 Data Collection

The data contains results collected from a questionnaire survey in Hidaka city, Saitama prefecture, Japan. The city has around 55,000 people and bus service in the city comprises two routes and five lines with total distance of 35.4 km and around 700 daily users. Participants received the questionnaire via post. The time to answer questions is from September 24, 2012 to October 5, 2012. There are 7500 questionnaires distributed. Each of the questionnaires gathers two types of information. The first type is about hypothetical constructs of loyalty on bus service. The other is about respondents' demographic information. The total number of received questionnaires is 554 (7.39%). After eliminating unusable questionnaires due to uncompleted answers, there are 333 (4.44%) questionnaires used for analysis. Table 1 provides general characteristics of respondents.

Table 1. General characteristics of respondents

Characteristics	Statistics
Gender	Male (48.0%), Female (52.0%)
Age (year old)	≤17 (1.2%), 18-29 (6.0%), 30-39 (8.1%), 40-49 (14.1%), 50-54 (6.6%), 55-59 (9.3%), 60-64 (13.8%), 65-69 (13.5%), 70-74 (18.6%), 75-79 (5.7%), ≥80 (3.0%)
Time of residence (year)	≤1 (3.3%), 1-5 (7.8%), 5-10 (12.6%), 10-30 (35.7%), ≥30 (40.2%), unknown (0.3%)
Driving license	Have (76.9%), Don't have (21.0%), Other (2.1%)

5.2 Measures

Respondents answer one to three items designed to measure each of the predictors: cognitive loyalty, affective loyalty, implicit loyalty, attitudinal loyalty, social norm (via descriptive norm), habit, conative loyalty and action loyalty (via frequency of use). Each of the items requires respondents to choose one answer from 1 (strongly agree) to 5 (strongly disagree) in Likert-type scale. There is only an exception for a question on action loyalty (frequency of use) where the answer comes with real number filled by respondents. Coding is then applied to the exceptional answer as the follows: 1.(Frequency \geq 5 days/week), 2.($2\leq$ Frequency $<$ 5), 3.($0<$ Frequency $<$ 2), 4. (Frequency=0). A list of items used for constructs is summarized in Table 2.

Table 2. List of constructs measured by the questionnaire survey

Construct	Items/questions
Cognitive Loyalty (Cronbach's alpha = 0.79)	Q1. Overall, bus service quality is good. Q2. Compare with price you pay, the service is valuable.
Affective Loyalty (Cronbach's alpha = 0.90)	Q1. You love to use bus service in your daily life. Q2. Compared to other transport modes, you prefer to use bus in your daily life.
Implicit Loyalty (Cronbach's alpha = 0.81)	Q1. You find no difficulty to use bus in daily life. Q2. Using bus is an easy thing for you to do. Q3. Your freedom to use bus in daily life is high.
Attitudinal Loyalty	Q1. If being asked to give advice, you will recommend the bus service to other people.
Conative Loyalty (Cronbach's alpha = 0.94)	Q1. Bus is one of priorities for your daily travel. Q2. You strongly intend to use bus in daily life. Q3. The possibility to daily use bus is high.
Descriptive Norm (Cronbach's alpha = 0.93)	Q1. Number of people using bus is increasing nowadays. Q2. Most of people you know tend to use bus more nowadays.
Habit	Q1. If you have alternatives, you can easily change your most frequent-use transport mode
Action Loyalty	Q1. On average, how many days per week do you use bus?

5.3 Modeling Approach

Issues on construct validity and related measurement have received attention of numerous researchers (e.g., Churchill, 1979; Peter, 1981). With such reason, internal consistency reliability (e.g., Cronbach's alpha) and factor analysis become common in academic studies to provide evidence of convergent. Even so, the development of structural equation modeling (SEM) provides a stronger tool for dealing with the issue of construct validity. First, the SEM differentiates measurement model that concerns the constructs to their measures, from the

structural model which concerns the constructs to each other (Jarvis *et al.*, 2003). Second, the technique comes with various tests of construct validity, convergent validity and discriminant validity (e.g., Bagozzi, 1980).

The appearance of SEM provided solutions for problems related to unobserved construct. According to Fornell and Bookstein (1982), the observed indicators of unobserved construct can be viewed either as reflective or formative. This leads to a careful choice between formative and reflective models because the misspecification can cause inaccurate conclusions about the structural relationship (Law and Wong, 1999). To assist the choice-pick up, Jarvis *et al.* (2003) provided suggestions built on SEM literature. However, an additional problem is the identification of formative model. To overcome the trouble, researchers provided several methods including adding two reflective indicators, adding two reflective constructs and adding one reflective indicator and one reflective construct (e.g., MacKenzie *et al.*, 2005; Jarvis *et al.*, 2003; Diamantopoulos and Winklhofer, 2001).

