Consumer evaluation of net utility: Effects of competition on consumer brand selection processes

MICHEL LAROCHE, LEFA TENG, and MARIA KALAMAS
John Molson School of Business, Concordia University, Montreal, Quebec, Canada H3G 1M8

Abstract: This study explores how brand-related information is integrated within a competitive environment. Specifically, we develop a structural equation model of competition between two brands, which includes each brand's price-quality characteristics (i.e., net utility). The model simultaneously tests how the net utility of the focal and competing brands affects consumers' attitudes, intentions, and choice regarding the focal brand. This study extends existing research with the findings that price-quality evaluations of a focal brand and net utility perceptions of competing brands influence consumers' attitudes, intentions, and choice regarding the focal brand. Thus, in order to attract consumers to their brands, marketers should focus not only on improving the performance and net utility of their own brands, but also on studying competing brands in the marketplace.

Key words: consumer psychology, decision making, brand choice, competition, net utility.

In today's fiercely competitive and increasingly global markets, consumers are faced with much greater information and choice (Laroche & Toffoli, 1999). In the age of information and information overload, the challenge of understanding which salient attributes significantly affect consumers' brand evaluations and purchasing decisions is more important than ever. Researchers have shown that consumers have limited processing capacity and hence use only part of the information available when choosing a brand (Bettman, 1979). In their evaluations of brand attributes, for example, consumers limit themselves to three or four items of information (Simon, 1974). Researchers have even found that consumers focus on comparisons of the two most popular brands in order to reduce the cognitive complexity of selection (Brisoux & Laroche, 1981; Lussier & Olshavsky, 1979).

Price and quality play an important role in brand choice, since they are often central to consumers' judgments and decisions, influencing both their attitudes toward a brand and their purchasing behaviors. For instance, consumers may choose brands that compare favorably in the “what you pay for” and “what you get” categories. Numerous researchers have studied the effects of price on product choices (Kalyanaram & Winer, 1995; Kojima, 1994; Lattin & Bucklin, 1989; Lichtenstein, Ridgway, & Netemeyer, 1993). Among them, Kalyanaram and Winer (1995) have shown that consumers use reference prices when they make decisions.

For most brands, consumers believe that price and quality are correlated (Laroche & Toffoli, 1999; McGowan & Sternquist, 1998). Consumers with positive price-quality perceptions, for example, are more likely to associate...
price with high quality in the consideration set. Similarly, in the reject set, those with negative price-quality perceptions have less chance of buying a product with a higher price. Evidence shows that net utility, determined by the price and quality of a specific brand, can be important in influencing consumers' brand choices (Lichtenstein et al., 1993).

The literature on consumer behavior has not yet dealt with the effects of net utility of competing brands on attitude and intention toward a focal brand. Some researchers have found that cognitive evaluations of competing brands significantly influence consumers' attitude and intention formation toward a focal brand within the choice set (Laroche, Hui, & Zhou, 1994; Laroche, Kim, & Zhou, 1996). Here, we use net utility, derived from price and quality, instead of cognition. When consumers are exposed to multiple brands in a given product category, both price and quality stand out as important attributes. Net utility reflects these key attributes simply and summarily. In this study, we developed a model of competition between two brands, which includes each brand's price-quality characteristics (i.e., net utility) (Figure 1). The model simultaneously tests how the net utility of the focal and competing brands affects consumers' attitudes, intentions, and choice regarding the focal brand. Unlike other models of brand competition, the proposed model includes both net utility and choice. In so doing, this research extends the classic C(A cognition)-A(affect)-B(behavior) paradigm (hereafter the C-A-B paradigm).

