Inertia: Spurious Loyalty or Action Loyalty?

Li-Wei Wu*

Department of International Business, Tunghai University, Taiwan

Received 3 March 2009; Received in revised form 17 June 2009; Accepted 16 September 2009

Abstract

Although much research on customer behaviors has demonstrated the positive role of inertia in the action loyalty phase, previous studies on inertia still emphasize the spurious dimension of customer loyalty. This study seeks to analyze how inertia varies with differing levels of alternative attractiveness, relationship length, and commitment in affecting customer loyalty. The results suggest that alternative attractiveness decreases the effect of inertia on customer loyalty. On the other hand, although commitment and relationship length strengthen the relationship between inertia and customer loyalty, only commitment provides resistance to attractiveness from alternative offerings and generates action loyalty.

Keywords: Inertia, alternative attractiveness, commitment, customer loyalty

1. Introduction

Building customer loyalty has become a primary goal, as high customer loyalty translates to retention of existing customers (Zeithaml et al., 1996). It is more cost and revenue effective to retain current customers than attract new ones (Reichheld and Sasser, 1990). The most commonly studied antecedents of customer loyalty include satisfaction, trust, commitment, and switching barriers (Jones et al., 2000; Lee et al., 2001; Morgan and Hunt, 1994; Ping, 1993; Sharma and Patterson, 2000). Although many studies demonstrate the importance of inertia (Colgate and Lang, 2001; Rust et al., 2004), relatively little research on customer loyalty has considered it (White and Yanamandram, 2004).

Based on repeated patronage and relative attitude, Dick and Basu (1994) proposed four types of customer loyalty: Loyalty, spurious loyalty, latent loyalty, and no loyalty. Inertia is a primary component of spurious loyalty (Dick and Basu, 1994). Obviously, much of inertia research about customer loyalty still emphasizes such spurious dimension of loyalty (Gounaris and Stathakopoulos, 2004; Huang and Yu, 1999). In this tradition, many studies focus on the instability in the relationship between inertia and customer loyalty (Gupta et al., 1996; Kim et al., 2008; Ranaweera and Neely, 2003). On the other hand, Oliver (1999) conceptualized the four-stage model of loyalty, which is comprised of sequential phases in the development of customer loyalty, namely: Cognitive-affective-conative-action. Specifically, in the action loyalty phase, customers possess not only a stable disposition but also an inertial repurchasing pattern, because action inertia develops and facilitates loyalty behaviors (Evanschitzky and Wunderlich, 2006; Oliver, 1999).

Basically, if the service providers are similar in terms of their offerings and lack any differentiation of alternatives, customer loyalty is therefore more related to inertia than positive attitude (Kahn and Schmittelein, 1992; Vogel et al., 2008). In addition, relationship

* Corresponding author. Email: lwwu@thu.edu.tw
length and commitment may intuitively seem to be closely associated, and in the same way strengthen such inertial repurchasing behaviors. However, the market is not a static entity, and thus there is a need for dynamic models of customer relationships. Therefore, this study addresses the following two questions: “What makes inert customers loyal even in the presence of high alternative attractiveness?” and “Is commitment or relationship length successful in translating spurious loyalty to action loyalty in the presence of high alternative attractiveness?” Therefore, this study specifically shows how alternative attractiveness, relationship length, and commitment moderate the effect of inertia on customer loyalty. Furthermore, this study also considers how the influences of commitment and relationship length on the inertia-loyalty relationship will change as alternative attractiveness increases.

As noted previously, perceptions of inertia still remain divided, and the relationships among inertia, spurious loyalty, and action loyalty have not been satisfactorily explained. In particular, spurious and action loyalty have the same forms of inertial repurchasing behaviors. As a result, it is more challenging for a service provider to distinguish spurious loyalty and action loyalty. A unique contribution of this study is to analyze and elucidate these seemingly indistinguishable relationships, and thus help to differentiate action loyalty from spurious loyalty.

2. Literature review

Based on the literature review, this study develops a framework linking inertia, alternative attractiveness, relationship length, and commitment to customer loyalty (see Figure 1). This framework has three main features. First, it examines the main effects of inertia, alternative attractiveness, relationship length, and commitment on customer loyalty. Second, it investigates three two-way interaction effects (inertia * alternative attractiveness, inertia * relationship length, and inertia * commitment) on customer loyalty. Third, it analyzes two three-way interaction effects (inertia * relationship length * alternative attractiveness and inertia * commitment * alternative attractiveness) on customer loyalty.

![Figure 1. Conceptual framework.](image-url)
2.1 Customer loyalty

Customer loyalty appears to consist of both behavioral and attitudinal dimensions (Jacoby and Chestnut, 1978). The behavioral dimension of customer loyalty has been interpreted as a form of repeat purchasing behaviors directed towards a particular product or service (Jacoby and Chestnut, 1978). The attitudinal dimension of customer loyalty includes a degree of positive attitude in terms of some unique value associated with a particular product or service (Jacoby and Chestnut, 1978). Dick and Basu (1994) suggested that customer loyalty may be an outcome of both favorable attitude and repeat patronage. Spurious loyalty exists when customers show behavioral but not attitudinal loyalty (Dick and Basu, 1994). Numerous studies have argued for the superiority of the attitudinal loyalty, because it ultimately explains why some customers are not easily influenced by alternative attractiveness (Bloemer and Kasper, 1995; Dick and Basu, 1994).

