

The Conceptual Domain of Service Loyalty: How Many Dimensions?

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The Conceptual Domain of Service Loyalty: How Many Dimensions?

Abstract

As “loyalty” research has evolved, the conceptualization and measurement of service loyalty has become increasingly complex. The majority of research in marketing now represents loyalty as a multi-dimensional construct; however, agreement on whether it has 2 or 3 dimensions is lacking, and measurement of these dimensions have has been inconsistent. This paper argues for and tests a 2 dimensional conceptualization of loyalty based on theory from the interpersonal psychology literature. The results support a two-dimensional loyalty construct – a result that holds regardless of whether the service was of a more “interpersonal” nature or not. Implications of these results are presented.

Key Words: service loyalty, customer relationships, services marketing, interpersonal relationships, dimensionality of loyalty

The Conceptual Domain of Service Loyalty: How Many Dimensions?

Marketers agree that building customer loyalty can generate positive returns to a firm such as increased sales, lower costs, and more predictable profit streams (Ostrowski et al. 1993; Terrill et al. 2000). Some have labeled customer loyalty as a key source of competitive advantage (Bharadwaj et al. 1993) and a key to firm survival and growth (Reichheld 1996). However, how “loyalty” has been conceptualized and measured has varied considerably across studies, resulting in calls for more research into the fundamental meaning of loyalty (Oliver 1999).

Because of the possible importance of service loyalty to firm growth, it is important for marketers to fully understand the nature and dimensionality of this construct. Without such an understanding, service firms may be: 1) measuring the wrong things in their attempts to identify loyal customers; 2) unable to link customer loyalty to firm performance measures; and 3) rewarding the wrong customer behaviors or attitudes when designing loyalty programs.

As “loyalty” research has evolved, the conceptualization and measurement of service loyalty has become increasingly complex. At its most general level, loyalty reflects various customer propensities towards the service firm. Early definitions conceptualized loyalty as a behavioral outcome – typically repurchase or switching intentions (e.g., Jacoby and Chestnut 1978). As loyalty research developed, two-dimensional conceptualizations appeared that included both repurchase behavior and attitudinal dispositions towards the provider (e.g., Dick and Basu 1994; Pritchard et al. 1999). More recently, three-dimensional conceptualizations have been proposed where loyalty includes a behavioral, attitudinal, and a cognitive component - the latter reflecting consumers’ brand beliefs and exclusive consideration of one service provider (e.g., Bloemer et al. 1999; de Ruyter et al. 1998; Gremler and Brown 1996). The majority of

research in marketing now represents loyalty as a multi-dimensional construct; however, agreement on whether it has 2 or 3 dimensions is lacking.

In sharp contrast to the increasingly complicated approaches to conceptualizing and measuring loyalty, Reichheld (2003) has recently argued that it is possible for many service firms to adequately assess loyalty using only one measure – “willingness to recommend”. He reports that for many of the firms he studied, this one indicator of loyalty was a strong predictor of a firms’ growth rate. In essence, his results imply a uni-dimensional conceptualization of loyalty.

Thus the question remains – is service loyalty multi-dimensional and if so, what constitutes these dimensions? If it is uni-dimensional, then measurement of customer loyalty can likely be captured by measuring a single manifestation of loyalty. However, if service loyalty is two or possibly three dimensional, then measurement of loyalty should contain aspects of each dimension in order to capture truly loyal customers and separate these from the habitual purchasers, and variety-seekers (i.e., those who may prefer a particular service provider, but frequently try new ones).

Despite increasing consensus from services researchers that service loyalty is multi-dimensional, theoretical foundations for a multi-dimensional service loyalty construct are lacking and empirical examinations of its dimensionality scarce. In an attempt to address this void, this paper utilizes theory from the psychology literature on interpersonal relationships to provide theoretical guidance for examining the nature of service loyalty. Since it has been argued that service loyalty, as compared to loyalty to tangibles, is dependent on the development of interpersonal relationships (Iacobucci and Ostrom 1996; Macintosh and Lockshin 1998), then examination of the loyalty-related outcomes that ensue from interpersonal relationships (i.e.,

romantic partnerships and friendships) could prove useful in the conceptualization of the service loyalty construct. This line of reasoning is consistent with Oliver's (1999) argument that when consumers display certain loyalty behaviors, they have "achieved a state not unlike the concept of love" (p.38). In the interpersonal relationships literature, it is generally agreed that two general types of loyalty or "pro-relationship maintenance acts" (Rusbult et al. 1999) exist: behavioural and cognitive. Thus, in contrast to recent theorizing in marketing suggesting a three-dimensional loyalty construct, a long history of research in psychology would suggest a two-dimensional loyalty construct, with each dimension encompassing a variety of "acts". This paper explores if a two-dimensional loyalty construct exists in a service setting as well.

It could be argued that the generalizability of an "interpersonal relationship" conceptualization of loyalty would be limited to only services that are high in "interpersonal" factors; this would imply that what constitutes loyalty differs depending on service type. Thus this paper will examine not only: 1) whether service loyalty is three-dimensional (as suggested by recent marketing literature) or two-dimensional (as suggested by the interpersonal relationship literature) but also, 2) does the dimensionality of service loyalty differ across different types of services? An empirical test using data from over 300 service customers is used to address these research questions. Towards this end, the existing literature on service loyalty is outlined and linked to "pro-relationship maintenance acts" detailed in the interpersonal relationships literature. Then, the methodology and results of the empirical study are presented. The paper concludes with a discussion of the implications of the results for both services marketing managers and researchers.

Service Loyalty and Pro-relationship Outcomes

Early conceptualizations of service loyalty focused primarily on behavioral outcomes, operationalized as repeat purchasing intentions or the purchasing sequence behavior of consumers. As such, the focus of much research on customer loyalty has centered on customer retention as a proxy for loyalty since it has a precise calculable net present value (Reichheld 1994). Some researchers (e.g., Dick and Basu 1994) criticized this behavioral approach for a lack of a conceptual basis and for having too much of an outcome-based view; they argued for loyalty being comprised of both relative attitude and behavioral intentions. Relative attitude (an affective evaluation of the brand) has been operationalized in various ways such as: considering the service provider the first choice among alternatives (Mattila 2001; Zeithaml et al. 1996); willingness to recommend (Butcher et al. 2001; Javalgi and Moberg 1997); strength of preference (Mitra and Lynch 1995); feelings of attachment to a product, service, or organization (Fournier 1998) and altruistic behavior such as assisting the service firm and other customers (Patterson and Ward 2000; Price et al. 1995).

Recently researchers have argued for a third dimension of service loyalty – a cognitive element (Bloemer et al. 1999; de Ruyter et al. 1998; Oliver 1999) - where loyalty is based on conscious evaluation of brand attributes or the conscious evaluation of the rewards and benefits associated with repatronage (Lee and Cunningham 2001), leading the consumer to consider this service provider at the expense of others (Dwyer et al. 1987). The operationalization of the cognitive element of service loyalty has taken a number of forms including: top of mind (Dwyer et al. 1987); first choice (Ostrowski et al. 1993); price tolerance (Anderson 1996; de Ruyter et al. 1998); exclusive consideration (i.e., considering only one service provider when needing this type of service) (Gremler and Brown 1996), and identification with the service provider (i.e., thinking of the service provider as an extension of one's self and acknowledging this by

references to “my service provider”, or by collective representations such as “us” and “we”) (Butcher et al. 2001).

Theoretical foundations for a multi-dimensional service loyalty construct are lacking. A strong theoretical foundation to inform our understanding of service loyalty is that of interpersonal loyalty. Researchers are increasingly recognizing the importance of interpersonal relationships that develop between service providers and service consumers (Bendapudi and Berry 1997; Bove and Johnson 2001a; Gutek et al. 1999; Gwinner et al. 1998). A number of relational variables such as commitment, closeness, and relationship quality have been empirically linked to a variety of service loyalty-related outcomes such as repurchase intentions, advocacy, and consumers’ willingness to pay more (Bove and Johnson 2001b; Crosby et al. 1990; Hennig-Thurau et al. 2002). Fournier’s (1998) ground-breaking work on brand relationships found utility in the use of the interpersonal relationship literature to examine loyalty-related outcomes with consumer durables. Because of the interpersonal nature of most services, it is likely that this literature would provide theoretical guidance for the conceptualization of service loyalty.

The history of research on interpersonal relationships parallels that of marketing-based service loyalty research (see Table I); the quest to understand loyalty in interpersonal relationships began by focusing on behavioral outcomes such as relationship persistence and divorce intentions (Adams and Jones 1999). They too, recognized that mere relationship persistence (similar to repurchase intentions) was a minimal requirement for sustaining a long-term relationship, and thus recent work has identified a number of other pro-relationship outcomes or “relationship maintenance acts” (Rusbult et al. 1999, p. 436). These pro-relationship maintenance acts, defined as “the specific means by which partners manage to sustain long-term,

well-functioning relationships”, come in two primary forms: 1) behavioral, which involves the individual shifting of behavior toward the goal of enhancing the overall relationship; and 2) cognitive, which involves the individual restructuring his or her beliefs about the relationship.