Consumer brand choice and the C-A-B paradigm

Classic C-A-B

With the C-A-B paradigm as a backbone, several consumer researchers have developed buyer behavior models. Among the most famous and influential theoretical frameworks is that set out by Howard and Sheth (1969) in The theory of buyer behavior. In Howard and Sheth's conceptual framework, brand comprehension affects attitude, which then affects intention or purchase. Howard used similar terminology in subsequent work, first substituting brand comprehension with brand identification (1977), then simply identification (1983), and finally brand recognition (1994). Other researchers have altered Howard's original terminology, while still maintaining the basic premise of the C-A-B paradigm (e.g., Laroche, forthcoming; Loudon & Della Bitta, 1979; Nicosia, 1966; Zaltman & Wallendorf, 1979). Common among them is a focus on the process by which cognition influences affect and subsequently behavior. Despite many variations, the C-A-B paradigm still prevails in consumer research because of its strong predictive power.

In psychology, communications, consumer behavior, and other related fields, the C-A-B paradigm is used to predict attitudes and behavioral intentions (Ajzen & Fishbein, 1969; Rosenberg, 1956). Typically, most consumer behaviorists treat cognition as a set of evaluations, beliefs, or perceptions (Holbrook, 1986; Laroche et al., 1994). In turn, affect "is narrowly conceived . . . as a simple bipolar continuum running from positive to negative and roughly synonymous with Osgood, Suci, and Tannenbaum's evaluative dimension (1957) or with Fishbein and Ajzen's attitude (1975)" (Holbrook, 1986, p. 22). Behavior is the intention to buy (Laroche et al., 1994) followed by the overt expression of the purchase (i.e., the brand choice) (Holbrook, 1986). For the most part, behavior is synonymous with the intention to purchase rather than the actual purchase. Given this common terminology, researchers often refer to the tripartite sequence as cognition-attitude-intention.

The attitude-intention portion of the paradigm has received considerable attention, given that attitude toward a brand determines intention to purchase the same brand. Social psychologists treat attitude as a multi-dimensional construct composed of cognitive, affective, and conative components (Rosenberg, 1956). This three-part conceptualization of the attitude construct originates from Plato's work (Holbrook, 1986). In consumer behavior, the same three components of attitude exist but
with different operationalizations. The cognitive and affective components translate into multi-attribute and global ($A^*_B$) measures of attitude, respectively (Laroche & Sadokierski, 1994). The most common multi-attribute measure stems from the Fishbein and Ajzen model (1975), where attitude is a unidimensional construct (i.e., $\text{attitude} = \sum b_i e_i$). In the present context, $b_i$ represents the cognitive beliefs about a brand’s attributes and $e_i$ stands for the evaluations of these attributes. Other multi-dimensional measures of attitudes include ideal points (Lehmann, 1971), value importances and instrumentalities (Sheth & Talarzyk, 1972), and value intensity and “perceived importance of the attitude object leading to or blocking the attainment of [a person’s] values” (Rosenberg, 1956, p. 367).

Over the years, this dual operationalization of the attitude construct has led to much debate. Numerous studies (Fazio & Zanna, 1978; MCA lister, 1982; Reibstein, 1978) “provide a theoretical base that questions the usefulness of multi-attribute measures” (Gresham, Bush, & Davis, 1984, p. 353). Since global measures of attitude are better predictors of intentions and behaviors, researchers have largely relied on them. In the formulation of behavioral intentions, for example, attitudes are measured via a global measure ($A^*_B$) instead of a multidimensional construct. Subjective norms are also included in the mathematical expression of behavioral intentions (i.e., $B^*_I = W_1 (A^*_B) + W_2 (SN^*_B)$) (Fishbein & Ajzen, 1975). In this context, subjective norms refer to perceived social pressures encountered when making a brand choice. In other models, the role of subjective norms in the formation of behavioral intentions is relatively minor (e.g., Bagozzi, 1981; Miniard & Cohen, 1981; Warshaw, 1980).

In consumer behavior and other fields alike, Fishbein and Ajzen’s theory of reasoned action (TRA) (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975) has received considerable attention and support (Kim & Hunter, 1993a, 1993b; Sheppard, Hartwick, & Warshaw, 1988). Combining the results of 87 previous studies, Sheppard et al.’s (1988, p. 336) meta-analysis revealed “a frequency-weighted average correlation” for the prediction of behavioral intention from attitudes and subjective norms of .66. In other meta-analyses (Kim & Hunter, 1993a, 1993b), attitude was a significant predictor of behavior, with behavioral intentions acting as a mediator. These impressive results help explain TRA’s staying power.

