Customer Value, Satisfaction and Behavioral Intentions: the Effects of Consumer Search Behavior

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Customer Value, Satisfaction and Behavioral Intentions: 
the Effects of Consumer Search Behavior

Wahyuningsih*

This study develops and tests an integrative model to examine the relationships among customer value, satisfaction and behavioral intentions based upon a typology of consumer search behaviors. The model was tested using surveyed data from 546 customers of car insurance in Melbourne, Australia. The findings demonstrate that each type of consumer (passive, rational-active, relational-dependent), performs differently on the relationships among customer value, satisfaction, and behavioral intentions. The identification of value, satisfaction, and behavioral intentions within each search behavior allows managers to deliver optimal value and satisfaction to their consumers.

Keywords: customer value, satisfaction, behavior intentions, consumer behavior

Introduction

The study of relationships among value, satisfaction, and behavioral intentions is of increasing interest to both academics and practitioners. However, the relationships among these constructs have been studied assuming homogeneity in consumers. That is, previous studies (Choi et al. 2004; Hutchinson, Lai, and Wang, 2009; Lam et al. 2004; McDougall and Levesque 2000; Ryu, Han, and Kim, 2008; Yang and Peterson, 2004) have seen the relationships among value, satisfaction, and behavioral intentions as pertaining uniformly to all customers. Based on the theory of market segmentation, specifically segmenting a market from the behavior of consumers, it is perceived that each type of consumer needs a specific approach. As pointed out by Eggert and Ulaga (2002), different customer segments perceive value differently for the same product. Starting from this premise, this study demonstrates that customer value and its relationships with customer satisfaction and behavioral intentions differ from one search type to another, and thus need to be examined separately for each segment of consumers.

Studies of the interrelationships among customer value, satisfaction, and behavior are not new. For example, Choi et. al (2004) have investigated the interrelationships among value, satisfaction, and behavioral intentions in health care provider choice. Similarly, Hutchinson et. al (2009) examine the interrelationships among value, satisfaction, and behavioral intentions of golf travelers. Eggert and Ulaga (2002) have also studied the interrelationships among value, satisfaction, and behavioral intentions in business markets. These past studies have investigated the interrelationships among the three constructs (value-satisfaction-behavioral intentions) for all

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types of customer, without looking at consumer segments. This paper attempts to bridge the gap found in the literature of relationships between value-satisfaction-behavioral intentions model and consumer market segmentation. The paper proceeds as follows. First, definitions and a brief discussion of customer value, customer satisfaction, and behavioral intentions will be presented. Next we discuss consumer search and how it might affect each of value, satisfaction, and behavioral intentions. Finally, we discuss the possible interconnections among the main constructs in the model and test a model of the relationships among value, satisfaction, and behavior in each of the three search types.

**Literature Review**

**Customer Value**

Organizations which have a strong focus on customer value will form a sustainable competitive advantage (Parasuraman, 1997; Woodruff, 1997). The rationale behind this is that, delivering better value to customers might result in a higher likelihood of purchase, repeat purchase, and positive word-of-mouth communication (Bolton and Drew, 1991; Grisaffe and Kumar, 1998). In other words, if the organizations know what drives value for their customers and provide superior customer value, they have a greater probability of obtaining and retaining customers (Slater and Narver, 2000). Therefore, it can be noted that an in-depth understanding of customer value is very important for companies to succeed.

Generally, it is argued that value means many things to many people. Concepts of value have been discussed in many literatures, for example economics, social science, accounting, and marketing which results in diversity in interpretations. The concepts of value are multifaceted and complicated (Huber et al., 2001) and characterised as fragmented (Woodruff, 1997). Having reviewed the literature, in this paper customer value defined as the difference between benefits and sacrifices (Eggert and Ulaga 2002; Ha and Jang, 2010; Lapiere 2000; Snoj et al. 2004; Ulaga and Chacour 2001; Van Der Haar et al. 2001; Walter et al. 2001).

**Benefits**

In any purchase decisions, a consumer is seeking to acquire benefits (Lapiere, 2000; Monroe, 1990). The perceived benefits are a combination of physical attributes, service attributes, and technical support available in relation to a particular use situation (Monroe, 1990). The benefits delivered by organisations need to be consistent with benefits desired by customers. This is the core concept of benefit analysis (Myers and Tauber, 1977). Based on this concept, the benefits delivered to customers are determined by characteristics/attributes of products/services, the firms, the customer characteristics, and usage situations or occasions. This concept has certain implications for companies; first, it is necessary to identify the benefits that the customers will perceive about the product or service; second, it is necessary to determine the relative importance of those benefits that the customers place on the product or service (Monroe, 1990). It can be argued, therefore, that in order to meet the customers’ needs and wants, components of benefits need to be critically identified.

**Sacrifices**

Sacrifices are primarily important to customers in value perceptions (Eggert and Ulaga, 2002). Sacrifices are what the consumers have to give up in obtaining the purchased products. These are defined from the customer’s perspective (Monroe, 1990) and include monetary terms (Anderson, Jain, and Chintagunta, 1993) and non-monetary terms such as energy, time and effort (Hutchinson et al, 2009; Lapiere, 2000).