2.2 Main effects

2.2.1 Inertia

Inertia is described as a consistent pattern of repurchasing the same brand almost every time a customer shops, where a brand is bought out of habit merely because less effort is required (Solomon, 2004). In this sense, inertia is defined as a condition of the repurchasing behaviors being undertaken passively and without much thought (White and Yanamandram, 2004). The underlying reason is that inertia occurs on the basis of situational cues and reflects a non-conscious process (Huang and Yu, 1999). Meanwhile, inertia is also characterized as a habitual attachment that is to a large extent unemotional, indifferent, and convenience driven (Gounaris and Stathakopoulos, 2004; Lee and Cunningham, 2001; White and Yanamandram, 2004). Moreover, inertia reflects some consequent behaviors. For example, Chintagunta (1998) assumed that a given customer is either a variety seeker or a variety avoider, and defined an inert customer as the latter. Generally speaking, inert customers are typified as lazy, inactive, or passive (Beckett, 2000; Bozzo, 2002). Thus, inertia is described as the absence of goal-directed behaviors (Zeelenberg and Pieters, 2004). Furthermore, inert customers are seen to avoid making new purchasing decisions (White and Yanamandram, 2004), avoid learning new service routines and practices, and avoid making price comparisons among alternatives (Pitta et al., 2006). In other words, inert customers prefer the status quo (Ye, 2005).

Despite the perceived negative aspects of inertia, Oliver (1999) argued that action loyalty is accompanied by an additional desire to overcome obstacles that might prevent action. If this engagement is repeated, action inertia develops. Thus, action inertia is defined as the facilitator of repurchasing behaviors (Oliver, 1999). Once customers experience action inertia, they have habitual and routine repurchasing behaviors. Corstjens and Lal (2000) explained that action inertia is due to the psychological commitment to prior experiences and customers’ desire to minimize their cost of thinking. It helps customers maintain loyalty by simplifying the decision-making process and saving the cost of making decisions (Vogel et al., 2008). In other words, customers in the action loyalty phase experience action inertia and have the desire to maintain the highest level of customer loyalty.

Drawing on these conceptualizations, there are some significant differences between spurious and action inertia customers who are both exhibiting loyal behaviors. Spurious inertia is due to passive service patronage, and exists without true loyalty (Ganesh et al., 2000; Huang and Yu, 1999). This non-conscious form of inertia is distinguished from action inertia by the degree of engagement and commitment involved in the relationship. In sum, it has been argued that customer loyalty may also be the result of inertia (Anderson and Srinivasan, 2003; Beckett et al., 2000; Colgate and Lang, 2001; Roy et al., 1996; Sheth and Parvatiyar, 1995; Yanamandram and White, 2006). Therefore, it is hypothesized that:
H1: Inertia has a positive effect on customer loyalty.

2.2.2 Alternative attractiveness

Alternative attractiveness is defined as a customer’s estimate of the likely satisfaction available in an alternative relationship (Ping, 1993). Alternative attractiveness can be characterized by four dimensions, as follows: The number of available alternatives, the degree of differences among alternatives, the degree of difficulty in understanding various alternatives, and the degree of difficulty in comparing the alternatives (Anderson and Narus, 1984). A lack of attractive alternatives has been suggested to be favorable to developing customer loyalty (Jones et al., 2000; Ping, 1993). In other words, if customers are either unaware of alternatives or simply do not perceive them as any more attractive than their current service provider, then they are likely to stay in the current relationship (Bendapudi and Berry, 1997; Jones et al., 2000; Ping, 1993; Ranaweera and Prabhu, 2003; Sharma and Patterson, 2000). Conversely, customers may decide to terminate the current relationship and switch to a new service provider if they perceive the alternatives to be more attractive (Liljander and Roos, 2002). Thus, it is hypothesized that:

H2: Alternative attractiveness has a negative effect on customer loyalty.

2.2.3 Relationship length

Relationship length is defined as the duration from the starting date that customers have developed a relationship with their service provider, usually measured in years (Bolton, 1998). The effects of relationship length on trust, commitment, and relationship performance have been examined in a number of studies (Anderson and Weitz, 1992; Doney and Cannon, 1997; Ganesan, 1994). Basically, relationship length facilitates the customers’ ability to predict the service provider’s future behaviors (Doney and Cannon, 1997). In other words, long-term customers get to know the service provider on a personal level, and have less anxiety about service performance. Consequently, a long-term relationship may foster higher levels of trust, thus leading to a lock-in effect. Gwinner et al. (1998) suggested that a long-term relationship leads to additional benefits for customers, such as increased confidence in the product, social engagement, and improved opportunities for customization. Therefore, as Ganesan (1994) noted, relationship length is likely to affect the customers’ expectations that the relationship will continue. In addition, Dwyer et al. (1987) suggested that a relationship develops over time from an awareness phase to a commitment phase, and ultimately to a higher stage of customer loyalty. In other words, a long-term relationship is associated with positive outcomes (Verhoef, 2003). On the other hand, relationship length also leads to the accumulation of switching barriers as perceived by customers, which in turn can affect loyalty (Jones et al., 2002). Furthermore, if there is an ongoing relationship, loyalty increases profits over time (Reinartz and Kumar, 2000).

In the retail banking market, significant relationship length between banks and customers is a common feature (Beerli et al., 2004). For example, a relationship might begin with a savings account opened in childhood, extend to a checking and credit account, and develop to loans and other financial instruments over time (Bell et al., 2005). Similarly, Sheth and Parvatiyar (1995) found that relationship length may inhibit customer switching in retail banking. Therefore, it is hypothesized that:

H3: Relationship length has a positive effect on customer loyalty.
2.2.4 Commitment

The definition of commitment is an enduring desire to maintain a valued relationship (Moorman et al., 1992). Along the same lines, Morgan and Hunt (1994) defined commitment as an exchange party's belief that a relationship is important enough to warrant maximum efforts at maintaining it. Commitment has both affective and calculative components in the marketing literature (Bansal et al., 2004; Gundlach et al., 1995). Affective commitment is defined as a psychological attachment to a service provider (Gundlach et al., 1995), while calculative commitment emphasizes switching costs, or the difficulty in replacing a relationship (Gundlach et al., 1995). Calculative commitment was not tested in this study because the emphasis of this work is on whether customers want to remain with the service provider rather than whether they need to do so. Furthermore, Evanschitzky et al. (2006) found that calculative commitment is a less enduring source of loyalty compared with affective commitment. Consistent with Morgan and Hunt (1994), commitment is operationalized as affective commitment.