Take in Table I

Three behavioral pro-relationship outcomes have been identified in long-term, well-functioning interpersonal relationships including: intentions to remain in the relationship, avoiding divorce or break-up, and physical fidelity (i.e., a partner’s intentions to remain sexually monogamous) (Drigotas et al. 1999; Rusbult 1980). By extension, in a service setting, a loyal service consumer would have strong intentions to repurchase from that service provider and weak intentions to switch to another provider. An extremely loyal service consumer would likely exhibit exclusive purchasing intentions (i.e., intentions to purchase all of his or her required services from this particular service provider). Thus, consistent with prior conceptualizations in marketing, the psychology literature would suggest that behavioral service loyalty would be reflected by repurchase intentions and switching intentions; however the psychology literature would suggest that behavioural loyalty also includes exclusive purchasing intentions.

Several cognitive pro-relationship outcomes have been identified in loyal interpersonal relationships. These include: an individual’s willingness to make sacrifices for the partner (Van Lange et al. 1997); emotional fidelity (i.e., thinking only of a specific partner for relationship purposes) (Drigotas et al. 1999); and cognitive interdependence (i.e., a collective representation of self and partner) (Agnew et al. 1997). In a services setting, these three outcomes are conceptually similar to: willingness to pay more (a form of economic sacrifice), exclusive consideration (i.e., thinking of only one service provider for a particular type of service), and

identification with the service provider (i.e., thinking of the service provider as an extension of one's self-identity). Thus, the psychology literature supports the conceptualization of cognitive loyalty as including: willingness to pay more, exclusive consideration and identification with the service provider.

The interpersonal relationships literature also includes several other “cognitive” pro-relationship acts. Research has found that people in loyal relationships perceived their relationship partner to be superior to alternative partners (Martz et al. 1998), spoke publicly about these virtues to others (Duck et al. 1991), and were altruistic (i.e., willing to accommodate their partner) (Finkel and Campbell 2001; Rusbult and Verette 1991; Rusbult et al. 1991). These are conceptually similar to the attitudinal service loyalty outcomes in marketing of: strength of preference, advocacy, and altruism (Dick and Basu 1994; Goodwin 1996; Zeithaml et al. 1996).

In summary, both the marketing literature and the psychology literature identify many similar types of loyalty or pro-relationship acts, suggesting that consumer/service provider relationships share similar attributes to interpersonal relationships. Recent research in marketing suggests that all of these “acts” can be captured in three loyalty dimensions; the psychology literature suggests two. Both would suggest that behavioral loyalty consists of repurchase intentions, switching intentions and exclusive purchasing. Some recent marketing researchers would argue that there are two other dimensions: attitudinal and cognitive (e.g., Bloemer et al. 1999; de Ruyter et al. 1998; Gremler and Brown 1996). As the discussion above suggests, psychologists suggest only one other dimension; however this dimension captures many of the attitudinal and cognitive elements suggested in marketing and provides some theoretical foundation for their inclusion. Attitudinal loyalty would consist of strength of preference, advocacy and altruism and cognitive loyalty would consist of willingness to pay more, exclusive

consideration and identification with the service provider. Whether consumers can distinguish between a two-dimensional (behavioral and combined cognitive/attitudinal) construct suggested by psychology; or a three-dimensional (behavioral, attitudinal, and cognitive) construct suggested by marketing will be examined here.

Furthermore, this study will examine if the same structure holds for loyalty to different types of service providers. It has been argued (e.g., Javalgi and Moberg 1997; Rundle-Thiele and Bennett 2001) that the concept of loyalty would differ depending on what type of product or service being considered. Similarly, Reichheld (2003) found that his one key measure of loyalty – “willingness to recommend” was not the best predictor of company growth in all industries. Thus it is important to examine if loyalty can be conceptualized the same way across different service types.

Using one of Lovelock's (1983) service categorization schemes that differentiates services based on the nature of the service act provides a framework for examining whether or not a conceptualization of loyalty based on the “relationship” literature holds true across service types. This categorization schemes differentiates between services that are directed at people (e.g., doctors, hairdressers) versus their possessions (lawyers, mechanics) and whether the services are primarily tangible (e.g., hairdressers, lawn care, mechanics, etc.) versus intangible (e.g., lawyers, financial services, etc.). Intuitively one might argue that a conceptualization of loyalty based on the "relationship" literature would only “fit” for services that are more "personal" or “relationship-based” like services aimed at the person. Also one could argue that, as services become less tangible and less easily evaluated, service consumers may rely on more “relational cues” for evaluation (Gwinner et al. 1998). In doing so, they may exhibit loyalty-related outcomes that closely mimic those found in the relationship literature. Therefore, in this

study, services will be divided into 4 types (intangible versus tangible and services directed at people's bodies versus those directed at their physical possessions) and possible differences across the 4 types examined.

Methodology

The purpose of this study was to examine the dimensionality of the service loyalty construct – specifically, whether there are two (based on the psychology literature) or three (based on recent marketing literature) dimensions of service loyalty. Three hundred and forty-eight adult consumers of services completed a paper-based survey that asked them to respond to questions relating to the relationship that they have with one Service Company in the community. Respondents were recruited using the employees of purposively selected large organization (n=225) and the patrons of several sports facilities (n=123). Data from 41 respondents who listed their service provider as one that provided primarily goods were deleted. The resulting sample (n=307) is presented in Table II and represents a good cross-section of respondent ages and sex, service provider sex, length of relationships, and types of services. The respondents' service types were further classified according to the nature of the service provided (Lovelock 1983) to allow for comparison across service types (see Table III).

Take in Table II

Take in Table III

The design of the survey contained two parts. Part A asked general questions about the type of service and the duration of the relationship that the consumer has with a particular service company. Part B focused on the consumer's relationship with the service company and measured nine different service loyalty-related outcomes: repurchase intentions, switching intentions, exclusive purchasing intentions, strength of preference, advocacy, altruism, willingness to pay

more, exclusive consideration, and identification. In addition, this study included the measurement of the respondent's perceived service quality. Since perceived service quality has been identified as one of the key drivers of loyalty-related outcomes in services (Bloemer et al. 1999; Boulding et al. 1993; Zeithaml et al. 1996), it is likely that high levels of service quality are responsible for high levels of the loyalty-related outcomes. Thus, service quality can be used as evidence of the criterion-related validity of service loyalty.

Each construct was measured using previously used scales from the marketing or psychology literatures. All scales, except where noted, were measured using a five-point, Likert scale and were worded to address manifestations of loyalty directed towards the service company, rather than an individual person that provides the service. Exclusive consideration was measured using an index similar to that developed by Shapiro, MacInnis and Heckler (1997) in their study of consideration set formation. Respondents were asked to record the number of service providers of whom they are aware that perform the same service. They were also asked to record the number of those service providers (including their current service provider) that they would consider using. The inverse of this number was used as an index of exclusive consideration with that varied between 1 (complete exclusive consideration) to 0 (no exclusive consideration at all). These scales are reported in Table IV along with reliability and unidimensionality statistics.

Take in Table IV

Results

For each of the measured constructs, measurement unidimensionality and reliability was assessed by examining the results of individual principal components analyses and confirmatory factor analyses and by examining measures of scale reliability (e.g., Cronbach's alpha, and

Fornell and Larker's (1981) internal consistency measures). For unidimensionality, a principal components analysis was run separately for each construct to ensure that all items loaded onto one factor only, which they did (Gerbing and Anderson 1988). Any items that loaded poorly were dropped (i.e., factor loadings were less than 0.7). The resulting scales all demonstrated good reliability according to accepted standards (i.e., α 's >0.70, I.C. > 0.70; AVE > 0.5¹).

To examine discriminant validity, a principal components analysis using oblique rotation for all nine loyalty-related variables was conducted; five components were extracted. There was one distinct component for each of the following variables: willingness to pay more, exclusive purchasing intentions and exclusive consideration. Another component represented both repurchase intentions and switching intentions, although each switching item loaded negatively onto the component. The fifth component was made up of the strength of preference, advocacy, altruism, and identity variables.

To further assess discriminant validity, factor scores were computed for each of the loyalty variables and then the correlation of each measurement item with all of the factor scores were examined (a procedure advocated by Fornell and Larker (1981)). Each measurement item correlated highly with its respective factor score, and higher with this factor than other factors suggesting discriminant validity (see Table V). Also, the square root of the average variance extracted of each factor exceeded the intercorrelations with the other constructs also suggesting discriminant validity (Barclay et al. 1995) (see Table VI). The measure of exclusive consideration was very weakly (i.e., $r < 0.10$) correlated with any of the other loyalty-related constructs. This construct was excluded from further analysis. The dimensionality of service loyalty was examined using the remaining eight loyalty-related outcomes.

¹ α - Cronbach's Alpha, I.C. – Fornell and Larker's internal consistency measure, AVE – average variance extracted)

Take in Table V

Take in Table VI

Service Loyalty: Two or Three Dimensions?