**Competition in brand choice models**

For a very long time, proponents of the C-A-B paradigm paid no attention to the impact of competing brands on the formation of attitudes and intentions vis-à-vis a core brand. The assumption was that “attitude and intention formation are independent of the consumer’s cognitions and affects regarding other competing brands” (Laroche et al., 1994, p. 171). In a competitive environment, such an assumption seemed unrealistic (Abe & Tanaka, 1989; Laroche et al., 1994) and yet consumer researchers adhered to it.

In classic information processing and, hence, the C-A-B paradigm, brand competition is limited to a consumer’s comparison of attitude or intention scores. Typically, the alternative with the highest score is selected (Sheppard et al., 1988). When a linear compensatory choice heuristic is used (e.g., a multi-attribute attitude model), comparisons among alternatives take place once overall evaluations are formed. In the end, brand competition at the cognition and affect levels is nonexistent.

A series of influential articles by Woodside and his colleagues (Clokey & Woodside, 1974; Woodside & Clokey, 1974; Woodside, Clokey, & Combes, 1975) opened the way for competitive brand choice models. Using multiple regressions, Woodside and Clokey (1974) showed that a person’s attitude toward a brand is dependent on his/her attitudes toward other brands. Prior to this original work, researchers had not studied “whether or not beliefs toward other brands partially determine a consumer’s attitude toward a specific brand and predict brand choice behavior toward that brand” (Woodside & Clokey, 1974, p. 34). In essence, conventional multi-attribute attitude models had largely ignored competitive brand effects.
Unfortunately, [Woodside and Clokey's] great insight was somewhat overlooked by most consumer researchers in the ensuing years (Laroche, forthcoming). Compared with the original multi-attribute models, the multi-attribute/multi-brand models offered greater predictive power. However, in their original work, Woodside and his colleagues used multi-attribute measures of attitude instead of global ones. More recently, a number of other researchers have tried to incorporate competition in the classic C-A-B paradigm (Abe & Tanaka, 1989; Howard, 1994; Laroche & Bisson, 1981, 1989; Laroche et al., 1994; Laroche & Sadokierski, 1994; Trommsdorff, 1984; Woodside & Trappey, 1991). These studies looked at direct effects and cross-over effects from cognitions to attitudes (C-A), attitudes to intentions (A-I/B), and cognitions to attitudes to intentions (C-A-B) (i.e., the complete sequence). Abe and Tanaka (1989) studied competitive effects using overall evaluations (i.e., \( \sum B_a \)). Their findings provided some empirical support for the existence of cross-over effects from cognitions to attitudes (C-A). Laroche et al. (1980) and Laroche and Bisson (1981, 1989) developed a multi-brand model of intention formation by looking at direct and competitive effects in the A-I sequence. Their findings showed that the direct effect positively influences a consumer's intention to buy the focal brand, and the competitive effect negatively affects the purchase intention for the focal brand. Overall, a single model that combines direct and cross-over effects offers greater diagnostic value than one with direct effects alone. Consistent with Tversky's similarity effect (1972) or the negative attraction effect, the expected direction of competition stems from the fact "that choice alternatives that are similar tend to draw shares from each other and are more competitive/substitutable than dissimilar alternatives (Kamakura & Srinivasan, 1984)" (Laroche, Kim, & Zhou, 1995, p. 334). In the context of a high-involvement service, Laroche and Sadokierski (1994) provided further empirical support for the Brisoux-Laroche model. The culmination of this research stream was a "full model of competition . . . that provides a better explanation of attitude and intention formation than the widely used C-A-B paradigm (Laroche et al., 1994, p. 179).