Oliver (1999) defined customer loyalty as “a deeply held commitment to repurchase a preferred product consistently in the future, despite situational influences and marketing efforts having the potential to cause switching behaviour”. Commitment is the highest level of customer loyalty (Dwyer et al., 1987). Beatty et al. (1988) stated that commitment and loyalty are related, but, by definition, they are separate and distinct constructs, with commitment leading to customer loyalty. Commitment and customer loyalty are distinguished in that commitment measures a psychological attachment, while customer loyalty seeks likely future patronage of a particular service provider. Similarly, a substantial body of research has demonstrated that commitment has a positive effect on various loyalty dimensions, including repurchasing intention, customer retention, word-of-mouth, share of wallet, and expansion and enhancement of the relationship (Bendapudi and Berry, 1997; Brown et al., 2005; Garbarino and Johnson, 1999; Gundlach et al., 1995; Morgan and Hunt, 1994; Sheth and Parvatiyar, 1995; Verhoef et al., 2002). Thus, it is hypothesized that:

H4: Commitment has a positive effect on customer loyalty.

2.3 Two-way moderating effects

2.3.1 The moderating effect of alternative attractiveness

The moderating effect of alternative attractiveness on customer loyalty has been confirmed in earlier literature (Jones et al., 2000; Sharma and Patterson, 2000). Specifically, this study bases the expectation for the moderating effect of alternative attractiveness between inertia and customer loyalty on Ranaweera and Neely’s (2003) proposition that the effect of inertia on customer retention could be determined by the competitive structure of the industry. The underlying reason can be explained by Newton's law of inertia, which states that an object persists its state of rest or of uniform motion as long as it is not acted upon by an external force. In other words, the assumption of the fact that inert customers are lazy, inactive, and passive is based on little or none alternative attractiveness existing along customers’ direction of repurchasing. Consequently, in a highly competitive marketplace, customers choose alternative brands in spite of past habitual pattern because spurious loyalty customers are more prone to switching (Bloemer and Kasper, 1995; Dick and Basu, 1994).

Similarly, Beckett et al. (2000) indicated that increased competition erodes inertia. In addition, habitual customers display only behavioral loyalty, and are very likely to switch service provider if their routine purchasing pattern is disrupted (Knox, 1997). Due to the fact that inertia is highly volatile and susceptible to alternative attractiveness (Gupta et al., 1996; Huang and Yu, 1999), the relationship between inertia and customer loyalty is easily terminated by alternative attractiveness breaking customers’ inertial repurchasing patterns.
In other words, alternatives with a better price, more convenient location, and a fuller range of services, among other factors, can easily change customers’ repurchasing behaviors based on inertia (Wathne et al., 2001). In addition, Ansari and Mela (2003) found that purchasing on the Internet lessens inertia in customer loyalty, because of the ready availability of alternative sources and lower switching costs found online. As such, under the condition of high alternative attractiveness, even inert customers are induced to switch. In contrast, if the attractiveness of alternatives is relatively low, inertia can be stably transformed into customer loyalty (Egan, 2000). Thus, it is hypothesized that:

\[ H5: \text{Inertia has a weaker positive effect on customer loyalty when alternative attractiveness is high than when alternative attractiveness is low.} \]

### 2.3.2 The moderating effect of relationship length

Verhoef et al. (2002) found that relationship length moderates the relationship between relational constructs and the number of service purchases. Coulter and Coulter (2002) and Gounaris and Venetis (2002) also referred to relationship length as the moderator of the relationship between service quality and trust. The findings of these studies suggest that as relationship length increases, customers become more familiar and experienced in interacting with the service provider and their procedures. With increased interactions and learning processes, customers have greater confidence in their evaluations and are more likely to use past experience or inertia to evaluate service performance (Richins and Bloch, 1986). In addition, although inertial behaviors are unstable and unpredictable (Kim et al., 2008), longer relationships facilitate the customer's ability to predict the service provider's intention and provide assurance that the provider's future behaviors will reflect its past behaviors (Doney and Cannon, 1997). Therefore, relationship length might indicate a level of customer inertia that would be associated with greater loyalty (Colgate and Lang, 2001). As such, relationship length can enhance the effect of inertia on customer loyalty. Therefore, it is hypothesized that:

\[ H6: \text{Inertia will have a stronger positive effect on customer loyalty when relationship length is high than when relationship length is low.} \]

### 2.3.3 The moderating effect of commitment

In most studies focusing on spurious loyalty, inertia involves little emotional involvement, little personal investment, and little commitment (Anderson and Srinivasan, 2003; Campbell, 1997; Gounaris and Stathakopoulos, 2004; Huang and Yu, 1999; O’loughlin and Szmigin, 2007; White and Yanamandram, 2004). Spurious loyalty reflects repurchasing behaviors undertaken passively and without much thought, rather than a commitment to the service provider. Indeed, the fact that inert customers are sensitive to attempts by alternatives to attract them may result from lower commitment, which causes the variability of the relationship between inertia and customer loyalty. In fact, commitment represents the continued stability of a relationship (Anderson and Weitz, 1992). In addition, customers’ levels of commitment to the service provider would sustain inertial repurchasing, and once customers reach action inertia, variety-seeking behaviors relating to alternatives are diminished (McMullan and Gilmore, 2003). In sum, action loyalty is commitment to the action of repurchasing on an ongoing basis (Oliver, 1999). Thus, it is hypothesized that:

\[ H7: \text{Inertia has a stronger positive effect on customer loyalty when commitment is high than when commitment is low.} \]
### 2.4 Three-way moderating effects