Suggestions provided on SEM literature enabled capability to simulate the formative construct of attitudinal loyalty. As already discussed, the construct has three causal factors including cognitive loyalty, affective loyalty and implicit loyalty. To deal with identification problem, attitudinal loyalty is explained as a MIMIC factor (Joreskog and Goldberger, 1975) with both effect and cause indicators. While the reason to obtain causal indicators stays as one of core arguments of the proposed model, recommendation is as the selected reflective indicator. The reason to choose reflective indicators originates from suggestions in literature that consequences of loyalty comprise search motivation, resistance to counter persuasion and word of mouth (e.g., Dick and Basu, 1994). Among those consequences, East *et al.* (2005), after testing several case studies, pointed out that recommendation is predicted by attitude. In addition, in the proposed structural relationship, there is a path from attitudinal loyalty to conative loyalty – a reflective construct. Therefore, this study considered a case that attitudinal loyalty is a formative construct having one reflective indicator and one path to a reflective construct. Furthermore, following the guidance of Kline (2006), a scale has been assigned to attitudinal loyalty by fixing the factor loading of the global indicator to one.

6. RESULT

6.1 Descriptive Analysis

Table 3 showed the means, standard deviations and Pearson correlations for constructs of loyalty. Attitudinal loyalty has a mean score of 2.82 denotes that people have a neutral attitude toward bus service. It should be a note that attitudinal loyalty has a well correlated relationship with cognitive loyalty, affective loyalty and implicit loyalty. It means that people's attitude may get influenced by the mentioned factors. Furthermore, the correlation between attitudinal loyalty and conative loyalty is stronger than that of between attitudinal loyalty and action loyalty. It suggested that there may have other impacts on people's intention before the intention becomes a real action.

Table 3. Means, standard deviations, and correlations for loyalty's variables

Variables	Mean	SD	1	2	3	4	5	6	7	8
1.Cognitive Loyalty	2.43	0.94	1							
2.Affective Loyalty	3.06	1.20	.45**	1						
3.Implicit Loyalty	2.40	1.10	.41**	.64**	1					
4.Attitudinal Loyalty	2.82	1.24	.48**	.72**	.57**	1				
5.Conative Loyalty	3.16	1.38	.44**	.79**	.64**	.68**	1			
6.Descriptive Norm	3.76	1.07	.24**	.47**	.30**	.44**	.51**	1		
7.Habit	3.74	1.13	-.05	.06	.08	.02	.003	.14*	1	
8.Action Loyalty	3.43	0.89	.31**	.58**	.45**	.48**	.63**	.33**	.05	1

Note: *p<0.05; **p<0.01; Sample size N = 333.

Action loyalty has an average score of 3.43 which indicates a low level of bus use. People use bus less than two days per week. In addition, significant correlations were found between action loyalty and other constructs. Among those, conative loyalty has the strongest correlation, followed by affective loyalty, attitudinal loyalty and others. Although cognitive loyalty directly relates to perceived service quality, however, it stands at the lowest position among constructs which are correlated with action loyalty. While descriptive norm significantly correlates with action loyalty, there is no similar report for the relationship between habit and action loyalty.

6.2 Estimation of the Proposed Model

The problem of multicollinearity is unexpected property of formative models because the substantial correlations among formative indicators may lead to an unstable influence of individual indicators on latent variable. To deal with that, researchers suggested indicator elimination based on the variance inflation factor (VIF) (e.g., Diamantopoulos and Winklhofer, 2001). The acceptable range for the VIF value is less than 10.0 (Diamantopoulos *et al.*, 2008), whereas, the range for VIF's tolerance is higher than .3 (Diamantopoulos and Sigauw, 2006). However, VIF score only takes a role of a reference index. Decision on indicator elimination should be adhered with conceptual consideration (Diamantopoulos and Winklhofer, 2001). Originated from suggestions of Diamantopoulos and Winklhofer (2001), to calculate VIF score, this study used recommendation as a global measure of attitudinal loyalty. As can be seen from Table 4, all VIF scores and their tolerances for the formative construct of attitudinal loyalty are well-satisfied the mentioned cut-off values.

Table 4. Collinearity statistic

Model	Standardized Coefficients		t	Sig.	Collinearity Statistic	
	Beta				Tolerance	VIF
1 (Constant)			4.200	.000		
Affective Loyalty	.719		18.814	.000	1.000	1.000
2 (Constant)			1.286	.199		
Affective Loyalty	.629		15.217	.000	.800	1.250
Cognitive Loyalty	.201		4.858	.000	.800	1.250
3 (Constant)			.863	.389		
Affective Loyalty	.545		11.066	.000	.550	1.819
Cognitive Loyalty	.179		4.312	.000	.776	1.289
Implicit Loyalty	.147		3.054	.002	.574	1.741

The correlations between formative indicators are not meaningful (Bagozzi, 1994; Nunally

and Bernstein, 1994). In the same conclusion, Bollen and Lennox (1991) explicitly give a warn that reliance on internal correlation for indicator selection may lead to deleting valid measure. As such, the correlation among formative indicators of attitudinal loyalty resulted in structural relationship of loyalty could be seen as impacts of unexplained factors. The issue related to whether or not to keep two formative indicators having substantial correlation, therefore, leans on the VIF scores and their tolerances.