To further examine discriminant validity among the loyalty-related outcomes and to assess the dimensionality of the service loyalty construct, a number of confirmatory factor analyses were conducted at two levels of aggregation following the procedure advocated by Bagozzi and Heathcington (1994). First, service loyalty was examined using a disaggregated (i.e., item-level) model as depicted in Figure I. This model was examined with loyalty as a single higher-order factor made up of several first-order factors representing our eight manifestations of loyalty. Four models were estimated using between five and eight first-order factors. In the five-factor model, one factor represented a combination of the variables of strength of preference, advocacy, altruism, and identity as suggested by the previous principal components analysis. The remaining six-, seven-, and eight-factor models represented the decomposition of this factor into its individual constituents. Table VIII displays the coefficients and variance explained for each of these models. The model representing the eight first-order factors provided the best fit to the data (χ^2 change = 12.13, $p < 0.001$). This analysis provides further evidence of the discriminant validity of the individual loyalty-related variables. Further analysis was conducted using these eight individual loyalty-related variables.

Take in Table VII

Take in Figure I

To examine the dimensionality of the service loyalty construct, three higher-order models of loyalty were conducted (see Figure II) representing a unidimensional loyalty construct (Figure 2a), a two-dimensional loyalty construct (behavioral loyalty and a combined attitudinal/cognitive loyalty – Figure 2b), and a three-dimensional loyalty construct (behavioral, attitudinal, and cognitive – Figure 2c). Confirmatory factor analyses were performed on all three models (Table VIII) revealing that a two-dimensional service loyalty construct, was a better fitting model than the one-dimensional model (χ^2 change = 66.7, $p < 0.001$). The three-dimensional model of loyalty, however, was not an improvement over the two-dimensional model (χ^2 change = 3.74, n.s.) and the attitudinal and cognitive dimensions were correlated at 0.99 level suggesting that these were the same construct.

Take in Table VIII

Take in Figure II

The dimensionality of the service loyalty was also examined at an aggregate level by averaging all of the measures of each loyalty-related outcome and using these as indicators of an aggregate construct of loyalty (see Figure III). Similar to the analysis above, two additional models were estimated. The second model was partially aggregated across two dimensions: behavioral loyalty and a combined attitudinal/cognitive loyalty, consistent with the interpersonal relationships literature from psychology while the third model was partially aggregated across the three dimensions of behavioral loyalty, attitudinal loyalty, and cognitive loyalty as proposed in the marketing literature. Similar to the results at the item-level of analysis (Figure II), the three-dimensional model was a good fit to the data (CFI = 0.97, SMSR = 0.03), but was not an improvement over the two-dimensional representation. Furthermore, the correlation between the

attitudinal element and the cognitive dimension was again very high ($r=0.99$) suggesting that respondents cannot discriminate between these two. Therefore, the two-dimensional model of service loyalty, consisting of behavioral service loyalty and a combined attitudinal/cognitive loyalty, provides the best alternative.

Take in Table IX

Take in Figure III

To examine the criterion-related validity of the two-dimensional service loyalty construct, a structural model involving perceived service quality as an antecedent variable of the two-dimensional model of service loyalty was estimated (Zeithaml et al. 1996). Perceived service quality was a significant and positive driver of both behavioral ($\beta=0.86$, $p<0.001$) and the combined attitudinal/cognitive ($\beta=0.85$, $p<0.001$) dimensions explaining 75% and 72% of the variance in the two dimensions respectively, consistent with previous research in the services arena (e.g., Bloemer et al. 1999; Zeithaml et al. 1996), and also supporting the criterion-related validity of the service loyalty model.

Service Loyalty Across Service Types

Further analysis was conducted to examine whether or not service loyalty differs according to the type of service provided. To examine whether or not a two-dimensional model of service loyalty holds across service types, the data was split according to one of Lovelock's (1983) classification schemes (intangible versus tangible, service directed at people versus their physical possessions). Unfortunately, none of the respondents in this survey described services that could be classified as "intangible/directed at people"; as such, only 3 of Lovelock's 4 categories could be examined here. For each of the resulting 3 data sets, a principal components analysis using the factor scores of the loyalty-related outcomes as input variables and direct

oblmin rotation was conducted. Two factors were extracted for each data set corresponding to behavioral loyalty (repurchase intentions, exclusive purchasing intentions, and switching intentions) and attitudinal loyalty (strength of preference, advocacy, altruism, identification, and willingness to pay more) suggesting the two-dimensional structure holds regardless of the 3 types of services examined.

A discussion of the implications of these results for research and practice follows.

Discussion and Implications

The purpose of this study was to examine the dimensionality of the service loyalty construct. This study found that eight different consumer responses (loyalty-related outcomes) reflect two dimensions: a behavioral element (consisting of repurchase intentions, switching intentions, and exclusive purchasing intentions), and a combined attitudinal/cognitive element (consisting of consumers' strength of preference, advocacy, altruism, willingness to pay more, and identification with the service provider). This two-dimensional representation of loyalty was consistent for all 3 types of services examined. The two-dimensional conceptualization is congruous with the predominance of literature in psychology that focuses on "pro-relationship maintenance acts" (Rusbult et al. 1999), suggesting that regardless of the target (friend, spouse, service provider), loyalty captures, in essence, what Oliver (1999) referred to as "what the person does" (behavioral loyalty) and the psychological meaning of the relationship (attitudinal/cognitive loyalty).

At the beginning of this paper, it was suggested that without an adequate understanding of the nature and dimensionality of service loyalty, service firms may be: 1) measuring the wrong things in an attempt to identify loyal customers; 2) unable to link customer loyalty to firm performance measures; and 3) rewarding the wrong customer behaviors or attitudes when designing loyalty programs. Consistent with other suggestions in the marketing literature (e.g.,

Dick and Basu 1994), this study provides empirical evidence that service loyalty is manifested both behaviorally and attitudinally. Thus, although managers need short and simple measurement devices to tap into important constructs such as service loyalty, this research suggests that to identify truly loyal customers firms should, at the very least, include measurement items from both dimensions.

While a two-dimensional conceptualization of service loyalty is not new in marketing, what these results suggest is that the two dimensions may be more complex than previously thought. For example, the majority of prior research has conceptualized behavioral loyalty as simply repurchase or switching; the current results and the psychology literature suggest that exclusive purchasing should also be considered. In addition, the second dimension, a combined cognitive/attitudinal dimension, incorporates much more than simply “relative attitude”, the variable most often used to operationalize this dimension in marketing (Pritchard et al. 1999). As suggested by the psychology literature, willingness to make sacrifices for the partner, cognitive interdependence, speaking publicly about the relationship and altruism also play a role. In fact, while the coefficient for strength of preference (relative attitude) was strong, altruism, advocacy and willingness to pay more were also all strong indicants of this construct in the empirical test. This suggests that marketers need to consider all of these when examining service loyalty.

To adequately link customer loyalty to firm performance requires additional research. Reichheld (2003) suggested that in some industries, willingness to recommend (i.e., advocacy) was the best predictor of growth; however, his sample consisted of primarily professional, tangible services (e.g., financial services, cable services, internet service providers, etc.). Several other manifestations of loyalty were not included in his Loyalty Acid Test (see http://www.loyaltyrules.com/loyaltyrules/acid_test_customer.html) such as willingness to pay

more, altruism, identification, exclusive purchasing, and switching intentions. One could argue that, for some services, these may be better indicators of performance than repurchasing, strength of preference, or advocacy. For example, membership organizations such as golf clubs may find measures of altruism and identification both better linked to performance and more meaningful. It is easy to see how a golf club with a large number of members that are willing to volunteer (i.e., display signs of altruism) and consider the golf club to be an integral part of their self-concept (i.e., they identify with the organization) could possibly outperform a similar club with fewer members exhibiting these manifestations of loyalty.

The eight manifestations of loyalty used in this study may provide some service managers with a guide to assist in designing programs to reward loyal consumers. Most of these programs reward repurchasing behavior and recommendations, but for some services that are prone to variety seeking behaviors (e.g., restaurants, entertainment venues) increasing share of wallet (i.e., exclusive purchasing intentions) may be the best loyalty-related variable on which to focus rewards. Imagine a small town with four, fine-dining establishments that cater to a select number of affluent consumers. Rewarding these consumers on the basis of repurchasing behaviour, willingness to recommend, and strength of preference may not provide the establishment with any relative advantage. Consumers may have strong repurchase intentions, equal strength of preference, and equal willingness to recommend all four establishments. In this case, individual establishments should focus marketing programs on increasing exclusive purchasing intentions.

The findings of this research highlight that service loyalty is similar to loyalty in interpersonal relationships, providing further evidence for the notion that service provider-consumer relationships can approximate friendships or even romantic partnerships in terms of

loyalty-like responses. While marketing research has identified a number of drivers of loyalty-related outcomes, future research should examine the relative role of each (e.g., service quality, alternative attractiveness, commitment) and possible other drivers on each of the two dimensions of service loyalty. Guidance for this may also be derived from the interpersonal relationships literature. For example, constructs such as trust, relationship orientation, long term goals, and concern for other's welfare, are just some of the variables studied as drivers of pro-relationship maintenance acts (Rusbult et al. 1999; Van Lange et al. 1997).