The preceding discussion has separately considered the moderating effects of alternative attractiveness, relationship length, and commitment on customer loyalty. It is expected that there is also the potential for two three-way moderating effects between these constructs. This possibility arises from the fact that customers at any one time may have different combinations of relationship length, commitment, and alternative attractiveness. The inclusion of alternative attractiveness for the three-way moderating effects not only provides useful information to understand the difference between relationship length and commitment, but also to differentiate action loyalty from spurious loyalty. Most importantly, the three-way moderating effects provide a better understanding of the temporal stability of inertia. Under the condition of low alternative attractiveness, the inclusion of relationship length allows for stability with regard to spurious loyalty. Under the condition of high alternative attractiveness, this temporal stability of inertia can be easily undermined by alternative attractiveness, because the service provider is not closely tied to those customers' belief systems (Knox, 1997). Consequently, commitment alone is what provides the strong foundation for action loyalty. Therefore, this study considers a higher resistance to alternative attractiveness as a distinguisher of action loyalty from spurious loyalty, and investigates whether action loyalty can be achieved by commitment rather than by relationship length. Where relationship length fails to predict action loyalty, commitment may succeed. In the following section, the possible three-way moderating effects will be discussed in more detail.

**2.4.1 The moderating effects of relationship length and alternative attractiveness**

Customer loyalty is basically a construct that has both attitudinal and behavioral elements, whereas relationship length is viewed as a behavioral construct (Wangenheim, 2003). As Reinartz and Kumar (2000) argued, relationship length cannot drive the lifetime value of a customer. Similarly, relationship length has no effect on customer share development (Verhoef, 2003). Thus, there may be a large number of long-term customers that are not necessarily attitudinally loyal (Wangenheim, 2003). In addition, relationship length is not always the same as a long-lasting relationship, which implies a certain degree of commitment between customers and service providers. Without commitment, even inert customers with long-term relationships can be easily attracted by alternative attractiveness. The underlying reason is that long-term customers sometimes may remain in a relationship because it is hard for them to leave, perhaps due to switching barriers, but they will still look to get out of the relationship when given an opportunity (Fullerton, 2005). In addition, as customers gain more knowledge about the particular service industry over time, it increases the opportunities for them to compare offerings on the basis of alternatives. Therefore, relationship length has a much more limited role to play in strengthening the stability of inertia under the condition of high alternative attractiveness. In other words, with a lack of alternative attractiveness, the positive moderating relationship, which was addressed in $H_6$, will remain in the same direction and strengthen. However, the positive moderating effect of relationship length, which was also addressed in $H_6$, will weaken if alternative attractiveness increases. Therefore, it is hypothesized that:

$$H_8: \text{The positive moderating effect of relationship length on the relationship between inertia and customer loyalty will reduce as alternative attractiveness increases.}$$

**2.4.2 The moderating effects of commitment and alternative attractiveness**

Oliver (1999) conceptualized the most intense phase of customer loyalty as action loyalty. In the action loyalty phase, action inertia develops, and customers exhibit high levels of commitment to the action of repurchasing. In such cases, committed customers are believed to
be less motivated to search for alternatives and to possess a higher resistance to alternative attractiveness (Bettencourt, 1997; Evanschitzky and Wunderlich, 2006; Oliver, 1999; Sheth and Parvatiyar, 1995; Zeithaml et al., 1996), and this is because commitment represents mutuality and the forsaking of other options (Gundlach et al., 1995). Furthermore, the essence of commitment is stability, and it represents a willingness to make short-term sacrifices to realize long-term benefits (Anderson and Weitz, 1992; Morgan and Hunt, 1994). For customers with higher levels of commitment to a relationship, the long-term benefits that customers receive from their current service provider are not easily provided and replaced by the potential alternatives.

In contrast, Oliver (1999) conceptualized cognitive loyalty as a shallow type of loyalty. In the cognitive loyalty phase, customers with low commitment are more likely to be driven by cognitive beliefs which are directed at the costs and benefits of an offering, and not at the service provider itself (Dick and Basu, 1994; Oliver, 1999). Therefore, customers are likely to switch once they perceive alternative offerings as being superior with respect to the cost-benefit ratio. High alternative attractiveness will not reduce the positive moderating effect of commitment on the relationship between inertia and customer loyalty. Thus, the positive moderating relationship, which was addressed in Hypothesis 7, remains unchangeable although alternative attractiveness increases. Thus, it is hypothesized that:

\[ H9: \text{The positive moderating effect of commitment on the relationship between inertia and customer loyalty will not reduce as alternative attractiveness increases}. \]

2.5 Control variables

Although this study focuses on inertia, alternative attractiveness, relationship length, and commitment with regard to customer loyalty, previous studies suggest that demographic variables (age, gender, and income) (Homburg and Giering, 2001) and the total number of products purchased from the existing service provider (Verhoef et al., 2001) also affect customer loyalty, and these represent significant alternative explanations for the development of loyalty.

3. Methodology

3.1 Data collection and sampling

The retail banking industry was chosen as the point of analysis in this study for two reasons. First, the retail banking market has been characterized by strong customer inertia (Colgate and Lang, 2001; Garland, 2002). Second, given a wide variety of alternatives among financial services in Taiwan, it is easy for customers to switch banks. Therefore, retail banking is an ideal industry with which to investigate the effects of inertia, alternative attractiveness, relationship length, and commitment on customer loyalty.