The validity assessment of the proposed model depends on individual indicator validity and the overall fit indexes (Diamantopoulos and Winklhofer, 2001). The γ -parameters capture the contribution of the individual indicator to the construct, therefore, items with the non-significant parameters are candidates for elimination (Bollen, 1989). In addition, there are several indexes used to assess the model validity. According to suggestion of Hair *et al.* (2005), Goodness-of-Fit Index (GFI), Adjusted Goodness-of-Fit Index (AGFI), Normed Fit Index (NFI) have a cutoff value of .90 indicating an acceptable model. The requirement for samples with a number of observations greater than 250 and a number of variables in between 12 to 30, is that the value of Root Mean Square Error of Approximation (RMSEA) is less than or equal to .07 and the value of Comparative Fit Index (CFI) is higher than or equal to .92. As shown in Figure 3, results show a good support for theoretical hypotheses. All of values of the γ -parameters are significant. The overall fit indexes fall within the acceptable range.

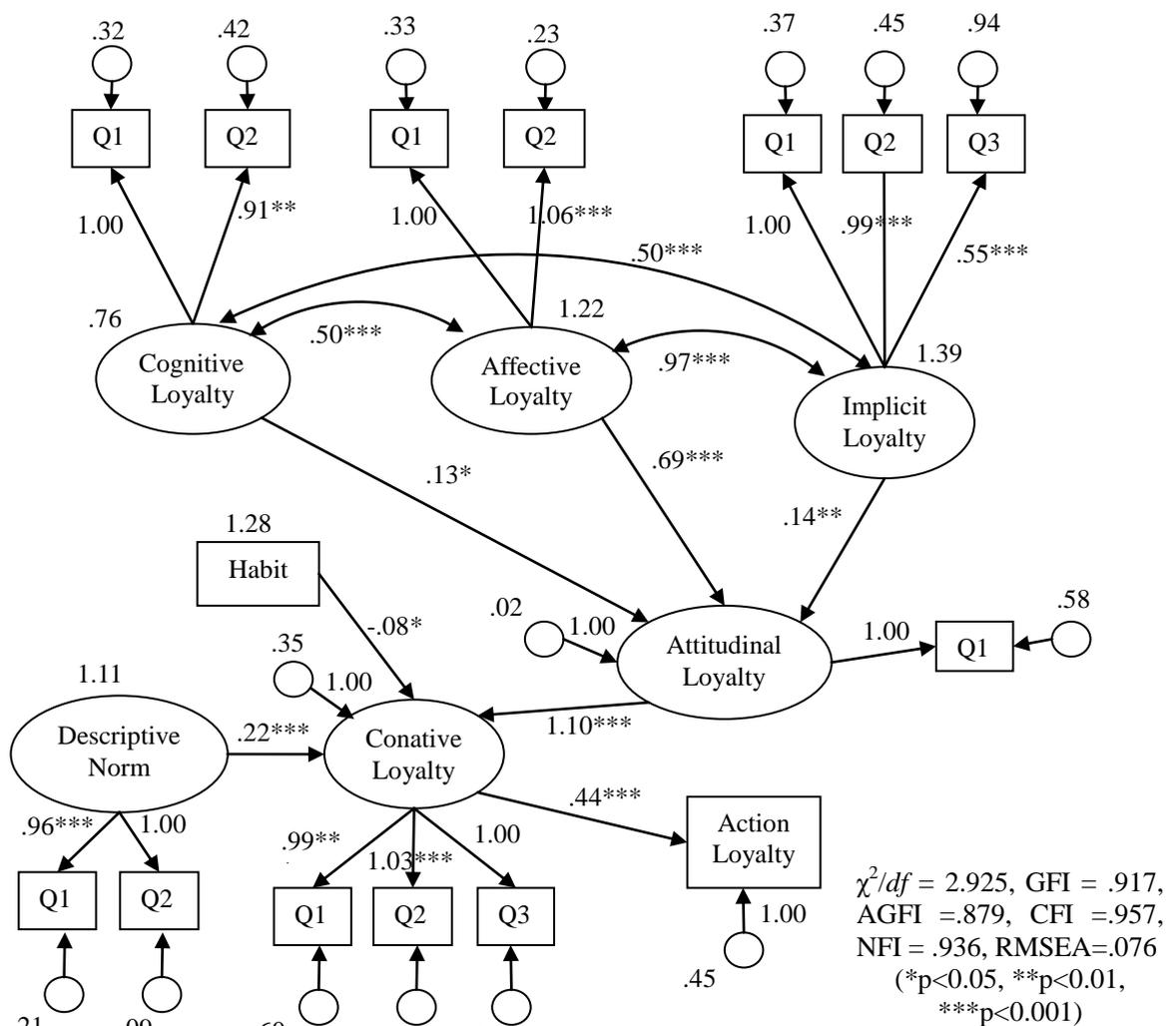


Figure 3. Structural equation model: estimation results

7. DISCUSSION

This study was an effort to elaborate the concept of loyalty using data collected from bus service. The proposed theoretical concept was successfully defined. The structural relationship of constituent components of loyalty has received a good support from SEM results. Based on a deep examination on related literatures of loyalty, the study uses the concurrent findings of earlier works as core points to hypothesize loyalty concept and constituent components of loyalty. It provides an innovative cultivation on the multi-dimensional construct of attitudinal loyalty with an evidence for the existence of implicit loyalty. In addition, it contributes to the loyalty literature by a highlight in new structural relationship of components of loyalty with a test of formative construct of attitudinal loyalty and effects of social norm and habit. Furthermore, with a lack of studies focusing on conceptual issue of loyalty within bus service, this study is as an initial attempt to examine the insight of loyalty using data from the discipline.

On a favor of the suggestion on composite approach (e.g., Dick and Basu, 1994; Oliver, 1997, 1999), the study added up an additional support for a multi-dimensional construct of loyalty with a focus on attitudinal loyalty. According to the proposed model, attitudinal loyalty includes cognitive loyalty, affective loyalty and implicit loyalty, while, behavioral loyalty depends on different moments of time to be conative loyalty and action loyalty. Those components have been successfully integrated to the proposed structural relationship of loyalty due to a good fit from SEM results (see Figure 3). In addition, the proposed model supported for common findings in the literature. Attitudinal loyalty has a correlation of 1.10 ($p < 0.001$) on conative loyalty. In turn, conative loyalty has the coefficient of .44 ($p < 0.001$) on action loyalty. In sum, attitudinal loyalty has a positive influence on action loyalty. This finding is in accordance with other conclusions from literature (e.g., Russel-Bennett *et al.*, 2007; Bandyopadhyay and Martell, 2007). To conclude, results supported to the composite approach with a positive linkage between attitudinal loyalty and behavioral loyalty.