Recent work has begun to recognize the fact that service loyalty is a hierarchy and that some consumers may exhibit higher degrees of loyalty (Gremler and Brown 1996; Narayandas 1998; Oliver 1999; Patterson and Ward 2000). This hierarchical view of service loyalty outcomes is similar to the outcomes proposed in the commitment ladder (Narayandas 1998; White and Schneider 2000) and the relationship marketing ladder (Christopher et al. 1991) that depict different cognitions, behaviors, and attitudes that occur as a result of increasing commitment or strength of relationships. It may be that some manifestations of service loyalty such as identification, exclusive purchasing, and altruism represent higher degrees of loyalty that may develop later in a relationship. This aspect of service loyalty requires further research.

While this study furthers our understanding of service loyalty, it is not without its limitations. First, respondents were asked to answer questions pertaining to a service where they tended to deal with the same person during each visit. Although there appeared to be good variation in the levels of each manifestation of loyalty, the means of each are in the moderate-to-high range. An analysis of the dimensionality of service loyalty at lower levels of relationship length (i.e., less than two years) also produced a two-dimensional structure and there were no significant differences between the levels of each loyalty-related variable across groups. Also,

and analysis of the dimensionality of service loyalty at the lowest levels of the loyalty-related outcomes also revealed a two-dimensional structure. Although it appears that the two-dimensional conceptualization of service loyalty holds across various lengths of relationships and levels of loyalty, further research is required that examines this conceptualization at lower levels of the loyalty-related outcomes.

Second, the sample included more female respondents than male respondents. Although there were no significant differences in the mean responses across sexes, the sample size for both studies precluded examination of loyalty across sexes. Research in psychology has found significant differences in commitment levels across sexes (Jones 1991; Rusbult and Farrell 1983) and marketing researchers have found some differences in loyalty-related outcomes between sexes (Garrett et al. 1997). This is another area of future research.

Lastly, this study did not include measures of firm performance. As such, although the study highlights the complexity of service loyalty, the relative importance of each manifestation of loyalty could not be determined. Further research is necessary to address this limitation.

Conclusion

For service providers, this research emphasizes the importance of developing relationships with its consumers. Manifestations of loyalty such as altruism, identification, advocacy, willingness to pay more, and strength of preference suggest forms of loyalty that are all-too-often ignored in commonly used marketing metrics. Viewing service loyalty in the same manner as pro-relationship behaviors that develop in friendships and romantic relationships shows promise for the understanding of service loyalty.

References

Adams, Jeffrey M. and Warren H. Jones Eds. (1999), *Handbook of Interpersonal Commitment and Relationship Stability*. New York, N.Y.: Kluwer Academic/Plenum Publishers.

- Agnew, Christopher R., P. A. M. Van Lange, Caryl E. Rusbult, and C. A. Langston (1997), "Cognitive interdependence: Commitment and the mental representation of close relationships.," *Journal of Personality and Social Psychology*, 74, 939-54.
- Anderson, E. W. (1996), "Customer satisfaction and price tolerance," *Marketing Letters*, 7, 19-30.
- Bagozzi, Richard P. and Todd F. Heatherton (1994), "A general approach to representing multifaceted personality constructs: Application to state self-esteem," *Structural Equation Modeling*, 1 (1), 35-67.
- Bansal, Harvir S. and Shirley F. Taylor (1999), "The Service Provider Switching Model (SPSM): A Model of Consumer Switching Behavior in the Services Industry.," *Journal of Service Research*, 2 (2), 200-18.
- Barclay, D., C Higgins, and R. Thompson (1995), "The Partial Least Squares (PLS) Approach to Causal Modeling: Personal Computer Adoption and Use as an Illustration," *Technology Studies*, 2 (2), 285-309.
- Bendapudi, Neeli and Leonard L. Berry (1997), "Customers' Motivations for Maintaining Relationships with Service Providers," *Journal of Retailing*, 73 (1), 15-37.
- Bharadwaj, S. G., P.R. Vanradarajan, and J. Fahy (1993), "Sustainable competitive advantage in service industries: a conceptual model and research propositions," *Journal of Marketing*, 57, 83-99.
- Bloemer, Josee, Ko de Ruyter, and Martin Wetzels (1999), "Linking perceived service quality and service loyalty: a multi-dimensional perspective," *European Journal of Marketing*, 33 (11/12), 1082-106.
- Bollen, Kenneth A. and J. Scott Long (1993), *Testing Structural Equation Models*. Newbury Park, CA: Sage Publications.
- Boulding, W., A. Kalra, R. Staelin, and V. Zeithaml (1993), "A Dynamic Process Model of Service Quality: From Expectations to Behavioral Intentions.," *Journal of Marketing Research*, 30 (1), 7-28.
- Bove, Liliana L. and Lester W. Johnson (2001a), "Customer Relationships with Service Personnel: Do We Measure Closeness, Quality, or Strength?," *Journal of Business Research*, 54 (3), 189-97.
- (2001b), "A Customer-Service Worker Relationship Model," *International Journal of Service Industry Management*, 11 (5), 491-511.
- Butcher, Ken, Beverley Sparkes, and Frances O'Callaghan (2001), "Evaluative and relational influences on service loyalty," *International Journal of Service Industry Management*, 12 (4), 310-27.
- Chin, Wynne (1998), "The Partial Least Squares Approach to Structural Equation Modeling," in *Modern Methods for Business Research*, G.A. Marcoulides, Ed. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Christopher, M., A. Payne, and D. Ballantyne (1991), *Relationship marketing: Bringing quality, customer service and marketing together*. Oxford, UK: Butterworth-Heinemann.
- Crosby, Lawrence A., Kenneth R. Evans, and Deborah Cowles (1990), "Relationship Quality in Services Selling: An Interpersonal Influence Perspective," *Journal of Marketing*, 54 (3), 68-82.
- Dabholkar, Pratibha A. and Simon Walls (1999), "Service Evaluation and Switching Behavior for Experiential Services: An Empirical Test of Gender Differences within a Broader Conceptual Framework," *Journal of Consumer Satisfaction, Dissatisfaction, and Complaining Behaviors*, 12, 123-37.
- de Ruyter, Ko, Martin Wetzels, and Josee Bloemer (1998), "On the relationship between perceived service quality, service loyalty and switching costs," *International Journal of Service Industry Management*, 9 (5), 436-53.

- Dick, Alan S. and Kunal Basu (1994), "Customer Loyalty: Toward an Integrated Conceptual Framework," *Journal of the Academy of Marketing Science*, 22 (2), 99-113.
- Dowling, Grahame R. and Mark Uncles (1997), "Do Customer Loyalty Programs Really Work?," *Sloan Management Review*.
- Drigotas, Stephen M., C. Annette Safstrom, and Tiffany Gentilia (1999), "An investment model prediction of dating infidelity," *Journal of Personality and Social Psychology*, 77 (3), 509-24.
- Duck, S., D.J. Rutt, M.H. Hurst, and H Strejc (1991), "Some evident truths about conversations in everyday relationships: All communications are not created equal," *Human Communications Research*, 18, 228-67.
- Dwyer, Robert F., P.H. Schurr, and S. Oh (1987), "Developing Buyer-Seller Relationships," *Journal of Marketing*, 51 (April), 11-27.
- Finkel, Eli J. and W. Keith Campbell (2001), "Self-control and accommodation in close relationships: An interdependence analysis," *Journal of Personality and Social Psychology*, 81 (2), 263-77.
- Fornell, C. and D. Larcker (1981), "Structural Equation Modeling and Regression: Guidelines for Research Practice.," *Journal of Marketing Research*, 18, 39-50.
- Fournier, Susan (1998), "Consumers and Their Brands: Developing Relationship Theory in Consumer Research," *Journal of Consumer Research*, 24 (March), 343-73.
- Garrett, Dennis E., Renee A. Meyers, and Lee West (1997), "Sex Differences and Consumer Complaints: Do Men and Women Communicate Differently When they Complain to Customer Service Representatives?," *Journal of Consumer Satisfaction, Dissatisfaction, and Complaining Behaviors*, 10 (116-130).
- Gefen, D., D.W. Straub, and M.C. Boudreau (2000), "Structural Equation Modeling and Regression: Guidelines for Research Practice," *Communications of the Association for Information Systems*, 4 (7).
- Gerbing, David W. and James C. Anderson (1988), "An updated paradigm for scale development incorporating unidimensionality and its assessment," *Journal of Marketing Research*, 25 (May), 186-92.
- Goodwin, Cathy (1996), "Communitality as a Dimension of Service Relationships," *Journal of Consumer Psychology*, 5 (4), 387-415.
- Gottman, J. M. (1994), *What predicts divorce?* Hillsdale, NJ: Erlbaum.
- Gremler, Dwayne D. and Stephen W. Brown (1996), "Service loyalty; its nature, importance, and implications," in *QUIS V: Advancing Service Quality: A Global Perspective*, B. Edvardsson, Brown, S.W., Johnston, R., and Scheuing, E., Ed. New York, NY: ISQA.
- Gutek, Barbara, Anita D. Bhappu, Matthew A. Liao-Troth, and Bennett Cherry (1999), "Distinguishing between service relationships and encounters," *Journal of Applied Psychology*, 84 (2), 218-33.
- Gwinner, Kevin P., Dwayne D. Gremler, and Mary Jo Bitner (1998), "Relationship Benefits in Services Industries: The Customer's Perspective.," *Journal of the Academy of Marketing Science*, 26 (2), 101-15.
- Hennig-Thurau, Thorsten, Kevin P. Gwinner, and Dwayne D. Gremler (2002), "Understanding relationship marketing outcomes," *Journal of Service Research*, 4 (3), 230-47.
- Iacobucci, Dawn and Amy Ostrom (1996), "Commercial and interpersonal relationships: Using the structure of interpersonal relationships to understand individual-to-individual, individual-to-firm, and firm-to-firm relationships in commerce," *International Journal of Research in Marketing*, 13, 53-72.