Net utility and choice: the missing pieces

Net utility

As early as 1951, Katona discussed the need to bring together economics and psychology (Katona, 1951). Kahneman and Tversky's seminal work, which combined utility and "irrational" consumer choice, shook the field of economics (Kojima, 1994). Marketing borrowed the notion of utility from economics and added a price-quality comparison to form net utility. As a construct, net utility bridges the gap between economics and psychology, and its inclusion in consumer research is not a recent phenomenon (e.g., Bliemel, 1984; Bliemel & Laroche, 1984; Hagerty, 1978; Levin & Johnson, 1984). In empirical research conducted by Hagerty (1978) and Levin and Johnson (1984), consumers used the difference rule (i.e., net utility) to evaluate alternative brands. In Kojima's (1994) work on the psychological purse, consumers feel psychological pain after spending money. The comparison here is between pain and price instead of quality and price. Kojima's (1994) notion of a psychological purse could be expanded to include net utility such that consumers trade off net utility and pain.

In our proposed model, price-quality evaluations ultimately lead to brand choice. Although we do not directly test Bliemel's (1984) price-quality evaluation model, we draw our conceptualization of net utility from it. In the context of brand choice, Bliemel's model consists of four parts, which are summarized as follows:

1. for each brand considered, consumers map price-quality characteristics onto subjective utility space.
2. for a given product category, consumers establish a price-quality convex function with constant marginal utility for money (i.e., a straight line);
3. consumers apply a difference rule to the price-quality mappings in subjective utility space;
4. consumers choose the alternatives with the highest utility for the money spent.

Later, Laroche and Toffoli (1999) found empirical support for Bliemel’s price-quality evaluation model, when used alongside the Brisoux-Laroche brand categorization model.

Choice

Borrowed from social psychology, the classic attitudinal framework ignored choice (e.g., Dabholkar, 1994; Laroche et al., 1980; Laroche & Sadokierski, 1994; Woodside & Clokey, 1974). In a meta-analysis conducted by Sheppard et al. (1988, p. 339), “the original Fishbein and Ajzen model … work[ed] adequately in choice situations,” even though it was originally developed to examine a unique behavior involving no choice. Specifically, Fishbein’s original work disregarded the effects of competing brands on the formation of beliefs and attitudes toward a focal brand (Fishbein, 1963). Furthermore, cross-over effects in the formation of attitudes and intentions were nonexistent in Fishbein and Ajzen’s later work (e.g., Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975). In subsequent years, Laroche and his colleagues included such cross-over effects in the classic C-A-B paradigm (e.g., Laroche et al., 1980, 1994; Laroche & Sadokierski, 1994). In their competitive brand selection model (renamed the competitive vulnerability model by Howard, 1994), these researchers treated the cross-over effects from cognition to attitude as the judgment stage and those from attitude to intention as the choice stage. Their conceptualization and subsequent test of the competitive vulnerability model was consistent with Johnson and Puto’s suggestion that judgment and choice are discrete yet interconnected processes (Johnson & Puto, 1987).

In our proposed model, judgment and choice are still treated as separate but related entities, with judgment taking place in the formation of attitudes and intentions, and choice being synonymous with actual purchase.

The inclusion of competition/choice in the C-A-B paradigm brought together two streams of research: information processing and attitudinal research. As described previously, this merger started with the series of papers by Woodside and his colleagues (Clokey & Woodside, 1974; Woodside & Clokey, 1974; Woodside et al., 1975). Recent efforts to model competition/choice in brand selection have shown that “competitive effects are present at all stages in the consumer decision process” (Laroche, forthcoming). The major contribution of the extended competitive vulnerability model is the notion that multi-level comparisons occur in brand selection. Brand comparisons are not limited to one particular level (i.e., beliefs, expectancy-value components, attitudes, or intentions) as Dabholkar (1994) and Mathur (1998) suggest. In addition, they do not include the consideration set in their conceptualization, a key variable in any model of brand selection. Although our proposed model is not as all-inclusive as the extended competitive vulnerability model (Laroche, forthcoming), it does add choice as a separate construct.

Conceptual model and hypotheses

Based on the literature review, our proposed model of consumer choice behavior is represented graphically in Figure 1. Unlike other models dealing with competitive effects, this one incorporates net utility and choice in the brand selection process.