According to the awareness of the authors, the present study was the first effort aiming to the use of formative construct in describing the concept of loyalty. Related literature has already getting familiar with an idea of using higher-order construct to illustrate the nature of loyalty (e.g., Lee and Petrick, 2008; Jone and Taylor, 2007). While many of the studies were loyal with reflective construct, some authors did not get support from their data (e.g., Lee and Petrick, 2008). A possible cause for the disconnection between hypotheses and data may come from a requirement for reflective construct that causal factors co-vary with each other. However, more importantly, the high-order construct of loyalty with solely reflective measures may not capture the nature of loyalty concept. As such, this study has successfully introduced the higher-order construct of attitudinal loyalty with formative measurement model. The success in forming attitudinal loyalty as formative measurement model, however, does not necessary to reject reflective measurement model. On a view point of higher-order construct, the formative measurement model is as an additional option for creating types of model. Adapted from Jarvis *et al.* (2003), there are several types of higher-order formative models including (I) formative first-order & formative second-order, (II) reflective first-order & formative second-order, and (III) formative first-order & reflective second-order. The proposed construct of attitudinal loyalty, therefore, belongs to type II with reflective constructs of cognitive loyalty, affective loyalty and implicit loyalty as first-order and formative construct of attitudinal loyalty as second-order.

The proposed concept of attitudinal loyalty received a support from data for adding an aspect of implicit loyalty. The three causal factors of attitudinal loyalty have significant paths to attitudinal loyalty. These confirmed the existences of the aspects in representing the

construct. Among those, affective loyalty has the strongest contribution, followed by implicit loyalty and cognitive loyalty. Although implicit loyalty has a weak influence on attitudinal loyalty with a coefficient of .14 ($p < 0.01$), it is appropriate to confirm the existence of the construct as an aspect of attitudinal loyalty. Importantly, it supported for the argument that affection and cognition are not enough to represent the construct of attitudinal loyalty.

This study was one of initial efforts to examine the insight of loyalty in bus service. Although marketing literature and other disciplines acknowledged the multi-dimensional construct of loyalty, the concept still remains as an unexamined conceptual point within bus service context. The bus service's literature recorded a few efforts on loyalty (e.g., Wen *et al.*, 2005; Jeowono and Kubota, 2007; Minser and Webb, 2010). However, within the few studies, authors only considered influencing factors on a single construct of customer loyalty. In addition, there were a few reports on social norm as influencing factors toward loyalty. Therefore, this study was as one of first attempts to examine the effect of social norm on a multi-dimensional construct of loyalty. Empirical study showed that the correlations of .22 ($p < 0.001$) between descriptive norm and conative loyalty indicates a weak but significant relationship. The finding pointed out a compatible conclusion compared with other confirmations on the existence of descriptive norm (e.g., Ravis and Sheeran, 2003; Heath and Gifford, 2002). It also provided an empirical examination for the conceptual issue suggested by Dick and Basu (1994) about the role of social norm toward attitudinal-behavioral relationship.