- Jacoby, Jacob and Robert W. Chestnut (1978), *Brand loyalty : measurement and management*. New York: Wiley.
- Javalgi, Rasjshekhar G. and Christopher R. Moberg (1997), "Service loyalty: implications for service providers," *Journal of Services Marketing*, 11 (3), 165-79.
- Jones, D.C. (1991), "Friendship satisfaction and gender: An examination of sex differences in contributors to friendship satisfaction.," *Journal of Social and Personal Relationships*, 8, 167-85.
- Jones, Michael A., David L. Mothersbaugh, and Sharon E. Beatty (2000), "Switching Barriers and Repurchasing Intentions in Services," *Journal of Retailing*, 76 (2), 259 - 74.
- Lee, Moonkyu and Lawrence F. Cunningham (2001), "A cost/benefit approach to understanding service loyalty," *Journal of Services Marketing*, 15 (2), 113-30.
- Lovelock, Christopher (1983), "Classifying Services to Gain Strategic Marketing Insights," *Journal of Marketing*, 47 (3), 9-20.
- Macintosh, Gerrard and L.S. Lockshin (1998), "Retail relationships and store loyalty; a multi-level perspective," *International Journal of Research in Marketing*, 14, 487-98.
- Martz, John M., Julie Verette, L.F. Slovic, C.L. Cox, and Caryl E. Rusbult (1998), "Positive illusion in close relationships," *Personal Relationships*, 5, 159-81.
- Mattila, Anna S. (2001), "The impact of relationship type on customer loyalty in a context of service failures," *Journal of Service Research*, 4 (2), 91-101.
- Mitra, A. and J. Lynch (1995), "Toward a Reconciliation of Market Power and Information Theories of Advertising Effects on Price Elasticity.," *Journal of Consumer Research*, 21 (4), 644-60.
- Narayandas, Das (1998), "Measuring and managing the benefits of customer retention," *Journal of Service Research*, 1 (2), 108-28.
- Oliver, Richard L (1999), "Whence Consumer Loyalty," *Journal of Marketing*, 63 (Special Issue), 33-44.
- Ostrowski, Peter L., Terrence O'Brien, and Geoffrey Gordon (1993), "Service quality and customer loyalty in the commercial airline industry," *Journal of Travel Research*, 32, 16-24.
- Patterson, Paul G. and Tony Ward (2000), "Relationship Marketing and Management," in *Handbook of Services Marketing and Management*, T. A. Swartz and Dawn Iacobucci, Eds. Thousand Oaks, CA: Sage Publications.
- Price, Linda L., Lawrence F. Feick, and Audrey Guskey (1995), "Everyday market helping behavior," *Journal of Public Policy and Marketing*, 14 (2), 255-67.
- Pritchard, Mark P., Mark E. Havitz, and Dennis R. Howard (1999), "Analyzing the commitment-loyalty link in service contexts," *Journal of the Academy of Marketing Science*, 27 (3), 333-48.
- Reichheld, Frederick F. (1994), "Loyalty and the renaissance of marketing," *Marketing Management*, 2 (4), 10.
- (1996), *The Loyalty Effect*. Boston, MA: Harvard Business School Press.
- (2003), "The One Number You Need to Grow," *Harvard Business Review* (December), 2-10.
- Reynolds, Kristy E and Mark J Arnold (2000), "Customer Loyalty to the Salesperson and the Store: Examining Relationship Customers in an Upscale Retail Context," *Journal of Personal Selling and Sales Management*, 20 (2), 89-98.

- Reynolds, Kristy E and Sharon E. Beatty (1999), "Customer benefits and company consequences of customer-salesperson relationships in retailing," *Journal of Retailing*, 75 (1), 11-32.
- Rundle-Thiele, Sharyn and Rebekah Bennett (2001), "A Brand for All Seasons? A Discussion of Brand Loyalty Approaches and Their Applicability for Different Markets," *Journal of Product and Brand Management*, 10 (1), 25-37.
- Rusbult, Caryl E. (1980), "Satisfaction and commitment in friendships," *Representative Research in Social Psychology*, 11, 96-105.
- Rusbult, Caryl E. and D. Farrell (1983), "A longitudinal test of the investment model: The development and deterioration of satisfaction and commitment in heterosexual involvements," *Journal of Personality and Social Psychology*, 45, 101-117.
- Rusbult, Caryl E. and Julie Verette (1991), "An interdependence analysis of accommodation processes in close relationships," *Representative Research in Social Psychology*, 19, 3-33.
- Rusbult, Caryl E., Julie Verette, Gregory A. Whitney, Linda F. Slovick, and Isaac Lipkus (1991), "Accommodation processes in close relationships Theory and preliminary empirical evidence," *Journal of Personality and Social Psychology*, 60 (1), 53-78.
- Rusbult, Caryl E., Jennifer Wieselquist, Craig A. Foster, and Betty S. Witcher (1999), "Commitment and trust in close relationships," in *Handbook of interpersonal commitment and relationship stability*, Jeffrey M. Adams and Warren H. Jones, Eds. New York, NY: Kluwer Academic.
- Shapiro, Stewart, Deborah MacInnis, and Susan Heckler (1997), "The Effects of Incidental Ad Exposure on the Formation of Consideration Sets," *Journal of Consumer Research*, 24 (June), 94 - 104.
- Steiger, J. H. (1990), "Structural model evaluation and modification: An interval estimation approach," *Multivariate Behavioral Research*, 25, 173-80.
- Tabachnick, Barbara G. and Linda S. Fidell (1996), *Using Multivariate Statistics* (3rd ed.). New York, NY: Harper-Collins.
- Terrill, Craig, Arthur Middlebrooks, and American Marketing Association. (2000), *Market leadership strategies for service companies : creating growth, profits, and customer loyalty*. Lincolnwood, IL: NTC/Contemporary Publishing.
- Van Lange, P. A. M., Caryl E. Rusbult, Stephen M. Drigotas, X. B. Arriaga, Betty S. Witcher, and C.L. Cox (1997), "Willingness to sacrifice in close relationships," *Journal of Personality and Social Psychology*, 72, 1373-95.
- White, Susan S. and Benjamin Schneider (2000), "Climbing the commitment ladder: The role of expectations disconfirmation on customers' behavioral intentions," *Journal of Service Research*, 2 (3), 240-53.
- Zeithaml, Valarie A, Leonard L Berry, and A Parasuraman (1996), "The behavioral consequences of service quality," *Journal of Marketing*, 60 (2), 31.