According to Monroe (1990, p.88), sacrifice in the context of perceived value is defined as “perceived total costs to the buyer, including: purchase price, start-up costs (acquisition costs, transport, installation, order handling), post-purchase costs (repairs and maintenance, risk of failure or poor performance”). Gabbott (2004) identifies sacrifices as having three aspects acquisition, consumption, and disposal. Acquisition includes the psychological cost of thinking, selecting and comparing, the physical costs of searching such as walking, driving, and
parking, and the economic cost associated with acquiring publications, applying for information and acquiring information. Consumption includes the physical and mental effort involved in consuming, such as riding a bike or a visiting a gym, and the required economic inputs to make a product consumable such as petrol for a car. The last aspect is disposal; for example, changing a bank account or phone account can involve a complex series of activities such as sending letters, making phone calls, tracking documentation, etc. Hence, it can be summarised that customer perceived sacrifices is the loss derived from the product or service due to the increment of its perceived short-term and long-term costs (Wang et al., 2004, p. 172).

Customer Satisfaction

There has been extensive research in customer satisfaction over many years. Customer satisfaction has been considered by companies as a key strategic indicator of a company’s success and long-term competitiveness (Anderson et al, 2008; Law, Hui, and Zhao, 2004; Luo and Homburg, 2007). So highly is it regarded that many service companies spend as much as half of their research budget on measuring customer satisfaction (Wilson, 2002).

Research into customer satisfaction has revealed several advantages for companies:

- A satisfied consumer is more likely to stay with the same company (Bodet, 2008; Shankar et al., 2003)
- The longer a consumer stays with a company, the more products or services he/she purchases from the company (Wangenheim and Bayon, 2007; Law, Hui, and Zhao, 2004)
- It costs more to capture a new consumer than to retain a current consumer (Sheth et al., 1999)
- A satisfied consumer is less likely to switch to other companies (Gremler and Brown, 1999; Keaveney, 1995)

For these reasons, many organisations have placed much attention on studying customer satisfaction.

Furthermore, higher customer satisfaction insulates current customers from competitors, enhances a firm’s reputation in the marketplace, and lowers the costs of attracting and transacting with new customers (Bodet, 2007). From the above advantages, accordingly, customer satisfaction leads to profitability (Luo and Homburg, 2007). This is in agreement with Rust and Zahorik (1993) who have empirically tested the subsequent links from customer satisfaction, to individual loyalty, aggregate retention rate, market share, and profits. They also point out that retention rate is seen to be the most important component of market share, and that it is driven by customer satisfaction.

Customer satisfaction has been a popular topic in marketing for more than 30 years without the emergence of a consensual definition of the concept (Host and Knie-Andersen, 2004). Johnson, Anderson, and Fornell (1995) argue that customer satisfaction is a cumulative construct that is affected by market expectations and performance perceptions in any given period, and is also affected by past satisfaction from period to period. According to Oliver (1980) satisfaction outcomes are a function of perceived performance and perceived disconfirmation. This author explains that perceived disconfirmation depends on perceived performance and a standard for comparison. Standards of comparison may include expectations, ideals, competitors, other service categories, marketer promises and industry norms.

In this study, we adopt the definition put forward by Anderson et al (2008) and Luo and Homburg (2007), which argues that customer satisfaction, is “an overall post-purchase evaluation”. This definition focuses on post-purchase perceived product performance compared with pre-purchase expectations. This choice allows us to make a clearer distinction between value and satisfaction.

Behavioral Intentions

Two behavioral intentions investigated in this study include repurchase intentions and word-of-mouth communication. The discussion concerning the two concepts is presented as follows:
Repurchase Intentions

Repurchase intentions are defined as “the individual’s judgment about buying again a designated service from the same company, taking into account his or her current situation and likely circumstances” (Hellier et al. 2003, p.1764). From this definition, it is clear that repurchase behavior occurs when customers purchase other products or services for the second or more times with the same company; and the reason for purchasing again is mainly triggered by customer experience towards the products or services. Thus, it is noticed that consumers are more likely to purchase again from the same company if they think that what they have received was worth what they have given up.

Hellier et al. (2003) argue that customer repurchase intentions are influenced by seven important factors. Namely, service quality, equity, value, customer satisfaction, past loyalty, expected switching cost, and brand preference. The study by Petrick, Morais, and Norman (2001) suggests that consumers’ intention to repurchase is influenced by three factors: past behavior, satisfaction, and perceived value. This is supported by Diaz and Ruiz (2002) who assert that customer satisfaction is a primary precursor of repeat purchase behavior. Meanwhile, Gross (1997) argues that repurchase intentions are directly impacted by perceived value omitting satisfaction. From these arguments, it can be noticed that customer value and/or customer satisfaction have a positive influence on repurchase intentions, and that the relative role of these factors is still unclear.

Word-of-Mouth Communication (WoM)

WoM communication is defined as “informal communications directed at other consumers about the ownership, usage, or characteristics of particular goods and services and/or their sellers” (Westbrook 1987, p.261). Customers engage in WoM communications because they want to ease a tension that the positive or negative experience produced, to reassure themselves in front of others, to gain support from others who share their opinions, to gain attention, or to share the benefits of things enjoyed (Wirtz and Chew 2002).