With small effects of social norm and habit on conative loyalty, this study seeks to support a positive path from attitudinal loyalty toward behavioral loyalty. There exists a debate between researchers supporting a predictive path from attitudinal loyalty to behavioral loyalty (Dick and Basu, 1994; Russel-Bennett *et al.*, 2007) and others arguing for the nonexistence of the predictability (e.g., Bodet, 2008; Khatibi *et al.*, 2002). To solve the problem, the proposed model is theoretically expected to obtain a flexible outcome by considering the roles of social norm and habit in the concept of loyalty. Based on a suggestion by Ravis and Sheeran (2003) that descriptive norm has a medium to strong effect toward intention, this study only examines the impact of descriptive norm. Results from the case study showed weak influences from both descriptive norm and habit toward conative loyalty, whereas, that of from attitudinal loyalty is strong. The findings suggested a low possibility to obtain negative attitudinal-behavioral relationship even there is a need to consider other cases before having any concrete conclusion on the matter.

There was a warning about the impact of habit toward conative loyalty even the impact is small. As suggested by Dick and Basu (1994), situational factors may introduce an inconsistency linkage between attitudinal loyalty and behavioral loyalty. In addition, stable situational contexts are often considered as a necessary condition for individual to nourish habits (Bamberg *et al.*, 2003). Therefore, it is reasonable to examine the effect of habit on the attitudinal-behavioral relationship. Literature of bus service showed a much focus on habit in a view of switching mode (e.g., Chen and Chao, 2011; Chen and Lai, 2011), however, there was no study aiming to consider habit associated with the attitudinal-behavioral relationship. As such, this study took a lead in considering the impact of habit under a framework of loyalty concept. Attention on habit of the study was not specific at any mode use. In stead, the habit measure seeks to a difficulty in changing frequent-use transport mode. The consideration aims to capture a general view on habit change, rather than on switching mode same as conventional transport studies. Results from the case study showed that habit has a negative influence to conative loyalty with a correlation of -0.08 ($p < 0.05$). It indicated that people easy in changing frequent-use mode tend to reduce intention to use bus. Therefore, the finding gives a warn that if people have a better alternative they will less use bus even the

impact between habit and intention is weak.

An expansion on typology of loyalty might be helpful for bus managers in categorizing customers. Sticking with an original purpose of loyalty concept that helps managers recognize customer's pattern toward a given service, Dick and Basu (1994) have provided a typology of loyalty without an empirical basis. However, the typology got different feedbacks among authors supporting for the acceptance (e.g., Bandyopadhyay and Martell, 2007; Garland and Gendall, 2004) and others with the rejection (e.g., East *et al.*, 2005). This research did not aim to any additional argument on the topic, rather, it naturally expanded the typology accordingly with two phases of time. One typology reflects the pattern of loyalty when an action is stored as spiritual behavior. The other typology describes the pattern when the action becomes a real one. The purpose of the division is to provide different recognitions on customer loyalty at different moments of time. Thus, managers will be able to give respective interventions accordingly.

The results of this research come up with some limitations. First, although arguing for the existence of social norm, however, the study did not examine all types of social norm. Suggestion from literature shows that both subjective norm and descriptive norm have impacts on intention (e.g., Ravis and Sheeran, 2003; Heath and Gifford, 2002). Therefore, future researches should widen the scope of social norm to provide a deeper understanding on the role of social norm toward the attitudinal-behavioral relationship. Second, to overcome the issue of identification on formative structure, the study has employed MIMIC method. Even the method makes sense to interpret the nature of attitudinal loyalty, it has a technical limit with scaling issue. A 1.0 loading factor assigned to the global indicator makes attitudinal loyalty solely dependent on the indicator. In fact, it will be more convincing to obtain more than one reflective indicator for attitudinal loyalty. Along with the improvement in representing the construct, there is a possibility to obtain more evidence on validity assessment with the confirmative factor analysis (CFA) because the construct at that time is identified on its own (Jarvis *et al.*, 2003). Finally, the empirical results of this study are from an individual segment. As such, they can be seen as cautions when applying to other segments of the bus industry because each of the segments may have different characteristics. Future works should provide more empirical case studies to strengthen the conceptual model as well as findings of the present study.