Table I: Service Loyalty-Related Outcomes (Marketing) and “Pro-relationship Outcomes” (Psychology)

| Dimension | Service Loyalty-Related Outcome | Definition | Related Research | “Prorelationship Outcome” | Definition | Related Research |
|-------------|---------------------------------|--|--|---|--|---|
| Behavioral | Repurchase Intentions | Customer’s aim to maintain a relationship with a particular service provider and make his or her next purchase in the category from this service provider. | (Jones et al. 2000; Zeithaml et al. 1996) | Relationship Persistence | An individual’s intention to maintain an interpersonal relationship with a specific individual. | (Adams and Jones 1999; Rusbult et al. 1999) |
| | Switching Intentions | Customer’s aim to terminate a relationship with a particular service provider and patronize another in the same category. | (Bansal and Taylor 1999; Dabholkar and Walls 1999) | Divorce Intentions | An individual’s intention to terminate an interpersonal relationship with a specific individual. | (Adams and Jones 1999; Gottman 1994) |
| | Exclusive Intentions | Customer’s aim to dedicate all of his or her purchases in a category to a particular service provider. | (Reynolds and Arnold 2000; Reynolds and Beatty 1999) | Monogamy (Physical Fidelity) | An individual’s intentions to remain sexually monogamous to a specific relationship partner. | (Drigotas et al. 1999) |
| Attitudinal | Relative Attitude | The appraisal of the service including the strength of that appraisal and the degree of differentiation from alternatives. | (Dick and Basu 1994; Mattila 2001; Pritchard et al. 1999) | Positive Illusions | An individual perceives his or her partner to be superior to others. | (Martz et al. 1998) |
| | Willingness to Recommend | Consumer willingness to recommend a service provider to other consumers | (Butcher et al. 2001; Javalgi and Moberg 1997; Zeithaml et al. 1996) | Advocacy | An individual is willing to speak publicly about the virtues of his or her partner. | (Duck et al. 1991) |
| | Altruism | Consumer’s willingness to assist the service provider or other service consumers in the effective delivery of the service. | (Price et al. 1995) | Accommodating Behavior | An individual is willing to accommodate partner by responding constructively to partner’s behaviors. | (Finkel and Campbell 2001) |
| Cognitive | Willingness to pay more | Consumer’s indifference to price differences between that of his or her current service provider and others in the same category. | (Anderson 1996; de Ruyter et al. 1998) | Willingness to Sacrifice | A partner is willing to make sacrifices for the other partner. | (Van Lange et al. 1997) |
| | Exclusive consideration | The extent to which the consumer considers the service provider as his or her only choice when purchasing this type of service. | (Dwyer et al. 1987; Ostrowski et al. 1993) | Derogation of Alternatives (emotional fidelity) | A partner thinks only of a specific other partner for relationship purposes. | (Drigotas et al. 1999) |
| | Identification | The sense of ownership over the service, affiliation with the service provider, or congruence of values that exists between the service provider and the consumer. | (Butcher et al. 2001) | Cognitive Interdependence | An individual refers to their relationship partner as a collective representation of themselves. | (Agnew et al. 1997) |

Table II: Description of Respondents

| Variable | Category | Frequency | Percent |
|------------------------------------|---|---------------------|---------------------------|
| Type of Service ^a | Intangible, Directed at people | 0 | 0 |
| | Intangible, Directed at things | 73 | 23.8 |
| | Tangible, Directed at people | 169 | 55.0 |
| | Tangible, Directed at things | 65 | 21.2 |
| Sex of Respondent | Male | 98 | 31.9 |
| | Female | 208 | 68.0 |
| | Respondent did not specify sex | 1 | 0.3 |
| Sex of Service Provider | Male | 150 | 48.9 |
| | Female | 150 | 48.9 |
| | Respondent did not specify sex | 7 | 2.3 |
| Match of Sex with Service Provider | Service provider and respondent are both males | 63 | 20.5 |
| | Service provider and respondent are both females | 118 | 38.8 |
| | Service provider and respondent are of the opposite sex | 119 | 38.4 |
| | Respondent did not specify sex | 7 | 2.3 |
| Age Categories of Respondents | 18-19 | 2 | 0.7 |
| | 20-24 | 11 | 3.6 |
| | 25-34 | 64 | 20.8 |
| | 35-44 | 128 | 41.7 |
| | 45-54 | 76 | 24.8 |
| | 55-64 | 18 | 5.9 |
| | 65+ | 7 | 2.3 |
| | | Mean (years) | Standard Deviation |
| Duration of Relationship | With Service Company | 9.92 | 8.12 |
| | With Service Provider | 8.36 | 7.11 |

^aService types were classified according to a classification scheme provided by Lovelock (Lovelock 1983). Examples are provided in Table III.

Table III: Service Types Examined in this Study
Based on Lovelock (1983)

| | Direct Recipient of Service: People | Direct Recipient of Service: Things |
|---------------------------|--|---|
| Tangible actions | Health Care Beauty Salons Medical Doctors Physiotherapists Massage Therapists Chiropractors Dentists | Automobile Mechanics Equipment repair Bike Repair Lawn Maintenance House Repair |
| Intangible Actions | None in sample | Lawyers Real Estate Agents Insurance Agents Bankers Financial Planners Mortgage Assistants |

From: Figure 1 - Lovelock, Christopher (1983), "Classifying Services to Gain Strategic Marketing Insights," Journal of Marketing, 47 (3), 9-20.

**Table IV: Service Loyalty
Measurement Scales, Reliability and Unidimensionality**

IC = Fornell and Larcker's Internal Consistency Measure, AVE = Average Variance Extracted, α = Cronbach's Reliability Measure, PCA = principal components analysis, CFA = confirmatory factor analysis, df= degrees of freedom, NFI = normed fit index, CFI = comparative fit index

| Scale | Item(s) | Mean (St. Dev.) | PCA Loading | St. Coefficients (CFA) | Confirmatory Factor Analysis Fit Results | Source |
|---|--|-----------------|-------------|------------------------|--|---|
| Repurchase Intentions (from the Service Company) $\alpha=0.899$ IC=0.939 AVE=84% | I will probably use COMPANY X again. | 4.62 (0.70) | 0.908 | 0.922 | N/A | (Jones, Mothersbaugh, and Beatty 2000) |
| | I intend to repurchase services from COMPANY X again in the future. | 4.52 (0.76) | 0.907 | 0.871 | | |
| | It is possible that I will use COMPANY X in the future. | 4.67 (0.64) | 0.883 | 0.818 | | |
| Strength of Preference $\alpha=0.863$ IC=0.912 AVE=72% | I prefer COMPANY X to the other service providers in this category. | 4.13 (1.02) | 0.885 | 0.843 | $\chi^2=0.973$ df=2 p=0.615 CFI > 0.999 NFI >0.999 | (Mitra and Lynch 1995) |
| | I would rank COMPANY X as #1 amongst the other service providers I listed. | 4.04 (1.08) | 0.882 | 0.835 | | |
| | COMPANY X provides the best service among the alternatives I listed earlier. | 3.97 (1.07) | 0.908 | 0.903 | | |
| | Compared to COMPANY X, there are few alternatives with whom I would be satisfied. | 3.59 (1.21) | 0.711 | 0.582 | | |
| Willingness to Pay More $\alpha=0.831$ IC=0.888 AVE=67% | I am likely to pay a little bit more for using COMPANY X. | 3.33 (1.17) | 0.808 | 0.741 | $\chi^2=7.01$ df=2 p=0.03 CFI =0.989 NFI =0.985 | (Zeithaml, Berry, and Parasuraman 1996) |
| | Price is not an important factor in my decision to remain with COMPANY X. | 3.35 (1.30) | 0.750 | 0.640 | | |
| | If COMPANY X were to raise the price by 10%, I would likely remain. | 3.44 (1.31) | 0.835 | 0.759 | | |
| | I am willing to pay more for COMPANY X's services. | 3.33 (1.33) | 0.865 | 0.828 | | |
| Switching Intentions $\alpha=0.926$ IC=0.953 AVE=87% | Rate the probability that you would switch to another service company Unlikely---likely | 1.75 (1.14) | 0.884 | 0.910 | N/A | (Bansal and Taylor 1999) |
| | Improbable---probable | 1.87 (1.11) | 0.910 | 0.941 | | |
| | No Chance--- certain | 2.06 (1.05) | 0.820 | 0.824 | | |
| Advocacy $\alpha=0.878$ IC=0.927 AVE=81% | I say positive things about COMPANY X to other people. | 4.24 (0.91) | 0.914 | 0.875 | N/A | (Zeithaml et al. 1996) |
| | I recommend COMPANY X to someone who asks my advice. | 4.21 (0.88) | 0.930 | 0.934 | | |
| | I encourage friends and relatives to do business with COMPANY X. | 3.78 (1.06) | 0.854 | 0.732 | | |
| Exclusive Purchasing Intentions $\alpha=0.793$ IC=0.879 AVE=65% | I do all of my business with COMPANY X when I need this type of service. | 4.13 (1.08) | 0.881 | 0.863 | $\chi^2=10.84$ df=2 p=0.004 CFI =0.980 NFI =0.976 | Created |
| | I sometimes give my business to another service provider that provides the same type of service. | 3.53 (1.35) | 0.720 | 0.614 | | |
| | COMPANY X gets the majority of my business when I need this type of service. | 4.66 (0.66) | 0.743 | 0.625 | | |