Relationships between net utility and attitude

Evidence indicates that price and quality can affect consumers’ attitudes toward a specific brand and that price-quality evaluations are important in consumer choice (Bliemel, 1984; Bliemel & Laroche, 1984; Laroche & Toffoli,
In the brand selection process, consumers face many brands within a given product category. Establishing a generalized price-quality function incorporating all the brands in a product category and further determining net utility for each experienced brand would allow consumers to select a brand. Obviously, consumers will be more likely to buy brands with higher net utility since higher price is indicative of higher quality. When a positive price-quality correlation exists, consumers infer that price will increase with increasing quality. Similarly, if a brand’s net utility, based on price and quality, is negative, then consumers will not purchase it (Bliemel & Laroche, 1984; Hagerty, 1978; Levin & Johnson, 1984). Some researchers have also found that consumers normally have upper and lower price limits (i.e., a high-price, high-quality brand and a low-price, low-quality brand) (Bliemel & Laroche, 1984; Stoetzel, 1970). Upper- or lower-end brands fall in the reject set when the price-quality relationship is negative. Laroche and Toffoli (1999) also confirmed that consumers consider buying brands from their consideration set because a positive price-quality relationship is already built in. Although some may assume a negative correlation between price and quality, with quality increasing with decreasing price, this kind of relationship rarely exists in today’s “you get what you pay for” market.

In decision making, consumers take both price and quality into account. Even when no price or quality information is provided, most consumers are able to estimate the relationship of these two variables based on past experience with the product category. Realistically, consumers want an optimal price-quality (P-Q) combination (i.e., higher quality at a lower price) and the likelihood of purchasing a brand depends on the P-Q difference. Consumers thus evaluate alternative brands based on net utility (Hagerty, 1978; Levin & Johnson, 1984).

Research also shows that consumers form their perceptions of brand value by weighing potential benefits against price. Thus, value consciousness may reflect consumers’ preoccupation with the price paid for the quality received. Perceived value is defined as “the consumer’s overall assessment of the utility of a [brand] based on perceptions of what is received and what is given” (Zeithaml, 1988, p. 14). The “receive” component corresponds to the quality of the brand, and is expected to have a positive effect on consumers’ perceived value. In contrast, the “give” component corresponds to money spent, and is expected to have a negative effect on consumers’ perceived value. Perceived value is thus a trade-off between the “receive” and “give” components. Generally, the higher the perceived value of a brand is, the greater will be a consumer’s willingness to choose that brand.

In choosing a brand, a consumer not only evaluates its net utility but also considers the net utility of competing brands (Abe & Tanaka, 1989; Laroche & Brisoux, 1989). In other words, based on the net utility of a specific brand, a consumer will form an attitude toward that brand. The attitude toward the
focal brand also will be affected by the net utility of competing brands and the ensuing attitudes. Thus, our first hypothesis can be formulated as follows:

Hypothesis 1 (H1). An individual’s attitude toward a focal brand (i) should increase by increasing the net utility value of the same brand (i), while her/his attitude toward a focal brand (i) should decrease by increasing the utility values of the competing brands (j, j ≠ i).

Relationships between attitude and intention
In the context of a given product category, all the available brands are competing for consumers’ attention, evaluation, and possible selection. Evidence shows that there is a causal link between attitude and purchase intention in consumer choice. Specifically, consumers’ attitudes toward focal and competing brands affect their purchase intentions vis-à-vis the focal brand (Laroche et al., 1980, 1994, 1995, 1996; Laroche & Sadokierski, 1994). Several studies have also demonstrated that purchase intention toward a specific brand depends on the features of the competing brands within the consideration set (Howard, 1977). Laroche and Brisoux (1989) postulate that there are direct and competitive effects on consumers’ purchase intentions. An individual’s attitude toward a focal brand directly and positively determines her/his intention to buy that brand, while an individual’s intention to buy the focal brand is negatively affected by her/his attitude toward competing brands within the consideration set. In other words, a consumer’s intention to buy a specific brand not only depends on attitude toward the same brand, but also on attitude toward competing brands within the consideration set. Similarly, improved attitudes toward competing brands should lower the intentions to buy a specific brand (Laroche et al., 1994, 1995). Thus, our second hypothesis can be formulated as follows:

Hypothesis 2 (H2). An individual’s purchase intention toward a focal brand (i) should increase by increasing her/his attitude vis-à-vis the same brand (i), while her/his purchase intention toward a focal brand (i) should decrease by increasing her/his attitudes vis-à-vis competing brands (j, j ≠ i) within the consideration set.