8. CONCLUSIONS

As an additional support for the composite approach of loyalty concept with the attitudinal-behavioral relationship, this study has successfully elaborated the concept of loyalty with a deep examination on the multi-dimensional construct of attitudinal loyalty. The excavation on the attitudinal facet of loyalty went to a suggestion that affection and cognition are not enough to represent attitudinal loyalty. Rather, implicit loyalty is a supplemental component of the construct. This study also insisted its distinction as a first attempt to use formative construct to describe the nature of attitudinal loyalty. Cognitive loyalty, affective loyalty and implicit loyalty are defined as three causal indicator of the construct. In addition, this study provided an empirical examination for the conceptual issue suggested by Dick and Basu (1994), first on the roles of social norm and situational context, and second on the expansion of the loyalty topology. Finally, this study was the first research to examine the conceptual aspect of loyalty within the bus service context. Overall, the study has substantially contributed to the body of knowledge that exists on loyalty literature. It also provided a conceptual foundation for future loyalty research in the bus industry.

Empirical findings in this study were critical for bus service managers. On the one hand, it indicated that not all people having a good perception on bus service quality are going to obtain a good attitude even perceived service quality is the key determinant of attitude. Their attitudes additionally depend on hidden factors such as concerns and pressures in case of using the bus service. As such, in order to get user having loyal attitude, efforts should cover both the improvement of service quality and the capability of mitigating hidden concern or pressure of the users. On the other hand, a task to increase loyal users in actual use is not easy. It requires not only an increase in loyal attitude but also on perception of an increase in number of people using bus and a boost in bus service attachment among users. In addition, it is not enough to expect the entire loyal intention user will transfer the intention into actual use even managers succeed in getting users with a high in intention. Therefore, this suggested a deeper study on the transferring period between conative loyalty and action loyalty.

REFERENCES

- Ajzen, I., (1991) *The Theory of Planned Behavior*. Organizational Behavior and Human Decision Process 50, 179-211.
- Ajzen, I., (2001) Nature and operation of attitudes. *Annual Review of Psychology* 52, 27-58.
- Ajzen, I., Fishbein M., (1980) *Understanding Attitudes and Predicting Social Behavior*. Englewood-Cliffs, NJ: Prentice-Hall.
- Akerlof, (1980) A Theory of Social Custom, of Which Unemployment may be One Consequence. *Quarterly journal of Economics* 94, 749-775.
- Amine, A., (1998) Consumers' true brand loyalty: the central role of commitment. *Journal of Strategic Marketing* 6, 305-319.
- Back, K., Parks, S. C., (2003) A Brand Loyalty Model Involving Cognitive, Affective, and Conative Brand Loyalty and Customer Satisfaction. *Journal of Hospitality and Tourism Research* 27 (4), 419-435.
- Bagozzi, R. P., (1980) *Causal Models in Marketing*, New York: Wiley.
- Bagozzi, R. P., (1994) *Structural equation models in marketing research: basic principles*. In: Bagozzi RP, editor. Principles of marketing research. Oxford: Blackwell, 317-85.
- Bamberg, S., Ajzen, I., Schmidt, P., (2003) Choice of Travel Mode in the Theory of Planned Behavior: The Roles of Past Behavior, Habit, and Reasoned Action. *Basic and Applied Social Psychology* 25 (3), 175-187.
- Bandyopadhyay, S., Martell, M., (2007) Does attitudinal loyalty influence behavioral loyalty? A theoretical and empirical study. *Journal of Retailing and Consumer Services* 14, 35-44.
- Bodet, G., (2008) Customer satisfaction and loyalty in service: two concepts, four constructs, several relationships. *Journal of Retailing and Customer Service* 15, 156-162.
- Bollen, K., (1989) *Structural Equations with latent variables*, New York: Wiley.
- Bollen, K., Lennox, R., (1991) Conventional wisdom on measurement: a structural equation perspective. *Psycho Bull* 110 (2): 305-14.
- Breckler, S. J., (1984) Empirical validation of affect, behavior, and cognition as distinct components of attitude. *Journal of Personality and Social Psychology* 47 (6), 1191-1205.
- Chen, C. F., Lai, W. T., (2011) The effects of rational and habitual factors on mode choice behaviors in a motorcycle-dependent region: Evidence from Taiwan. *Transport*