WoM has been identified in previous research as an important behavior after consuming a product or service (e.g., Gremler et al. 2001; Wirtz and Chew 2002). Customers who show up on the strength of a personal recommendation tend to be more profitable and stay with the company longer than customers who respond to conquest advertising, sales pitches, or price promotions (Reichheld 1996). From the previous studies, it is perceived that WoM plays a key role in shaping consumers attitudes and behaviors (Harrison-Walker 2001). Thus, WoM serves as enforcement to consumers to remain loyal to a service provider.

WoM is more important and influential within a service context than strictly just product marketing scenarios, given their intangibility and higher associated risk (Mangold et al. 1999). Compared to purchasers of goods, Murray (1991) found that service buyers have greater confidence in personal sources of information as well as a greater pre-purchase preference for personal information sources. In addition, Ennew et al. (2000) suggest that WoM may also be one of the most powerful forms of communication within financial services, given they tend to be characterized by a predominance of experience and credence qualities. A consumer may not understand a service fully before its consumption; he or she might seek WoM information from an experienced source (Bansal and Voyer 2000). Therefore, WoM becomes especially important within the services purchase decision context.

Factors Influencing Consumer’s Word-of-Mouth Communication

Bone (1992) argues that WoM can be partially influenced by four factors. These are social tie strength, the presence/absence of an individual taking a committed decision maker role, consumer satisfaction, and perceived novelty. Social ties represent the strength of a consumers’ relationship to the people accompanying them. The author suggests that the weaker the social ties that exist among group members, the more WoM will occur. A second factor is whether one or more group members take on the role of a
committed decision maker. It is suggested that whenever there is a committed decision maker in a group, WoM is likely to occur. Third, the author argues that the level of satisfaction and dissatisfaction affect an individual’s mood and increase the amount of WoM. The last factor is perceived novelty that may be a function of the consumer’s lifestyle and experiences, characteristics of the product/service, and/or the manner in which the product/service is presented. A situation that is perceived as novel will receive the consumer’s attention, making WoM more likely. Specifically, previous studies (e.g., Bansal and Voyer 2000; Bone 1992; Ennew et al. 2000) suggest that WoM is often influenced by customer satisfaction or dissatisfaction with purchasing experiences.

The Link between Customer Value and Behavioral Intentions (Direct Impact Model)

Most conceptual and empirical contributions to value literature conceive a direct impact of customer value on behavioral outcomes neglecting the role of satisfaction (Eggert and Ulaga, 2002). For example, Grisaffe and Kumar (1998) point out two behavioral intentions as direct consequences of customer value. These are customer likelihood to recommend and likelihood to continue doing business with the company. This is in agreement with Petrick’s (2002) argument that customer value has a direct impact on repurchase intentions and word-of-mouth communication. In addition, Bolton and Drew (1991) found that value is related to customers’ subscription intentions and intentions to recommend. This is in line with the study by Hartline and Jones (1996) who suggest that value leads to the increase of word-of-mouth intentions. Moreover, Chang and Wildt (1994) found that perceived value mediates the relationship between perceived quality, perceived price, and purchase intention. The model of these relationships can be seen in Figure 1.

Further to the discussion, Cronin et al. (1997) propose the value added model which examines service quality and sacrifice as a direct measure of value that has a direct link to purchase intentions. They found that the addition of a direct measure of service value to the model which is defined solely by service quality and sacrifice increases the ability of the model to explain variance in consumers’ purchase intentions.

Basically, a rationale for neglecting satisfaction is provided by Gross (1997) who argues that in business markets, purchasing managers’ decision making is mainly guided by cognitive factors and not by affective ones. Therefore, a direct link between value and outcome variables has been developed taking into consideration solely the cognitive input and cognitive output which consist of repurchase intentions, search for alternatives, and word-of-mouth communication (Eggert and Ulaga 2002). In consumer markets, buying decision-making is determined by both cognitive and affective factors (Sheth et al. 1991). Hence, it is reasonable to argue that there is a direct relationship between value and behavioral intentions in consumer. In this context, customer value is supposed to have a direct impact on behavioral intentions.

Grewal, Monroe, and Krishnan (1998) and Sweeney, Soutar, and Johnson (1999) suggest that in a pre-purchase situation, perception of value might directly influence willingness to buy. Neal (1999) argues that satisfaction is necessary,

Figure 1. A Direct Link between Value and Purchase Intentions

![Figure 1. A Direct Link between Value and Purchase Intentions](Source: Adapted from Chang and Wildt (1994))
but value drives loyalty. This is because the most satisfied customer may not necessarily be the most loyal; thus, value is a better predictor for loyalty. The key foundation underlying all these studies is that value is the key linkage between the cognitive elements of perceived quality or performance, perceived sacrifice, and behavioral intentions (Patterson and Spreng 1997). Based on these previous studies, it is noticed that value may well directly impact on behavioral intentions. Based on this discussion, it is hypothesized that:

H1: Customer value is antecedent to behavioral intentions

The Link between Customer Value and Behavioral Intentions Mediated by Satisfaction (Indirect-Impact Model)

Unlike studies that have found perceived value to influence intentions directly thus neglecting satisfaction, the findings of Ha and Yang (2010) and Patterson and Spreng (1997) suggest that value is completely mediated through satisfaction in influencing repeat purchase behavior. Their argument supports an earlier study by Fornell et al., (1996) that the impact of value on behavioral intentions is mediated by satisfaction. In agreement with this view, McDougall and Levesque (2000) investigate the relationships among these constructs: core service quality, relational service quality, perceived value, customer satisfaction, and future intentions to purchase across four services. They found that core service quality and perceived value are the most important drivers of customer satisfaction with relational service quality a significant but less important driver. They also reveal that there is a direct link between customer satisfaction and future intentions. The links can be seen in figure 2.

This argument is in agreement with the work of Chan et al. (2003), Cronin et al. (2000), McNaughton et al., (2002) and Petrick et al., (2001) who assess the effects of value on behavioral intentions through customer satisfaction. In addition, Lam et al. (2004) found that customer satisfaction mediates the relationship between customer value and customer loyalty including repurchase intentions and intentions to recommend. From these previous studies, it is clear that the relationship between perceived value and future intentions is mediated by customer satisfaction.

The reasoning behind the argument that the link between value and behavioral intentions is mediated by satisfaction may be described as follows. To continue doing business with a company and recommend to other people about the products and services, consumers need to have formed a judgment towards the products and services as to whether they are satisfied or dissatisfied. It might be difficult for a consumer to form behavioral intentions before they have a reaction (or judgment) towards the products and services. Thus, the degree of behavioral intentions is dependent on the level of satisfaction. Therefore, it can be noticed that the link between customer value and behavioral intentions may also be mediated through customer satisfaction. Therefore, it is hypothesized that:

Figure 2. Indirect Link between Perceived Value and Future Intentions

![Figure 2. Indirect Link between Perceived Value and Future Intentions](source: McDougall and Levesque (2000))
**H2: The relationship between value and behavioral intentions is mediated by satisfaction**

**Consumer Behavior Search Typology**

Classifying target markets into groups of consumers assists marketers to clearly identify and satisfy the needs and wants of each group. In parallel with this view, Beckett et al., (2000) formulate a consumer behavior matrix (see Figure 3) that divides financial services consumers into four groups of consumers based on their behavior.

According to Beckett et al., (2000), it is possible to specify consumer search behavior through two principal factors that motivate and determine individual contracting choices, namely involvement and uncertainty (Bateson 1989; Ennew and McKechnie 1998; Harrison 1994; McKechnie 1992). Consumer involvement incorporates a number of subsets: customer control (Bateson 1989), customer participation, and level of contact (Chase 1978). Uncertainty or confidence is largely determined by perception of risk, which is determined by the complexity of the product being purchased and the certainty of the outcome associated with that product (Shostack 1977). The following presents further discussion on involvement and confidence.

From the above key factors, involvement and confidence, the matrix can be formulated (Figure 4). This matrix describes different types of consumer behavior: repeat-passive, rational-active, relational-dependent, and no-purchase.

**No-purchase**

According to Beckett et al. (2000) consumers who do not have involvement with financial products and do not possess confidence in them make no purchase. An example of the “no-purchase” consumers is that individuals who leave significant sums of money on deposit rather than purchase financial services that could generate greater return (Beckett et al. 2000). The authors do not discuss the “no-purchase” consumers in their study. In their empirical discussion, they only focus on the three types of consumer purchase behavior: repeat-passive, rational-active, and relational-dependent. This is because “no-purchase” is not a type of consumer, rather, it is an action made by the three types of consumer behavior (passive, rational-active, and relational-dependent). Figure 4 shows how this works.

From figure 4, it is clear that in evaluating a product, the three types of consumers will make a decision whether or not to purchase a product. Thus, purchase or not purchase is not a type of consumer search, it is a decision. The remaining categories are defined in Table 1.

As noted earlier, these three types of consumers possess different levels of confidence and involvement, which in turn have an impact on their search behavior. Therefore, their perceptions of a certain product might also differ, including their perceived value and satisfaction. As argued by Moorthy et al. (1997), consumers will search for more information when they perceive that the product will give them high value or make them

![Figure 3. Consumer Behavior Matrix](image-url)
Ratchford et al. (2003) suggest that less satisfaction might trigger a more extensive search. In addition, Eggert and Ulaga (2002) suggest that different customer segments perceive different value levels within the same product. As discussed earlier, customer value is related to customer satisfaction and behavioral intentions. Taking into account that customer value might be perceived differently by consumers in different segments, and the arguments that there are interactions among customer value, customer satisfaction, and behavioral intentions; accordingly, it is hypothesized that:

\[ H_3: \text{Each type of consumer search behavior perform differently on the relationships among perceived value, satisfaction, and behavioral intentions} \]

**Methodology**

This research investigates the typology of consumer search behavior and examines the value-satisfaction-behavioral intentions model displayed by each consumer type regarding their experiences with the car insurance industry. To collect these data, this study employs closed-ended questions in a structured questionnaire. A nine point Likert scale from “1” to “9” was used to capture the behavior, attitudes, and perceptions of consumers toward the product. The unit of analysis of this study is individuals, specifically, students who have purchased car insurance within the past year. A convenience sample of 654 questionnaires were distributed directly to undergraduate student respondents. These students were first screened for owning a car, and
for paying their own car insurance premium. Out of 654 questionnaires, 546 questionnaires were usable and 13 questionnaires were incomplete. Thus, the response rate in this survey was 85%.