Relationships between intention and purchase choice
Intention toward a particular brand is considered as the central variable of most models trying to offer a partial or comprehensive view of consumer choice. Numerous researchers have indicated that brand selection (i.e., how consumers make judgments and choices) is complex and is influenced by a variety of factors (for a review see Johnson & Puto, 1987). However, behavioral choice, as measured by a constant sum scale, can predict the probability of brand choice on an individual basis. For example, Bagozzi (1992) suggests that consumers make a choice from alternative brands based on their comparisons of multiple intentions toward a few brands. Improvements in modeling may lead to better prediction of choice. Similarly, some empirical evidence has also shown that a consumer may evaluate all the brands separately in the consideration set, arrive at intentions to use each brand, compare the brands, and then finally make a choice (Laroche et al., 1994, 1995, 1996).

Several studies support the idea that consumer choice takes place through the comparison of beliefs, expectancy-value components, attitudes, or intentions (Ajzen & Fishbein, 1980; Dabholkar, 1994; Mathur, 1998). Thus, there is a positive relationship between purchase intention and choice vis-à-vis a specific brand. Since an individual makes a choice based on her/his intention comparisons from multiple alternative brands, then that individual’s intentions toward competing brands within the consideration set should partially influence her/his choice toward a particular brand. In other words, the way in which a consumer chooses a specific brand is likely to be influenced by her/his purchase intention toward other competing brands.
within the consideration set. Thus, our third hypothesis can be formulated as follows:

Hypothesis 3 (H3). An individual’s purchase choice of a focal brand \((i)\) should increase by increasing her/his intention toward the same brand \((i)\), while her/his purchase choice of a focal brand \((i)\) should decrease by increasing her/his intentions vis-à-vis competing brands \((j, j \neq i)\) within the consideration set.

Consumers’ overall assessments

Furthermore, a consumer may formulate “a global view” of a given product category. This means that an individual’s evaluations of and feelings toward a specific brand are related to her/his overall assessments and feelings vis-à-vis competing brands within the same product category (Laroche et al., 1994). Therefore, correlations among price-quality evaluations, attitudes, and intentions are included in the proposed model.

Method

Sample

In this study, we gathered information on the selection of brokerage firms by individual investors. The population surveyed consisted of residents of a major metropolitan area in eastern North America. Twelve brokerage firms were carefully selected to represent the brokerage field. Efforts were made to contact as many individual investors as possible in order to gather a comprehensive sample without any bias toward a specific brokerage firm. The self-administered survey contained questions on evaluations, attitudes, intentions, choices, and demographics. In total, 402 individuals completed and returned the questionnaires. Among the 12 brokerage firms, Nesbitt Thomson and Wood Gundy were the most popular (i.e., selected by 102 respondents in their consideration sets). We treated these two popular brokerage firms as brands and used them to test the proposed model (Figure 1).

Measures

Net utility. The difference between a quality and a price rating is regarded as a proxy value for net utility of a brand. We measured quality on a nine-point semantic differential scale, where 1 indicated extremely poor quality and 9 extremely good quality. We also measured price (cost) on a nine-point scale. Here, respondents were asked to indicate how they feel about the commission/fee schedules with respect to the 12 brokerage firms.

Attitude. Two nine-point items were used to measure attitude toward the selected brands. The items were: “Please indicate the degree to which you like the brokerage firm” (1 = dislike very much, 9 = like very much) and “How you feel about the general reputation of the 12 brokerage firms” (1 = extremely poor reputation, 9 = extremely good reputation). For the specific brokerage firms under consideration (i.e., Nesbitt Thomson and Wood Gundy), the reliability of these two scales was .85 and .83, respectively.