- Policy* 18, 711-718.
- Chen, C. F., Chao, W. H., (2011) Habitual or reasoned? Using the theory of planned behavior, technology acceptance model, and habit to examine switching intentions toward public transit. *Transportation Research Part F* 14, 128-137.
- Churchill, G. A., (1979) A Paradigm for Developing Better Measures of Marketing Constructs. *Journal of Marketing Research* 16, 64-73.
- Cunningham, R.M., (1956) Brand loyalty-What where how much. *Harvard Business Review* 34, 116-128.
- Cunningham, S. M., (1966) Brand Loyalty- What, Where, How much?. *Harvard Business Review* 34, 116-128.
- Davis, F., (1989) Perceived usefulness, perceived easy of use, and user acceptance of information technology, *MIS Quarterly* 13 (3), 319-340.
- Day, G.S., (1969) A two-dimensional concept of brand loyalty. *Journal of advertising research* 9, 29-35.
- Diamantopoulos, A., Winklhofer, H., (2001) Index Construction with Formative Indicators: An Alternative to Scale Development. *Journal of Marketing Research* 38 (2), 269-277.
- Diamantopoulos, A., Riefler, P., Roth, K. P., (2008) Advancing formative measurement models. *Journal of Business Research* 61, 1203-1218.
- Diamantopoulos, A., Siguaw, J., (2006) Formative versus reflective indicators in organizational measure development: a comparison and empirical illustration. *Br J Manage* 17 (4): 263-82.
- Dick, A.S., Basu, K., (1994) Customer loyalty: toward an integrated conceptual framework. *Journal of the Academy of Marketing Science* 22 (2), 99-113.
- Eagly, A. H., Chaiken, S., (1993) *The psychology of attitudes*. Orlando, FL: Harcourt Brace Jovanovich.
- East, R., Gendall, P., Hammond, K., Lomax, W., (2005) Customer Loyalty: Singular, Additive or Interactive? *Australian Marketing Journal* 13 (2), 10-26.
- Feather, N.T., ed. (1982) *Expectations and Actions: Expectancy-Value Models in Psychology*. Hillsdale, NJ: Erlbaum.
- Fishbein, M., Ajzen I., (1975) *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*. Reading, MA: Addison-Wesley.
- Fornell, C., Bookstein, F. L., (1982) Two Structural Equation Models: LISREL and PLS Applied to Consumer Exit-Voice Theory. *Journal of Marketing Research* 19, 440-452.
- Gahwiler, P., Havitz, M., (1998) Toward a relational understanding of leisure social work, involvement, psychological commitment, and behavioral loyalty. *Leisure Science* 20, 1-23.
- Garland, R., Gendall, P., (2004) Testing Dick and Basu's Customer Loyalty Model. *Australian Marketing Journal* 12 (3), 81-87.
- Hair, J. F., R. E. Anderson, R. L. Tatham, and W. C. Black, (2005) *Multivariate Data Analysis*, Sixth edition. Prentice Hall, Upper Saddle River, N.J.
- Hammond, K., East, R.L., Ehrenberg, A., (1996) *Buying More and Buying Longer: Concepts and Applications of Consumer Loyalty*. London Business School, London.
- Haddock, G., Zanna, M. P. (1998) Assessing the impact of affective and cognitive information in predicting attitudes toward capital punishment. *Law Hum. Behav.* 22:325-39.
- Han, H., Kim, Y., Kim, E. K., (2011) Cognitive, affective, conative, and action loyalty: Testing the impact of inertia. *International Journal of Hospitality Management* 30, 1008-1019.

- Harris, L.C., Goode, M. M. H., (2004) The four levels of loyalty and the pivotal role of trust: A study of online service dynamics. *Journal of Retailing* 80, 139-158.
- Hartel, C.E.J., Russell-Bennett, R., (2010) Heart versus mind: The functions of emotional and cognitive loyalty. *Australian Marketing Journal* 18 (1), 1-7.
- Health, Y., Gifford, R., (2002) Extending the Theory of Planned Behavior: Predicting the Use of Public Transportation. *Journal of Applied Social Psychology* 32 (10), 2154-2189.
- Iwasaki, Y., Havitz, M., (1998) A path analytic model of the relationship between involvement, psychological commitment, and loyalty. *Journal of Leisure Research* 30 (2), 256-280.
- Jacoby, J., Chestnut, R.W., (1978) *Brand loyalty measurement and management*. New York. Wiley.
- Jarvis, C. B., Mackenzie, S. B., Podsakoff, P. M., (2003) A Critical Review of Construct Indicators and Measurement Model Misspecification in Marketing and Consumer Research. *Journal of Consumer Research* 30 (2), 199-218.
- Joewono, T.B., Kubota, H., (2007) Exploring Negative Experience and User Loyalty in Paratransit. Transportation Research Record, *Journal of Transportation Research Board* 2034, 134-142.
- Jones, T., Taylor, S.F., (2007) The conceptual domain of service loyalty: How many dimensions?. *Journal of Services Marketing* 21 (1), 36-51.
- Joreskog, K., Goldberger, A. S., (1975) Estimation of a Model with Multiple Indicators and Multiple Causes of a Single Latent Variable. *Journal of the American Statistical Association* 70, 631-639.
- Kahn B.E., Manohar U.K., and Donald G.M., (1986) Measuring variety seeking and reinforcement behaviors using panel data. *Journal of Marketing Research* 23, 89-100.
- Katz, D., (1960) The functional approach to the study of attitudes. *The Public Opinion Quarterly* 24 (2), 163-204.
- Khatibi, A.A., Ismail, H., Thyagarajan, V. (2002) What drives customer loyalty: An analysis from the telecommunications industry. *Journal of Targeting, Measurement and Analysis for Marketing* 11(1), 34-44.
- Kline, R., B., (2006) *Reverse arrow dynamics: Formative Measurement and Feedback Loops*. Structural Equation Modeling: A Second Course, 43-68. Information Age Publishing.
- Latané, B., (1981) The psychology of social impact. *American Psychologist*, 36, 343-356.
- Law, K., Wong, C. S., (1999) Multidimensional Constructs in Structural Equation Analysis: An Illustration Using the Job Perception and Job Satisfaction Constructs. *Journal of Management* 25 (2), 143-160.
- Lee, J., Graefe, A. R., Burns, R. C., (2007) Examining the Antecedents of Destination Loyalty in a Forest Setting. *Leisure Sciences* 29, 463-481.
- Li Xiang, (2006) PhD Dissertation, *examining the antecedents and structure of customer loyalty in a tourism context*, Graduate Studies of Texas A&M University.
- Li Xiang, Petrick James F., (2008) Reexamining the Dimensionality of Brand Loyalty: A Case of the Cruise Industry. *Journal of Travel and Tourism Marketing* 25 (1), 68-85.
- McConnell, A.R., Leibold, J.M., Sherman, S.J., (1997) Within-target illusory correlations and the formation of context-dependent attitudes. *J. Pers. Soc. Psychol.* 73:675-86.
- MacKenzie, S. B., Podsakoff, P. M., Jarvis, C. B., (2005) The Problem of Measurement Model Misspecification in Behavioral and Organizational Research and some Recommended Solutions. *Journal of Applied Psychology* 90 (4), 710-730.