This study used a quota sampling method, based on the target banks’ number of branches in Taiwan. A total of 700 self-reported surveys were distributed by banking salespeople at service counters to individual customers. To overcome the difficulty posed by respondents' having multiple banks, the respondents were asked to report their major bank. In this study, major bank was defined as a customer's sole bank or that bank where most of their banking business was done. If a customer's major bank was not one of the target banks, then the survey process was discontinued. Furthermore, to increase the response rate, salespeople and customers were each given financial incentives and gifts to participate in this study. The surveys were conducted in the three largest cities in Taiwan, namely Taipei, Taichung, and Kaohsiung. Respondents from large, medium, and small-sized; local and foreign; financial holding company and non-financial holding company based banks were all represented in the
sample. Therefore, the sample characteristics appear to be representative of retail banking customers in Taiwan.

A total of 514 responses were returned, which represented a 73.4% response rate. After excluding 55 incomplete responses, the final sample size was 459. The details of the respondents are as follows: gender (male, 43.4%; female, 56.6%), age (less than or equal to 30 years of age, 35.6%; 31-40 years of age, 37.7%; 41-50 years of age, 17.3%; greater than or equal to 51 years of age, 9.40%), annual income (less than or equal to US $10,000, 16.6%; US $10,001-US $17,000, 38.1%; US $17,001-US $27,000, 28.7%; greater than or equal to US$27,001, 16.6%), the number of banking products purchased (less than or equal to two products, 54.9%; three or four products, 32.6%; greater than or equal to five products, 12.5%), and relationship length (less than or equal to five years, 57.8%; six to ten years, 28.0%; eleven to twenty years, 12.6%; greater than or equal to twenty-one years, 1.6%).

3.2 Measures

All measures used in this study were adopted from existing scales. All constructs used a five-point Likert-type scale with the descriptive equivalents ranging from Strongly Disagree (a) to Strongly Agree (e). For the measurement of customer loyalty, five items were adopted from Zeithaml et al. (1996), while the measure of commitment included five items taken from Morgan and Hunt (1994). Three items to measure alternative attractiveness were adopted from Jones et al. (2000) and Ping (1993) and three items to measure inertia came from Ranaweera and Neely (2003) and Anderson and Srinivasan (2003). Relationship length was measured by asking respondents how long (in years) they have maintained relationships with their major banks. In this study, one banking manager and two researchers reviewed the initial items and the definitions of all the constructs. According to their suggestions, several items were adapted to suit the banking environment. The questionnaires were pretested with 74 EMBA students, and one item was dropped due to low Cronbach’s alpha, item-to-total correlations, and loading of exploratory factor analysis.

3.3 Confirmatory factor analysis

Finally, confirmatory factor analysis (CFA) was performed to test the measurement model using LISREL 8.52. In the CFA, this study utilized all independent, dependent, and moderator variables, with the 16 individual measurement items serving as construct indicators (see Appendix A). The CFA revealed a relative fit to the data ($\chi^2(98) = 485.80$ ($p < 0.05$), GFI = 0.87, CFI = 0.94, NFI = 0.93, NNFI = 0.93, PNFI = 0.76, RMR = 0.04), thus confirming the efficacy of our measurement model. In assessing reliability, composite reliabilities and the Cronbach’s alpha for each construct were also computed. The Cronbach’s alpha of inertia, alternative attractiveness, commitment, and customer loyalty were all greater than 0.80, supporting the reliability of the measurement. In addition, all composite reliability estimates were greater than 0.80, and all average variance extracted (AVE) estimates were greater than the recommended value of 0.50 (Fornell and Larcker, 1981).

As evidence of convergent validity, all the items had significant loadings on their respective constructs (Anderson and Gerbing, 1988). Discriminant validity was assessed for two constructs by constraining the estimated correlation parameter between two constructs to a value of 1.0, and then performing a chi-square difference test on the values for the constrained and unconstrained models (Anderson and Gerbing, 1988). A significantly lower $\chi^2$ value for the unconstrained model was found, thus indicating that discriminant validity was achieved. Table 1 shows the means, standard deviations, and correlations matrix for the constructs. Appendix A summarizes the results of the item description, factor loading, AVE, and reliability test.
Table 1. Means, standard deviations, and correlations.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Inertia</td>
<td>3.530</td>
<td>0.727</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Alternative attractiveness</td>
<td>3.405</td>
<td>0.889</td>
<td>0.112</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Relationship length</td>
<td>5.990</td>
<td>4.920</td>
<td>0.169*</td>
<td>-0.114*</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Commitment</td>
<td>3.607</td>
<td>0.677</td>
<td>0.159*</td>
<td>-0.138*</td>
<td>0.197*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>5. Customer loyalty</td>
<td>3.539</td>
<td>0.656</td>
<td>0.151*</td>
<td>-0.253*</td>
<td>0.336*</td>
<td>0.419*</td>
<td>1</td>
</tr>
</tbody>
</table>

*p < 0.05

Due to the self-reported nature of the data, there was a potential for common method variance, and so the Harman one-factor test was conducted to determine the extent of this. The unrotated factor analysis showed that the first factor accounted for only 33.42 percent of the variance. Based on the results of the Harman's one-factor test, the common method variance was not considered significant (Podsakoff et al., 2003).

4. Results

4.1 Hierarchical moderated regression

Four basic techniques are used to examine the moderating effect: (a) SEM multigroup analysis, (b) SEM product terms analysis, (c) regression multigroup analysis, (d) hierarchical moderated regression analysis. Hierarchical moderated regression analysis was used to test the hypotheses for two primary reasons. First, the relatively straightforward predicted relationships between dependent, independent, and moderator variables (Cohen et al., 2003). Second, numerous two-way and three-ways moderating relationships were investigated in this study, with Kenny and Judd (1984) recommending the avoidance of SEM in complicated moderating tests.