**Measures and Data Analysis**

This study uses multi-item scales to measure the model constructs. The measures for consumer behavior typology were derived from the study of Beckett et al. (2000), and information search (e.g., Moorthy et al. 1997; Murray 1991; Urbany et al. 1989). We used existing scales for the measures of customer value including measures for functional benefits (e.g., Alfansi and Sargeant 2000), social and emotional benefits (Kahle 1983; Petrick 2002; Sheth et al. 1999; Sweeney and Soutar 2001), and functional, social, and emotional sacrifices (e.g., Cronin et al. 1997; Sheth et al. 1991). We also used existing scales for the measures of customer satisfaction (e.g. Athanassopoulos, 2000; Spreng et al.1996; Oliver 1981) and behavioral intentions (e.g. Eggert and Ulaga, 2002; Bansal and Voyer 2000; Bone 1992; Ennew et al. 2000).

The respondents have been classified into the three search categories based on their responses to questions on sources of information used, and the degree to which they relied on these sources. For each source there was a one to seven scale and the respondents were asked to indicate how much they had used each source. The anchors for these scales were “Not at all” and “A great deal.” The question was repeated, but this time the respondents were asked to indicate which sources were the most influential in their decision and the anchors were “Not influential” and “Very influential.” We then classified our respondents by first splitting between those who searched at all (scored at least a four on any one item and had that item with at least a four in terms of its influence). Thus, someone who did not search at all (scored less than a four on each of the seven point scales) was considered passive. Someone who scored highly on any of the sources was then sub-classified depending on whether the most important sources of information were considered influencers (Friends/family/partner or financial adviser/intermediary) or if they were influenced by data they collected and assessed themselves. In the former case respondents were classified as relational dependent, while in the latter they were classified as rational active. Thus, each respondent was classified uniquely into one category.

Data analysis technique used in this research is Structural Equation Modeling (SEM) using AMOS 5. The assumptions to apply these techniques including absence of multicollinearity, outliers, and heteroscedasticity, as well as the presence of homogeneity, linearity, and normality have all been met. SEM was employed to construct and test the measurement model, which enables a comprehensive, confirmatory assessment of construct validity, and provides a confirmatory assessment of convergent validity and discriminant validity (Anderson and Gerbing 1988). The measurement model performed well as indicated by the summary of model fit ($\chi^2$ =18.520, df=8, P value=.018, $\chi^2$/df=2.315, GFI=.989, AGFI=.972, NFI=.981, IIF=.989, TLI=.979, CFI=.989, and RMSEA=.049). The reliability of constructs have been assessed using Cronbach’s alpha, which is justified for this study since the object of measurement (the consumer) is the same as the unit of analysis (Finn and Kayande 1997). Coefficient $\alpha$ score for functional benefit is .84, functional sacrifice is .78, social benefit is .79, and emotional benefit .78. Since the concept of value will be investigated across different types of consumer (passive, rational-active, relational-dependent), the Measurement Equivalence/ Invariance (ME/I) using SEM needs to be performed. The purpose of establishing ME/I is to examine whether the conceptualization of value was perceived similarly by the different types of consumer (Vanderberg and Lance 2000).

**Result and Discussion**

As mentioned earlier, the conceptualization of customer value, customer satisfaction, and behavioral intentions need to be investigated across the types of consumer using Measurement Equivalence/Invariance (ME/I). Since behavioral intentions in this study has been measured using nominal scale (“yes-no” question), measurement model cannot be established for this construct. Thus, the ME/I will be established for the
conceptualization of customer value and customer satisfaction for the three groups of consumer: passive (N=79), rational-active (N=208), and relational-dependent (N=259), being aware that the sample size for passive consumers is small compared to the other two groups. However, using the justification suggested by Bentler and Yuan (1999), the ME/I test can still be run given that the number of distinct parameters to be estimated is low (13), which is still more than 1:6 for the sample. Hence, statistically the sample is adequate to run a measurement equivalence/invariance test. Results of testing ME/I for customer value and customer satisfaction across three group comparisons are presented in Appendix 1 and 2 respectively.

The above chi-square difference test shows that the four variables: corporate, convenience, innovative-commission, expectation have been perceived as equivalent by our respondents. In other words, only “feeling” has been perceived to be non-equivalent. Therefore, it can be concluded that “corporate, convenience, innovativeness-pricing, and expectation” can be generalized for measuring customer satisfaction across types of consumer.