Intention. Intention was measured for each of the 12 brokerage firms on a nine-point scale anchored at 1 = would definitely not intend to use and 9 = would definitely intend to use.

Choice. We measured choice among the selected brands by asking respondents to indicate the probability of using each of the 12 brokerage firms (sum of the probabilities = 1). For each brokerage firm, the stated probabilities varied between 0 and 1.

Results

Descriptive statistics

The demographic profile of the sample (Table 1) reveals that most of the respondents were male (79%) and in the 40-59-year age category (55.2%). The majority of respondents were married (87.6%) and had a university degree (84.6%). Just under half were professionals (45.8%) with a household income exceeding $110,000 (45%). Our sample is skewed in that it primarily consists of a male, educated, and affluent segment of the...
population, which is the segment most likely to use a brokerage firm.

We computed means and standard deviations for all the variables in the model (Table 2). Net utility for both brokerage firms was low. Respondents’ attitudes and intentions were above average, hovering around 6.0.

**Structural equation modeling**

We used structural equation modeling to test the causal relationships among brand evaluations, attitudes, intentions, and choices. Brand 1 was considered as the focal brand while brand 2 was treated as the competing brand (Figure 2). The model was analyzed using the maximum likelihood fitting function in EQS software. With values on the comparative fit index (CFI) of .98, the resulting model exhibited an excellent fit (Table 3). CFI values at or above .95 are indicative of a meaningful model (Hu & Bentler, 1999). We summarize the estimates and the t values in Table 4. Figure 2 presents the complete model with the various path estimates.
the structural parameters (i.e., net utility $B_1 \to \text{attitude } B_1$, and net utility $B_2 \to \text{attitude } B_2$) show that an individual’s price-quality evaluation toward a particular brand positively influences her/his attitude toward that brand (Table 4). Conversely, net utility $B_1 \to \text{attitude } B_2$ and net utility $B_2 \to \text{attitude } B_1$ suggest that a consumer’s net utility toward a focal brand negatively influences her/his attitude toward the competing brand in the consideration set. These results confirm H1, in that a higher net utility toward a focal brand leads to a lower attitude toward competing brands and a higher attitude toward the same brand. Therefore, in a competitive environment, attitude toward a particular brand is influenced, in part, by consumers’ perceptions of net utilities of the focal brand and the competing brand.

R{}e{}l{}a{}t{}i{}o{}n{}s{}h{}i{}p{}s{} between attitude and purchase intention (H2). As expected, an individual’s purchasing intention toward a specific brand is a positive function of her/his attitude toward that brand. However, a significant negative influence of other competing brands on intention to buy the focal brand also appears (Table 4). These results support H2.

Researchers have previously demonstrated the relationship between attitude and intention in consumers’ brand selection (e.g., Laroche et al., 1980, 1994, 1995, 1996; Laroche & Sadokierski, 1994). The influence of a competing brand on the intention to purchase a focal brand is consistent with previous findings in that an individual’s intention to buy a focal brand is negatively affected by her/his global attitudes toward other competing brands.
brands within the consideration set, and positively affected by her/his attitude toward the same brand.

Relationships between intention and purchase choice (H3). As predicted in H3, a significant positive relationship was found between purchase intention for the particular brand and choice of the same brand, and conversely there was a significant negative relationship between purchase intention for a brand and choice of a competing brand within the consideration set (Table 4).

Overall assessment. Overall, all the parameters are significant and all the structural relationships are in the hypothesized direction (Table 4). These findings strongly support the twin notions of positive relationships between price-quality evaluations of a focal brand and attitude, then intention, and finally choice toward the same brand (direct paths in
Figure 2), and of negative relationships between the price-quality evaluation of a specific brand and attitude, then intention, and finally choice vis-à-vis competing brand (cross-over paths in Figure 2).