- McMullan, R., Gilmore, A., (2003) The conceptual development of customer loyalty measurement: A proposed scale. *Journal of Targeting, Measurement and Analysis of Marketing* 11 (3), 230-243.
- Minser, J., Webb, V. (2010) Quantifying the Benefits: Application of Customer Loyalty Modeling in Public Transportation Context. *Transportation Research Record: Journal of the Transportation Research Board*, No. 2144, Transportation Research Board of the National Academies, Washington, D.C., 111–120.
- Nunnally J. C., Bernstein, I. H., (1994) *Psychological theory*, New York, NY: MacGraw-Hill.
- Oliver, R.L., (1997) *Satisfaction: A behavioral Perspective on the Consumer*, New York, NY: MacGraw-Hill.
- Oliver, R.L., (1999) Whence consumer loyalty? *Journal of Marketing* 63 (4), 33-45.
- Pan, Y., Sheng, S., Xie, F.T., (2012) An empirical synthesis and reexamination. *Journal of Retailing and Consumer Services* 19, 150-158.
- Peter, J. P., (1981) Construct Validity: A Review of Basic Issues and Marketing Practices. *Journal of Marketing Research* 18, 133-145.
- Reizartz, W.J., Kumar, V., (2002) The mismanagement of customer loyalty. *Harvard Business Review* 80 (7), 86.
- Rivis A, Sheeran P., (2003) Descriptive norms as an additional predictor in the theory of planned behavior: a meta-analysis. *Current Psychology: Developmental, Learning, Personality, Social.*, 22, 218–233.
- Rundle-Thiele, S.R., (2005) Elaborating customer loyalty: exploring loyalty to wine retailers. *Journal of Retailing and Consumer Services* 12 (5), 333-344.
- Russel-Bennett, R., McColl-Kenedy, J.R., Coote, L.V., (2007) Involvement, satisfaction, and brand loyalty in a small business service setting. *Journal of Business Research* 60, 1253-1260.
- Schepers, J., Wetzels, W., (2007) A meta-analysis of the technology acceptance model: investigating subjective norm and moderation effects. *Information and Management* 44 (1), 90-103.
- Schwarzer, R., (1992) *Self-efficacy in the adoption and maintenance of health behaviors: Theoretical approaches and a new model*. In R. Schwarzer (Ed.), *Self-efficacy: Thought control of action* (pp. 217-242). Washington DC: Hemisphere.
- Sojka, I.Z., Giese, J.L., (1997) Thinking and/or feeling: an examination of interaction between processing styles. *Adv Consum Res* 24: 438-42.
- Stoel, L., Wickliffe, V., Kyu, H.L., (2004) Attribute beliefs and spending as antecedents to shopping value. *Journal of Business Research* 57 (10), 1067-73.
- Tucker, W. T., (1964) The Development of Brand Loyalty. *Journal of Marketing Research* 1, 32–35.
- Wen C. H., Lan, L. W., Cheng, H. L., (2005) Structural Equation Modeling to Determine Passenger Loyalty Toward Intercity Bus Services. *Transportation Research Record: Journal of the Transportation Research Board*, No. 1927, Transportation Research Board of the National Academies, Washington, D.C., 249–255.
- Wicker, A. W., (1969) Attitude versus Actions: The relationship of Verbal and Overt Behavioral Response to Attitude Objects. *Journal of Social Issues* 25, 41-78.