Following from the above result (Table 2), the measurement equivalence/invariance test needed to be re-performed excluding the “feeling” variable as it was detected that this item was perceived by consumers to be non-equivalent. The results are presented in Appendix 3. The measurement equivalence test, as presented in Appendix 3 shows that without “feeling” variable, the conceptualization of customer satisfaction has been perceived as equivalent by the three groups of consumer as indicated by the non-significant of all the p values.

The results of testing measurement equivalence for customer value shows that the conceptualization of customer value has been perceived similarly by the three groups of consumer as indicated by the non-significant of all the p value (see Table 3). However, the conceptualization of customer satisfaction has been perceived significantly differently (non-equivalent) by consumers at the Strong Factorial Level (Model 3) as indicated by the significant p value (p<.05) (see Appendix 2). Therefore, further investigation was needed to determine which variable(s) were perceived as non-equivalent by consumers. As there are five main variables for measuring satisfaction (corporate, convenience, innovative-commission, expectation, and feeling), the chi-square difference test was performed on each variable which is presented in Table 2.

### Table 2. Chi-Square Difference Test for Customer Satisfaction Construct at Strong Factorial Equivalence Level

<table>
<thead>
<tr>
<th></th>
<th>χ²</th>
<th>Df</th>
<th>p</th>
<th>χ²/df</th>
<th>Δχ²</th>
<th>Δdf</th>
<th>Δχ²/Δdf</th>
<th>P</th>
</tr>
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<tbody>
<tr>
<td>Baseline</td>
<td>17.911</td>
<td>14</td>
<td>.211</td>
<td>1.279</td>
<td>1</td>
<td>1.111</td>
<td>1.111</td>
<td>p&gt;.75</td>
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<tr>
<td>Corporate</td>
<td>19.022</td>
<td>15</td>
<td>.213</td>
<td>1.268</td>
<td>1.111</td>
<td>1</td>
<td>1.111</td>
<td>p&gt;.75</td>
</tr>
<tr>
<td>Convenience</td>
<td>18.754</td>
<td>15</td>
<td>.225</td>
<td>1.250</td>
<td>0.843</td>
<td>1</td>
<td>0.843</td>
<td>p&gt;.75</td>
</tr>
<tr>
<td>and Pricing</td>
<td>18.394</td>
<td>15</td>
<td>.243</td>
<td>1.226</td>
<td>0.483</td>
<td>1</td>
<td>0.483</td>
<td>p&gt;.75</td>
</tr>
<tr>
<td>Expectation</td>
<td>19.458</td>
<td>15</td>
<td>.194</td>
<td>1.297</td>
<td>1.547</td>
<td>1</td>
<td>1.547</td>
<td>p&gt;.25</td>
</tr>
<tr>
<td>Feeling</td>
<td>24.514</td>
<td>15</td>
<td>.057</td>
<td>1.634</td>
<td>6.603</td>
<td>1</td>
<td>6.603</td>
<td>p&lt;.01</td>
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### Table 3. Chi-Square Difference Test

<table>
<thead>
<tr>
<th>Model Comparison</th>
<th>χ²</th>
<th>Df</th>
<th>P</th>
<th>χ²/df</th>
<th>Δχ²</th>
<th>Δdf</th>
<th>Δχ²/Δdf</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>130.560</td>
<td>52</td>
<td>.000</td>
<td>2.511</td>
<td>24.045</td>
<td>2</td>
<td>12.023</td>
<td>&lt;.005</td>
</tr>
<tr>
<td>Model 1 (Constraint β customer value to behavioral intentions)</td>
<td>154.605</td>
<td>54</td>
<td>.000</td>
<td>2.863</td>
<td>24.045</td>
<td>2</td>
<td>12.023</td>
<td>&lt;.005</td>
</tr>
<tr>
<td>Model 2 (Constraint β customer value to customer satisfaction)</td>
<td>170.114</td>
<td>54</td>
<td>.000</td>
<td>3.150</td>
<td>39.554</td>
<td>2</td>
<td>19.777</td>
<td>&lt;.005</td>
</tr>
<tr>
<td>Model 3 (Constraint β customer satisfaction to behavioral intentions)</td>
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<td>.000</td>
<td>3.185</td>
<td>41.427</td>
<td>2</td>
<td>20.714</td>
<td>&lt;.005</td>
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</table>
The above chi-square difference test indicates that there is a significant difference between the models (p<.005). In other words, there is a significant difference in the relationships among customer value, customer satisfaction, and behavioral intentions across the three types of consumer. Moreover, it is interesting to note the differences in standardized regression weights among customer value, customer satisfaction, and behavioral intentions across the types of consumer. This result is presented in Figure 5 and Table 4.

The above regression weights show that relational-dependent consumers demonstrate the strongest relationship between satisfaction and behavioral intentions (.96), followed by rational-active consumers (.77), and passive consumers (.52). Similarly, relational-dependent consumers also account for the strongest relationship between perceived value and satisfaction (.53), followed by rational-active consumers (.46), and passive consumers (.44). The results show that there is a non-significant relationship between perceived value and behavioral intentions for all types of consumer. The non-significance of this result is presented in Table 3.