All scales were averaged to form a composite. To examine individual moderating effects, the data were mean-centered to avoid multicollinearity when multiplying the moderating variables (alternative attractiveness, relationship length, and commitment) by inertia. The variance inflation factor (VIF) was tested for collinearity among variables by calculating for each of the regression coefficients, and these were well below the cutoff value of 10 recommended by Neter et al. (1990). The hypotheses were tested by estimating the following equation using multiple regression analysis:

\[ Y_i = \beta_0 + \sum \beta_{kj} K_{ji} + \beta_1 I_{ni} + \beta_2 A_{Ai} + \beta_3 R_{Li} + \beta_4 C_i + \beta_5 (I_{ni} \times A_{Ai}) + \beta_6 (I_{ni} \times R_{Li}) + \beta_7 (I_{ni} \times C_i) + \beta_8 (I_{ni} \times R_{Li} \times A_{Ai}) + \beta_9 (I_{ni} \times C_i \times A_{Ai}) + \varepsilon_i \]

where \( Y_i \) = customer loyalty; \( K_{ji} \) = control variables (\( j = 1, 2, ..., 4 \)); \( I_{ni} \) = inertia; \( A_{Ai} \) = alternative attractiveness; \( R_{Li} \) = relationship length; \( C_i \) = commitment; \( \varepsilon_i \) = error term; \( i \) = respondent.

In Model 1, only the control variables were entered. In Model 2, the main effect variables were entered along with the control variables. Model 3 included the control variables, main effect variables, and three two-way interaction terms. Model 4 included the control variables, main effect variables, three two-way interaction terms, and two three-way interaction terms. The explanatory power of Model 4 (\( R^2 = 0.369 \)) was higher than that of either Model 1 (\( R^2 = 0.097 \)), Model 2 (\( R^2 = 0.317 \)), or Model 3 (\( R^2 = 0.351 \)). First, the explanatory power of Model 2 was higher than that of Model 1 (\( \Delta R^2 = 0.220, \Delta F = 36.101, p < 0.05 \)). Second, the inclusion of three two-way interaction terms caused a significant improvement in the explanatory power of Model 3 over Model 2 (\( \Delta R^2 = 0.034, \Delta F = 7.950, p < 0.05 \)). Finally, the inclusion of two
three-way interaction terms explained a significant improvement in the explanatory power of Model 4 over Model 3 ($\Delta R^2 = 0.018$, $\Delta F = 6.133$, $p < 0.05$). It could thus be concluded that inertia, alternative attractiveness, relationship length, and commitment, three two-way interaction terms, and two three-way interaction terms had significant effects on customer loyalty. Model 4 shows the results of the hypotheses testing.

4.2 Hypotheses testing

One of the four control variables was found to be significantly related to customer loyalty. Specifically, the number of products purchased ($\beta = 0.071$, $p < 0.05$) had a significant positive effect on customer loyalty. Furthermore, the effects of inertia ($\beta = 0.076$, $p < 0.05$), alternative attractiveness ($\beta = -0.112$, $p < 0.05$), relationship length ($\beta = 0.015$, $p < 0.05$) and commitment ($\beta = 0.307$, $p < 0.05$) on customer loyalty were all significant. Inertia, relationship length, and commitment had positive effects on customer loyalty, while alternative attractiveness had a negative effect on it. Therefore, $H1$, $H2$, $H3$, and $H4$ were supported.

Consistent with $H5$, the interaction effect of inertia and alternative attractiveness was significant and negative ($\beta = -0.076$, $p < 0.05$). The negative sign of the coefficient indicates that under conditions of high alternative attractiveness, the effect of inertia on customer loyalty decreases. The interaction effect of inertia and relationship length was significant and positive ($\beta = 0.014$, $p < 0.05$), as was the interaction effect of inertia and commitment ($\beta = 0.037$, $p < 0.05$). These two positive signs of the coefficient indicate that under conditions of high relationship length and high commitment, the effect of inertia on customer loyalty increases. Thus, $H6$ and $H7$ were supported.

Observing the three-way interaction terms, although the three-way interaction effect between inertia, relationship length, and alternative attractiveness was not significant, the sign of the coefficient was changed from positive ($\beta = 0.014$, $p < 0.05$) for the two-way interaction effect (inertia * relationship length) to negative ($\beta = -0.001$, $p > 0.05$) for the three-way interaction effect (inertia * relationship length * alternative attractiveness). Even though consistent with our suggestion, $H8$ was not supported. On the other hand, the sign of the three-way interaction effect between inertia, commitment, and alternative attractiveness still remained positive and significant ($\beta = 0.151$, $p < 0.05$). This indicates that the positive moderating effect of commitment on the relationship between inertia and customer loyalty will not be influenced by rising alternative attractiveness. Thus, $H9$ was supported.
### Table 2. Regression results.