| Scale | Item(s) | Mean (St. Dev.) | PCA Loading | St. Coefficients (CFA) | Confirmatory Factor Analysis Fit Results | Source |
|--|---|-----------------|-------------|------------------------|---|--|
| | I deal exclusively with COMPANY X. | 4.29 (1.08) | 0.861 | 0.809 | | |
| Identification with the service company $\alpha=0.630$ IC=0.847 AVE=73% | The service company I use says a lot about who I am. | 2.94 (1.24) | N/A | N/A | N/A | Based on the ego involvement (Ganesh, Arnold, and Reynolds 2000) |
| | I think of COMPANY X as "my" service company. | 4.10 (1.02) | N/A | N/A | | |
| Altruistic Intentions $\alpha=0.785$ IC=0.877 AVE=71% | I am likely to do whatever I can to help COMPANY X do better. | 3.14 (1.17) | 0.896 | 0.889 | N/a | Based on the measure-of-values scale (Pierce 1975) |
| | I purchase from COMPANY X because I like to give COMPANY X my business. | 3.60 (1.23) | 0.725 | 0.527 | | |
| | I will go out of my way to assist COMPANY X. | 3.25 (1.19) | 0.887 | 0.839 | | |
| Perceived Service Quality $\alpha=0.920$ IC=0.945 AVE=81% | Overall, I consider COMPANY X's service to be excellent | 4.36 (0.94) | 0.930 | 0.927 | $\chi^2=13.70$ df=2 p=0.001 CFI =0.988 NFI =0.986 | (Dabholkar, Shepherd, and Thorpe 2000) |
| | I believe that the general quality of COMPANY X's service is low. | 4.58 (0.89) | 0.847 | 0.767 | | |
| | The quality COMPANY X's service is of a very high standard. | 4.31 (0.97) | 0.936 | 0.925 | | |
| | COMPANY X provides superior service in every way. | 3.99 (1.12) | 0.891 | 0.849 | | |
| Exclusive Consideration | Number of Service Providers of which the respondent is aware. | 17.45 (31.27) | N/A | N/A | N/A | (Shapiro et al. 1997) |
| | Number of Service Providers of which the respondent would consider using (CSS). | 4.59 (9.28) | | | | |
| | Index (1/CSS) | 0.377 (0.234) | | | | |

Interpretation

PCA Loadings: These are loadings extracted from principal components analyses (PCA) on each individual scale. Loadings of 0.70 or higher indicate that the measurement item loads well onto the respective construct.

St. Coefficients (CFA): These are standardized regression estimates provided by a confirmatory factor analysis performed on each individual scale. These are similar to the PCA loadings above in that values of 0.70 or higher indicate that the measurement items loads well onto the respective construct.

CFA Fit: These are fit statistics generated by a confirmatory factor analysis. They are only meaningful for constructs measured using four or more items. A CFI (comparative fit index) and NFI (normed-fit index) of greater than 0.9 are indicative of good measurement models.

Table V: Correlation Matrix of Individual Measurement Items and Loyalty Factor Scores

| Items | Factor Scores | | | | | | | | |
|-------|---------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | RPI | SP | WP | ID | ALT | EP | ADV | SW | EC |
| RP1 | 0.93 | 0.60 | 0.52 | 0.42 | 0.48 | 0.60 | 0.63 | -0.64 | 0.15 |
| RP2 | 0.92 | 0.61 | 0.49 | 0.41 | 0.50 | 0.59 | 0.62 | -0.64 | 0.11 |
| RP3 | 0.90 | 0.55 | 0.51 | 0.40 | 0.42 | 0.52 | 0.57 | -0.51 | 0.12 |
| SP1 | 0.65 | 0.88 | 0.59 | 0.66 | 0.69 | 0.54 | 0.72 | -0.56 | 0.12 |
| SP2 | 0.59 | 0.88 | 0.48 | 0.57 | 0.56 | 0.51 | 0.69 | -0.51 | 0.15 |
| SP3 | 0.59 | 0.91 | 0.56 | 0.60 | 0.61 | 0.49 | 0.66 | -0.52 | 0.15 |
| SP4 | 0.33 | 0.71 | 0.39 | 0.40 | 0.48 | 0.32 | 0.47 | -0.34 | 0.17 |
| WP1 | 0.38 | 0.45 | 0.81 | 0.38 | 0.40 | 0.31 | 0.42 | -0.29 | 0.05 |
| WP2 | 0.36 | 0.30 | 0.75 | 0.30 | 0.32 | 0.32 | 0.36 | -0.21 | 0.07 |
| WP3 | 0.57 | 0.55 | 0.84 | 0.50 | 0.56 | 0.48 | 0.55 | -0.52 | 0.14 |
| WP4 | 0.49 | 0.59 | 0.86 | 0.49 | 0.52 | 0.41 | 0.57 | -0.35 | -0.01 |
| ID2 | 0.25 | 0.45 | 0.37 | 0.86 | 0.56 | 0.28 | 0.39 | -0.21 | 0.15 |
| ID4 | 0.51 | 0.66 | 0.49 | 0.86 | 0.59 | 0.49 | 0.62 | -0.43 | 0.20 |
| AL2 | 0.40 | 0.57 | 0.45 | 0.60 | 0.90 | 0.37 | 0.59 | -0.37 | 0.14 |
| AL3 | 0.39 | 0.47 | 0.35 | 0.45 | 0.73 | 0.39 | 0.50 | -0.35 | 0.06 |
| AL6 | 0.49 | 0.67 | 0.56 | 0.62 | 0.89 | 0.42 | 0.61 | -0.49 | 0.17 |
| EP1 | 0.50 | 0.49 | 0.43 | 0.42 | 0.45 | 0.88 | 0.44 | -0.44 | 0.15 |
| EP2 | 0.29 | 0.23 | 0.21 | 0.17 | 0.19 | 0.72 | 0.24 | -0.31 | -0.01 |
| EP3 | 0.71 | 0.53 | 0.43 | 0.41 | 0.42 | 0.74 | 0.52 | -0.51 | 0.12 |
| EP4 | 0.50 | 0.45 | 0.43 | 0.41 | 0.43 | 0.86 | 0.47 | -0.47 | 0.10 |
| AD1 | 0.69 | 0.70 | 0.64 | 0.57 | 0.62 | 0.54 | 0.91 | -0.52 | 0.10 |
| AD2 | 0.64 | 0.70 | 0.51 | 0.59 | 0.62 | 0.51 | 0.93 | -0.53 | 0.08 |
| AD3 | 0.44 | 0.62 | 0.44 | 0.48 | 0.60 | 0.35 | 0.85 | -0.37 | 0.07 |
| SW1 | -0.68 | -0.61 | -0.43 | -0.44 | -0.52 | -0.58 | -0.58 | 0.94 | -0.14 |
| SW2 | -0.60 | -0.54 | -0.37 | -0.34 | -0.45 | -0.48 | -0.48 | 0.95 | -0.19 |
| SW3 | -0.58 | -0.53 | -0.40 | -0.33 | -0.43 | -0.48 | -0.48 | 0.91 | -0.23 |
| EC | 0.14 | 0.19 | 0.08 | 0.20 | 0.15 | 0.12 | 0.09 | -0.20 | 1.00 |

RPI = repurchase intentions, SW = switching intentions, EP=exclusive purchasing, SP = strength of preference, ADV = advocacy, ALT = altruism, WP = willingness to pay more, EC = exclusive consideration, ID = identification with the service provider, EXCL = exclusive consideration

Table VI: Correlation Matrix of Loyalty-Related Outcomes

| | RPI | SP | WP | ID | ALT | EP | ADV | SW | EC |
|-----|-------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|------------|
| RPI | 0.91^a | 0.64 | 0.55 | 0.45 | 0.51 | 0.62 | 0.66 | -0.66 | 0.14 |
| SP | 0.64 | 0.85 | 0.59 | 0.66 | 0.69 | 0.55 | 0.75 | -0.58 | 0.19 |
| WP | 0.55 | 0.59 | 0.82 | 0.52 | 0.56 | 0.47 | 0.59 | -0.42 | 0.08 |
| ID | 0.45 | 0.66 | 0.52 | 0.86 | 0.67 | 0.45 | 0.61 | -0.38 | 0.20 |
| ALT | 0.51 | 0.69 | 0.56 | 0.67 | 0.84 | 0.47 | 0.68 | -0.48 | 0.15 |
| EP | 0.62 | 0.55 | 0.47 | 0.45 | 0.47 | 0.80 | 0.52 | -0.54 | 0.12 |
| ADV | 0.66 | 0.75 | 0.59 | 0.61 | 0.68 | 0.52 | 0.90 | -0.53 | 0.09 |
| SW | -0.66 | -0.58 | -0.42 | -0.38 | -0.48 | -0.54 | -0.53 | 0.93 | -0.20 |
| EC | 0.14 | 0.19 | 0.08 | 0.20 | 0.15 | 0.12 | 0.09 | -0.20 | n/a |

RPI = repurchase intentions, SW = switching intentions, EP=exclusive purchasing, SP = strength of preference, ADV = advocacy, ALT = altruism, WP = willingness to pay more, EC = exclusive consideration, ID = identification with the service provider, EXCL = exclusive consideration

^aValues on the diagonal represent the square root of the average variance extracted (AVE) for each construct. These values should exceed the intercorrelations between each construct that are provided in the off-diagonal cells as evidence of discriminant validity. This test examines the extent to which measures of a given construct differ from measures of another construct in the same research setting. If the square root of the AVE exceeds the intercorrelations between constructs, we can conclude that the construct shares more variance with its measures than it shares with other constructs.