The above regression weights show that relational-dependent consumers demonstrate the strongest relationship between satisfaction and behavioral intentions (.96), followed by rational-active consumers (.77), and passive consumers (.52). Similarly, relational-dependent consumers also account for the strongest relationship between perceived value and satisfaction (.53), followed by rational-active consumers (.46), and passive consumers (.44). The results show that there is a non-significant relationship between perceived value and behavioral intentions for all types of consumer. The non-significance of this

---

**Table 4. Standardized Regression Weights for the Relationships among Customer Value, Customer Satisfaction, and Behavioral Intentions across Types of Consumer**

<table>
<thead>
<tr>
<th></th>
<th>Passive</th>
<th>Rational-Active</th>
<th>Relational-Dependent</th>
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</thead>
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<tr>
<td>Customer Value</td>
<td>.44</td>
<td>.46</td>
<td>.53</td>
</tr>
<tr>
<td>Customer Satisfaction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioral Intentions</td>
<td>.52</td>
<td>.77</td>
<td>.96</td>
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</tbody>
</table>

Note: non-significant results are grayed out.
result argues against a significant method effect in data of this research.

This study found that the three types of consumers display different relationships among value, satisfaction, and behavioral intentions. Before testing the relationships, the conceptualization of customer value and customer satisfaction has been assessed using measurement/equivalence invariance (ME/I). The establishment of measurement invariance across groups is a logical pre-requisite to conducting substantive cross-group comparisons (Vanderberg and Lance 2000), which in this study is the types of consumer (passive, rational-active, relational-dependent). The results indicate that the conceptualization of value has been perceived equivalently by the consumers. However, the conceptualization of one of the measures for satisfaction, the “feeling” variable, has been perceived differently by the three types of consumer. Hence, to test the conceptual model of the study, “feeling” has been excluded from the measures of satisfaction to achieve measurement equivalence across the types of consumer. The result of this study is in accordance with the study by Ueltschy et al. (2004) who investigated cross-cultural invariance of measures of satisfaction. These scholars found that some measures of satisfaction can be non-equivalent across cultures. The implication that can be drawn here is that future research needs to establish the measurement equivalence, even within cultures, before conducting cross-group comparisons.

The results of testing the conceptual model of the study suggest that the effect of satisfaction on behavioral intentions is considered stronger for relational-dependent and rational-active consumers than for passive consumer (see Figure 5 for illustration). This means that for consumers who search for information before purchasing a product, they may well know on what their future behavior depends. In other words, such consumers have a higher level of confidence regarding whether they are going to repurchase a product from the same company or switch to another company compared to the passive consumers who do not search for information before purchasing a product or service. Also, compared to the passive consumers, relational-dependent and rational-active consumers have a higher level of confidence in relation to whether or not they are going to recommend the product they are using to other people. Thus, this finding suggests that the level of intentions to repurchase and to recommend to other people, depends on both the amount of search and from whom consumers were directed to purchase a product (level of dependence). Hence, this study is the first empirical study to investigate the effects of information search behavior on intentions to repurchase and to do word-of-mouth communication.

The findings also suggest that the relationship between value and satisfaction is stronger for relational-dependent and rational-active consumers than for passive consumers. This means that, those relational-dependent and rational-active consumers with a high level of value will be more likely to perceive high levels of satisfaction. It suggests that consumers who actively collect information before purchasing a product will be more sensitive to a change in their level of satisfaction resulting from their perceived value compared to consumers who passively collect information. Thus, levels of satisfaction perceived by consumers are dependent on their levels of perceived value and are affected by their search behavior.

Previous studies on information search behavior (e.g., Moorthy et al. 1997; Ozanne et al. 1992; Ratchford 2001; Urbany et al. 1989) have mainly focused on the factors affecting search behavior and related search behavior to expected value. This implies that the main examination is on the process of information search “before” consumers purchase a product (pre-purchase). In this study, the difference is that consumer search behavior has a carryover effect on the behavior of consumers after they purchase a product. Hence, it is an integral part of post-purchase evaluation, in other words, with the consumers’ satisfaction. The findings suggest that consumers’ search behavior, which is represented by the amount of search and level of dependence of directed search, has an effect on the levels of satisfaction which are derived from the levels of perceived value.

The result further indicates that the direct link between customer value and behavioral intentions is not significant when satisfaction
is also in the model. This agrees with previous studies (e.g., Chan et al. 2003; Eggert and Ulaga 2002; Fornell et al. 1996; Ha and Yang, 2010; Lam et al. 2004; McNaughton et al. 2002; Patterson and Spreng 1997; Wang et al. 2004) which argued that the relationship between customer value and behavioral intentions is mediated by satisfaction. This study has confirmed that there is a positive relationship between customer value and customer satisfaction, and a positive relationship between customer value and behavioral intentions (see Appendix 5 for the model and results). This is in agreement with previous studies that support a positive link between value and behavioral intentions. For example, Grisaffe and Kumar (1998) suggest two behavioral intentions as direct consequences of customer value. These are customer likelihood to recommend and likelihood to continue doing business with the company. This is in line with the Petrick’s (2002) argument that customer value has a direct impact on repurchase intentions and word-of-mouth communication. In addition, Bolton and Drew (1991) found that value is related to customers’ subscription intentions and intentions to recommend. This also agrees with the study by Hartline and Jones (1996) who suggest that value leads to an increase in word-of-mouth intentions.