<table>
<thead>
<tr>
<th>Dependent variable: Customer loyalty</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control variables:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>(\beta = -0.044)</td>
<td>(t = -0.737)</td>
<td>(\beta = -0.075)</td>
<td>(t = -1.146)</td>
</tr>
<tr>
<td>Age</td>
<td>(\beta = 0.010)*</td>
<td>(t = 3.244)</td>
<td>(\beta = 0.005)</td>
<td>(t = 1.829)</td>
</tr>
<tr>
<td>Income</td>
<td>(\beta = 0.060)*</td>
<td>(t = 2.246)</td>
<td>(\beta = 0.024)</td>
<td>(t = 1.014)</td>
</tr>
<tr>
<td>The number of products purchased</td>
<td>(\beta = 0.088)*</td>
<td>(t = 4.110)</td>
<td>(\beta = 0.073)*</td>
<td>(t = 3.765)</td>
</tr>
<tr>
<td>Main effects:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inertia (In) (H1)</td>
<td>(\beta = 0.068)</td>
<td></td>
<td>(\beta = 1.840)</td>
<td></td>
</tr>
<tr>
<td>Alternative attractiveness (AA) (H2)</td>
<td></td>
<td></td>
<td>(\beta = -0.142)*</td>
<td></td>
</tr>
<tr>
<td>Relationship length (RL) (H3)</td>
<td>(\beta = 0.020)*</td>
<td></td>
<td>(t = 3.280)</td>
<td></td>
</tr>
<tr>
<td>Commitment (C) (H4)</td>
<td>(\beta = 0.338)*</td>
<td></td>
<td>(t = 8.415)</td>
<td></td>
</tr>
<tr>
<td>Two-way interactions:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(In)×(AA) (H5)</td>
<td></td>
<td></td>
<td>(\beta = -0.068)</td>
<td></td>
</tr>
<tr>
<td>(In)×(RL) (H6)</td>
<td></td>
<td></td>
<td>(\beta = 0.011)</td>
<td></td>
</tr>
<tr>
<td>(In)×(C) (H7)</td>
<td></td>
<td></td>
<td>(\beta = 0.058)*</td>
<td></td>
</tr>
<tr>
<td>Three-way interactions:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(In)×(RL)×(AA) (H8)</td>
<td></td>
<td></td>
<td>(\beta = -0.001)</td>
<td></td>
</tr>
<tr>
<td>(In)×(C)×(AA) (H9)</td>
<td></td>
<td></td>
<td>(\beta = 0.020)</td>
<td></td>
</tr>
</tbody>
</table>

\[ R^2 = 0.097 \]
\[ \Delta R^2 = 0.317 \]
\[ \Delta F value = 36.101 \]

\(* p < 0.05\)

### 4.3 Additional analysis

The moderating effects in the hypotheses were additionally assessed by the regression multigroup analysis (Arnold, 1982). The procedure adopted was to divide the total sample into two subgroups on the basis of high/low alternative attractiveness. The sample size was \(n = 280\) for the high alternative attractiveness subgroup, and \(n = 179\) for the low alternative attractiveness subgroup. Referring to Table 3, inertia had a stronger effect on customer loyalty under the condition of low alternative attractiveness (\(\beta = 0.176, p < 0.05\)) rather than high alternative attractiveness (\(\beta = 0.004, p > 0.05\)). Interestingly, the interaction effect of inertia and commitment was significant and positive under the condition of low alternative attractiveness (\(\beta = 0.053, p < 0.05\)) and high alternative attractiveness (\(\beta = 0.036, p < 0.05\)). However, the interaction effect of inertia and relationship length was significantly positive under the condition of low alternative attractiveness (\(\beta = 0.029, p < 0.05\)). However, under the condition high alternative attractiveness, the interaction effect of inertia and relationship was not significant (\(\beta = 0.014, p > 0.05\)). Therefore, regression multigroup analysis was clearly to observe how the effect of inertia on customer loyalty varies with differing levels of commitment and relationship length that are likely to change due to customers' alternative attractiveness.
5. Discussion

The results of this study have important contributions to the relationship and services marketing literature. First, this study constitutes an important first step in understanding the broadening role of inertia under the different conditions. Most importantly, this study adds to the existing literature on inertia beyond its typical focus on limited to spurious loyalty and manages to distinguish the role of inertia related to spurious loyalty and action loyalty. Furthermore, it adds to a better understanding of the positive role of inertia in the action loyalty phase. This study reveals that without commitment, loyalty based on inertia is unstable and remains just spurious loyalty. Furthermore, the role of relationship length is merely to strengthen and stabilize such spurious loyalty. In contrast, inertia in the action loyalty phase must be sustained by strong commitment.

Second, the interaction effects of inertia, alternative attractiveness, relationship length, and commitment on customer loyalty may help to explain inconsistent findings with regard to inertia in previous studies. For example, Yanamandram and White (2006) found a positive relationship between inertia and customer loyalty, while Ranaweera and Neely (2003) found...
no relationship between inertia and customer loyalty. A possible reason for these inconsistent findings is that previous studies may have ignored the moderating roles of alternative attractiveness, relationship length, and commitment concurrently. Just as Huang and Yu (1999) noted, inertia is rather fragile and vulnerable to alternative attractiveness. Higher alternative attractiveness not only has a direct negative effect on customer loyalty, but also decreases the effect of inertia on such loyalty. High alternative attractiveness can provide a reasonable explanation for the lack of a significant relationship between inertia and customer loyalty in Ranaweera and Neely’s (2003) model.

On the basis of the empirical results, the stability of inertia results from not only relationship length, but more especially, commitment. However, the stability of inertia from relationship length will be reduced as alternative attractiveness increases. In contrast, the stability of inertia from commitment will not be affected as alternative attractiveness increases. The underlying reason is that a large number of long-term customers without commitment are not necessarily attitudinally loyal (Wangenheim, 2003). Without commitment, alternative attractiveness can easily break long-term customers’ inertial repurchasing behaviors and encourage customers’ switching (Gupta et al., 1996; Huang and Yu, 1999; Liljander and Roos, 2002). Obviously, relationship length, while important, is less so than commitment in solidifying inertia-customer loyalty relationship. In sum, relationship length is not very successful in translating spurious loyalty to action loyalty. Instead, commitment should be of primary concern in terms of solidifying the relationship between inertia and customer loyalty, and it involves converting spurious loyalty to action loyalty.

Third, the moderating effects of alternative attractiveness and commitment specify the contingent conditions under which inertia could be stable or unstable. Customer loyalty can be described along a continuum from spurious to action loyalty on the basis of commitment and alternative attractiveness. If the moderating effect of commitment is more powerful than the moderating effect of alternative attractiveness, inertia exerts a stronger effect on customer loyalty because commitment acts to generate action inertia. On the other hand, if commitment is lacking, the moderating effect of alternative attractiveness is stronger than the moderating effect of commitment. In such cases, inertia becomes unstable because alternative attractiveness can easily break off customers’ inertial repurchasing behaviors and encourage customers’ switching (Liljander and Roos, 2002; Pitta et al., 2006). In sum, inert customers without commitment will easily terminate the relationship when alternative offerings appear to provide superior value, and this characterizes Dick and Basu’s (1994) spurious loyalty. However, the relationship between inertia and customer loyalty based on high levels of commitment on the customers’ part is less sensitive to alternative offerings, and customers in this case are most likely to maintain loyalty, and this characterizes Oliver’s (1999) action loyalty.