Moreover, the three reciprocal relationships (i.e., net utility $B_1 \leftrightarrow$ net utility $B_2$, attitude $B_1 \leftrightarrow$ attitude $B_2$, and intention $B_1 \leftrightarrow$ intention $B_2$) are significantly different from 1, which indicates that the constructs of net utility, attitude, and purchase intention are different for the focal brand and the competing brand. These results are not only consistent with the findings of previous studies (e.g., Laroche et al., 1994) but also with our expectations of correlated relationships among the constructs. Specifically, these significant estimates reveal correlations among net utilities, attitudes, and purchase intentions of the focal brand and the competing brand.

Discussion and conclusions

Our study addressed the impact of net utility of competing brands on the formation of attitude, intention, and choice vis-à-vis a focal brand. Although previous research has investigated the impact of price-quality evaluations on brand categorization, we provide further insight into the competitive effects of net utility of one brand on another. Our findings support the idea that, in a consideration set, a focal brand with high net utility tends to score higher on attitude, intention, and choice than brands with lower net utility. In addition, previous studies suggest that a consumer’s attitude toward a brand is a function of her/his familiarity with that brand and competing brands. Our findings provide additional evidence that brand net utility is an important determinant of attitude formation.

Recently, researchers have focused on the impact of competition on decision making, with emphasis on consumers’ attitudes and purchase intentions (Laroche et al., 1994, 1996). Our empirical evidence strengthens the argument that an individual’s attitude toward a focal brand affects her/his willingness and intention to buy that brand. The present paper also examined the influence of competitive effects on attitude, intention, and choice formations, and so added to our understanding of the role of competition in brand choice. Overall, this study revealed that price-quality evaluations of competing brands have an impact on consumers’ attitudes and intentions toward a focal brand. Our results suggest that competitive effects on attitude, intention, and choice formations can be partially explained by price-quality evaluations.

Managerial implications

This study clarifies the causal relationships among price-quality evaluations, attitudes, intentions, and choice. In so doing, it demonstrates how price and quality influence consumers’ attitudes toward one focal brand among alternative brands. In turn, consumers’ attitudes are linked to their purchase intention and behavioral choice. Thus, in order to attract consumers to buy their brands, marketers should focus not only on improving the performance and net utility of their own brands, but also on taking into account the strategies of competing brands in the marketplace.

Furthermore, consumers are now faced with more choice in deciding which investment firm is best suited to meet their financial needs. Evidence shows that competition grows when price and quality vary greatly among investment firms. For example, some investment firms have introduced free commission on accounts with a minimum investment. Other financial institutions disclose their performance records as well as the costs incurred in achieving their results. Still others have established standardized levels of service that vary in price and quality. By choosing a level of service, customers get a certain amount of information at a corresponding price. Such multi-level disclosure provides clients with an opportunity to choose their service and price options. As a result, this would positively influence clients’ attitudes and intentions toward the brokerage firm and in turn increase the probability of choosing that firm.
Limitations and future research

This study was a first attempt at addressing the competitive effects of the net utility of one brand on another. Like all studies, this one is not exempt from limitations. Collected in a single North American city, the results of this study have limited generalizability. That said, the use of a large cross-section of real consumers adds to firmness of the findings.

This study extends existing research through the finding that price-quality evaluations of a focal brand and net utility perceptions of competing brands influence consumers’ attitude, intention, and choice regarding the focal brand. Given the limited sample size, we could not incorporates three brands into the proposed structural equation model. In future studies, our model could be expanded to include more than two brands. A related issue deals with information integration. Some researchers (Laroche et al., 1996) suggest that familiarity with a brand affects an individual’s attitude toward that brand and her/his intention to buy it.

Finally, experience plays an important role in the use of price and quality as information cues. For example, consumers’ past experiences may affect their net utility evaluations toward a focal brand because they are already familiar with its attributes (e.g., price and quality) (Johnson & Lehmann, 1997). For those consumers with little previous experience, their price-quality schema may change as additional experience is acquired. As a result, the influence of net utility on attitude, intention, and choice formations may differ between consumers, based on past experience.

References


Consumer evaluation of net utility


(Received Jan. 15, 2001; accepted May 13, 2001)