However, when satisfaction was included in the model, the direct link between customer value and behavioral intentions became non-significant. This suggests that customer satisfaction completely mediates the relationship between customer value and behavioral intentions.

By identifying the perceived value across the three types of consumer, companies can predict the level of satisfaction that will be achieved by each type of consumer and anticipate the future behavior for each type of consumer. For relational-dependent and rational-active consumers who actively search for information, companies need to provide them with detailed information about the benefits of the product. Since relational-dependent consumers, who are directed by other people to purchase a product, display the strongest behavioral intentions, companies need to activate and manage word-of-mouth communication strategies to get closer to this type of consumer. Alternative strategies may be used such as reference groups, family members, and opinion leaders. As a consequence, those types of consumers will have high perceived value and high satisfaction, thus they will have stronger intentions to repurchase the product from the company and recommend it to other people. Meanwhile, passive consumers, who are less sensitive to the marketplace, may not be sure of what they intend to do in the future. They are less confident in deciding whether they will repurchase or not, and less confident to state that they will recommend the product to someone else, however, they are more likely to remain with the current company out of simple ignorance of the marketplace.

Therefore, it is important for companies to identify what types of consumers they serve (passive, rational-active, or relational-dependent). This will assist the companies to provide better value and increase levels of satisfaction for each type of consumer. As a consequence, companies may well predict the future behavior of each type of consumer. In doing so, companies need to create and manage the value proposition strategically before delivering value to each segment of consumers. By providing better value and satisfaction to certain consumers, companies are motivated to become active in managing the value chain and points of product differentiation (Yi and Jeon 2003). They are also motivated to make fundamental decisions on customer segmentation, competencies, culture, infrastructure, technology, resources, and strategies (O'Dell and Grayson 1999). If this occurs, companies will improve effectiveness and efficiency in value delivery. Effectiveness is the ability of the product or service to meet customer’s needs and wants, and efficiency means that customers spend a minimal sacrifice (money, time, effort) to receive the value (Sheth et al. 1999). As a result, companies can enhance their organizational performance.

**Conclusion**

This study opens a new approach to applying the concepts of customer value, satisfaction, and behavioral intentions to different types of consumers based on their search behavior.
Unlike previous research, which examined the relationships among value, satisfaction, and behavioral intentions at the aggregate level, this study examined the relationships among these constructs on a segment-specific basis. The contribution is that this study has shown that each type of consumer (passive, rational-active, relational-dependent) is significantly different on the relationships among value, satisfaction, and behavioral intentions. Relational-dependent and rational-active consumers exhibited a stronger relationship between perceived value and satisfaction as well as between satisfaction and behavioral intentions compared to passive consumers. This contribution suggests the mechanisms behind value, satisfaction, and behavioral intentions differ systematically across groups of consumers.

This study has some limitations that should be addressed by future research. First, the unit of analysis of the study is students, which may limit our results to specific characteristics of respondents. Hence, the finding indicates that there is a substantial proportion of relational-dependent consumers, which means that they are actively searching for information before the purchase and directed by other people in making the decision to purchase the product. It might be useful to replicate this study, perhaps in other service industries using mass market consumers as the respondents to examine whether the findings are consistent. In other words, to enhance the generalizability of the findings.

Second, this study has employed car insurance as its context, which might require consumers to search for information before purchasing the product. Hence, the conceptual model of this study might well be applied in consumer search in complex or intangible products, which may not be so well applied in fast-moving consumer goods (FMCG).

Third, the investigation of perceived value is only focused on ‘value’ perceived by consumers without investigating the outcomes of value analysis on financial performance. The focus of this study is on the perception of value and satisfaction seen and reported by consumers. Therefore, the company is not able to identify direct improvement of its financial performance resulting from a value program. Hence, further research should examine the outcomes of value analysis on business performance. Future investigations should identify any increases in company profits resulting from improvements in customer value programs. In addition, the effects of value analysis on business culture, employees’ satisfaction, as well as the benefits for stakeholder, should be tested empirically by future research.

References


Neal, William D. (1999), Satisfaction is Nice, but Value Drives Loyalty, Marketing Research, (Spring): 21-23.


Appendix

Appendix 1. Measurement Equivalence/Invariance for CUSTOMER VALUE construct

<table>
<thead>
<tr>
<th>Model Comparison</th>
<th>$\chi^2$</th>
<th>df</th>
<th>P</th>
<th>$\chi^2$/df</th>
<th>RMSEA</th>
<th>NFI</th>
<th>TLI</th>
<th>CFI</th>
<th>$\Delta \chi^2$</th>
<th>$\Delta$df</th>
<th>$\Delta \chi^2$/df</th>
<th>P</th>
<th>$\Delta$NFI</th>
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Appendix 2. Measurement Equivalence/Invariance for CUSTOMER SATISFACTION construct

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<th>$\Delta$df</th>
<th>$\Delta \chi^2$/df</th>
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Appendix 3. Measurement Equivalence/Invariance for CUSTOMER SATISFACTION construct (Excludes the “Feeling Variable”)

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