6. Managerial implications

The results of this study have important implications in the field of relationship and services marketing. As inertia, alternative attractiveness, relationship length, and commitment are the main antecedents of customer loyalty, banking managers should take these into account and develop appropriate actions. Understanding why inert customers stay will help banking managers objectively analyze potential strategies and tactics to improve customer loyalty. Especially, the behavioral aspects of action loyalty and spurious loyalty are the same. Therefore, this study suggests that action loyalty, which is different spurious loyalty, is a consequence of commitment. Merely spurious loyalty customers may exhibit loyal behaviors. Conversely, action loyalty customers not only exhibit loyal behaviors, they are also emotionally involved in a continuing relationship.
It is not surprising that there is a relatively high level of inertia among banking customers. However, inert customers should not be perceived as being a homogeneous segmentation (Howcroft et al., 2007). Some are passive, lazy, and indifferent. Some are old customers. Others may result from commitment. For example, Howcroft et al. (2007) referred action inertia customers as those who have high levels of confidence and satisfaction with their financial provider. Action inertia bred by commitment develops as customers’ decision making becomes more formalized, which further reduces their responsiveness to change (Vogel et al., 2008). In general, past behaviors in the relationship might represent the inertia effect (Rust et al., 2004). Thus, the identification of past behaviors may explain the reasons of inertia and has particular implications for managing inertia.

Under the condition of low alternative attractiveness, inertia definitely deters customers actively from searching for alternatives (Egan, 2000). Therefore, it is suggested that in terms of strategy, banking managers should place special emphasis on differentiation from alternative offerings to reduce perceived alternative attractiveness, as this may sustain the relationship between inertia and customer loyalty. Such a relationship may be temporary if banking managers cannot effectively defend the violation of alternative attractiveness, specifically in the more mature areas of the banking industry, where alternatives constantly offer more attractive offerings.

Under the condition of high alternative attractiveness, banking managers should realize that inertia becomes unstable. Most importantly, although commitment and relationship length may act as complements to inertia in strengthening customer loyalty, there is a need to differentiate stability of inertia from relationship length or commitment. The findings highlight for banking managers that relationship length may only strengthen spurious loyalty, and may not be very successful in translating it to action loyalty. In other words, regardless of relationship length, banking managers should continuously make sure that customers have affective commitment. Thus, the development of commitment is a key objective for banking managers. Real action loyalty can be achieved by fostering commitment. Inert customers experiencing high levels of commitment to the bank are more likely to maintain action loyalty than inert consumers who do not feel committed to it. The role of commitment is to aid in transforming unstable inertia in the spurious loyalty phase into stable inertia in the action loyalty phase. Therefore, banking managers may develop commitment through open communication, shared values, satisfaction, trust, and identification to strengthen customer loyalty (Garbarino and Johnson, 1999; Morgan and Hunt, 1994).

7. Research limitations and directions for future research

The most significant limitation of this study is the cross-sectional and self-reported data. The use of such data may have led to overestimation of the considered relationships because of common method variance. In addition, some of the managerial and research implications would greatly benefit from a longitudinal investigation. Commitment and inertia may develop over time (Reinartz and Kumar, 2000), and these effects are only likely to be observed with a longitudinal research design. As a result, this study cannot draw strong conclusions regarding the true dynamic effects.

Second, this study took place within a single-service setting and geographic area. As a result, the findings of this study may not generalize to other service industries and other countries. For the purpose of cross-validation, additional exploration of the relationships needs to be extended beyond the sample and setting reported here. For example, in business-to-business relationships, as the specific assets are involved for both parties, inertia rapidly develops. Inertia in such situations does show stability (Hertz, 2006). In contrast, with the rapid development of Internet technology, Harris (2000) argued that online purchasing may
be eroding inertia. In future work, this study should be replicated in other service industries, Internet channels, and other countries.

Third, this study may have omitted some variables that could help explain inertia and customer loyalty. More comprehensive models that take into account the antecedents of inertia, such as convenience, variety-seeking, the loss of the personal relationship, and the loss of advantages associated with previous loyalty (Bozzo, 2002; Lee and Cunningham, 2001; Lee et al., 2001), could be developed. In addition, like inertia, switching cost reveals a close relatedness to status quo. Whereas switching costs implicitly assumes a rational, explicit decision to stay with the service providers, inertia diverges from this explicit decision and instead occurs because customers engage in habitual buying behaviors (Wieringa and Verhoef, 2007). Accordingly, it is likely that those additional variables might help explain key relationships further.

Fourth, As Oliver (1999) argued, action loyalty is accompanied by an additional desire to overcome obstacles that might prevent action. In this study, action loyalty customers are found to show a higher level of resistance to alternative attractiveness. However, does a much greater violation, such as negative information, detach such inertial repurchasing behaviors? Future studies can develop Ahluwalia et al. (2000) study to design an experiment to empirically investigate whether action loyalty customers can tolerate negative information.

Finally, the measures of inertia did not perform as well as some of the other measures. Based on CFA analysis, the loading of the third scale item was less than 0.7 (see the Appendix). Future research should involve improved measures of inertia.

Acknowledgements

This author sincerely appreciates for the precious comments from the four anonymous reviewers and the financial aid from the National Science Council (NSC 97-2410-H-029-001).

References