Table VII: Results of Confirmatory Factor Analyses for First-Order Factor Models of Loyalty (Figure I)

| Loyalty-related outcomes | Figure 1a | Figure 1b | Figure 1c | Figure 1 d |
|--|-------------|-------------|-------------|-------------|
| Standardized Coefficients (R^2 in brackets) | | | | |
| Repurchase Intentions | 0.89 (0.78) | 0.83 (0.70) | 0.83 (0.69) | 0.82 (0.67) |
| Switching Intentions | 0.79 (0.63) | 0.75 (0.56) | 0.74 (0.55) | 0.73 (0.54) |
| Exclusive Purchasing | 0.78 (0.61) | 0.74 (0.54) | 0.73 (0.53) | 0.73 (0.53) |
| Strength of Preference | 0.88 (0.77) | 0.95 (0.90) | 0.93 (0.86) | 0.93 (0.87) |
| Advocacy | | | 0.90 (0.80) | 0.89 (0.80) |
| Altruism | | 0.85 (0.72) | 0.85 (0.72) | 0.82 (0.67) |
| Identification | | | | 0.87 (0.75) |
| Willingness to Pay More | 0.76 (0.58) | 0.78 (0.61) | 0.78 (0.61) | 0.78 (0.61) |
| Fit Statistics | | | | |
| χ^2 (p) | 931.23 (0) | 893.30 (0) | 773.02 (0) | 760.90 (0) |
| χ^2 difference (p) | | 37.93 (0) | 120.28 (0) | 12.12 (0) |
| d.f. | 294 | 293 | 292 | 291 |
| CFI | 0.888 | 0.894 | 0.915 | 0.917 |
| RMSEA | 0.084 | 0.082 | 0.073 | 0.073 |
| Standardized RMSR | 0.065 | 0.070 | 0.069 | 0.069 |

* all coefficients significant at $p < 0.001$ except where noted

St. Coefficients (CFA): These are standardized regression estimates provided by a confirmatory factor analysis performed on each individual scale. These are similar to the PCA loadings above in that values of 0.70 or higher indicate that the measurement items loads well onto the respective construct.

CFA Fit: These are fit statistics generated by a confirmatory factor analysis. They are only meaningful for constructs measured using four or more items. A CFI (comparative fit index) and NFI (normed-fit index) of greater than 0.9 are indicative of good measurement models. A RMSEA of less than 0.08 and Standardized RMSR of less than 0.08 are also indicative of a good measurement model.

Table VIII: Results of Confirmatory Factor Analyses for One-dimensional, Two-dimensional, and Three-dimensional Disaggregated Models of Service Loyalty (Figure II)

| Loyalty-related outcomes | Figure 2a | Figure 2b | Figure 2c |
|--|-------------|-------------|-------------|
| Standardized Coefficients (R ² in brackets) | | | |
| Repurchase Intentions | 0.82 (0.67) | 0.91 (0.82) | 0.91 (0.82) |
| Switching Intentions | 0.73 (0.54) | 0.82 (0.67) | 0.82 (0.67) |
| Exclusive Purchasing | 0.73 (0.53) | 0.79 (0.63) | 0.79 (0.62) |
| Strength of Preference | 0.93 (0.87) | 0.95 (0.89) | 0.94 (0.89) |
| Advocacy | 0.89 (0.80) | 0.89 (0.80) | 0.89 (0.80) |
| Altruism | 0.82 (0.67) | 0.83 (0.69) | 0.83 (0.69) |
| Willingness to Pay More | 0.78 (0.61) | 0.78 (0.61) | 0.77 (0.60) |
| Identification | 0.87 (0.75) | 0.89 (0.80) | 0.90 (0.81) |
| Fit Statistics | | | |
| χ^2 (p) | 760.90 | 694.18 | 690.80 |
| χ^2 difference (p) | | 66.71 (0) | 3.39 (0.2) |
| d.f. | 291 | 290 | 290 |
| CFI | 0.917 | 0.929 | 0.929 |
| RMSEA | 0.07 | 0.07 | 0.07 |
| Standardized RMSR | 0.07 | 0.06 | 0.06 |

* all coefficients significant at p<0.001 except where noted

Table IX: Results of Confirmatory Factor Analyses for One-dimensional, Two-dimensional, and Three-dimensional Aggregated Models of Service Loyalty (Figure III)

| Loyalty-related outcomes | Figure 3a | Figure 3b | Figure 3c |
|--|-------------|-------------|--------------|
| Standardized Coefficients (R ² in brackets) | | | |
| Repurchase Intentions | 0.76 (0.57) | 0.85 (0.72) | 0.84 (0.71) |
| Switching Intentions | 0.71 (0.50) | 0.79 (0.62) | 0.79 (0.63) |
| Exclusive Purchasing | 0.61 (0.37) | 0.67 (0.45) | 0.67 (0.45) |
| Strength of Preference | 0.87 (0.76) | 0.88 (0.78) | 0.88 (0.77) |
| Advocacy | 0.84 (0.71) | 0.86 (0.73) | 0.85 (0.72) |
| Altruism | 0.78 (0.61) | 0.78 (0.60) | 0.80 (0.63) |
| Willingness to Pay More | 0.69 (0.47) | 0.69 (0.47) | 0.68 (0.46) |
| Identification | 0.67 (0.45) | 0.66 (0.43) | 0.69 (0.48) |
| Fit Statistics | | | |
| χ^2 (p) | 113.23 | 30.09 | 49.27 |
| χ^2 difference (p) | | 83.14 (0) | -19.28 (1.0) |
| d.f. | 20 | 18 | 17 |
| CFI | 0.934 | 0.991 | 0.977 |
| RMSEA | 0.12 | 0.05 | 0.08 |
| Standardized RMSR | 0.05 | 0.02 | 0.03 |

* all coefficients significant at p<0.001 except where noted

**Figure I: Service Loyalty: One Versus Two Versus Three Dimensions
Disaggregated (Item-level) Models**

RPI = repurchase intentions, SW = switching intentions, EP=exclusive purchasing, SP = strength of preference, ADV = advocacy, ALT = altruism, WP = willingness to pay more, EC = exclusive consideration, ID = identification with the service provider

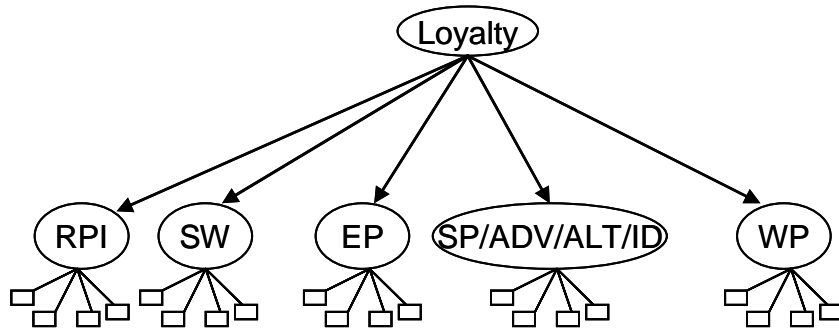


Figure 1a: Five First-Order Factors of Loyalty

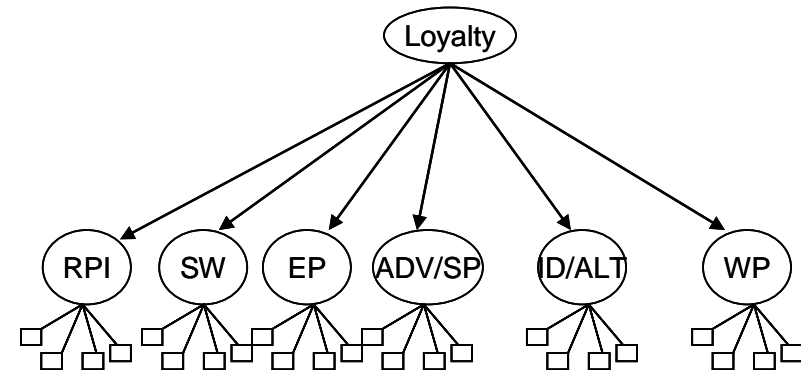


Figure 1b: Six First-Order Factors of Loyalty

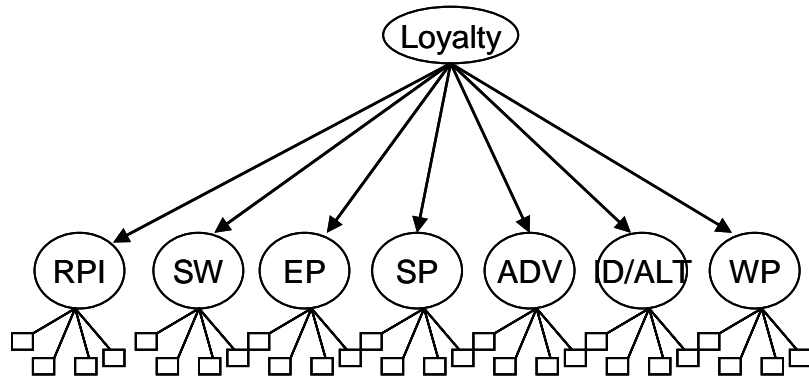


Figure 1c: Seven First-Order Factors of Loyalty

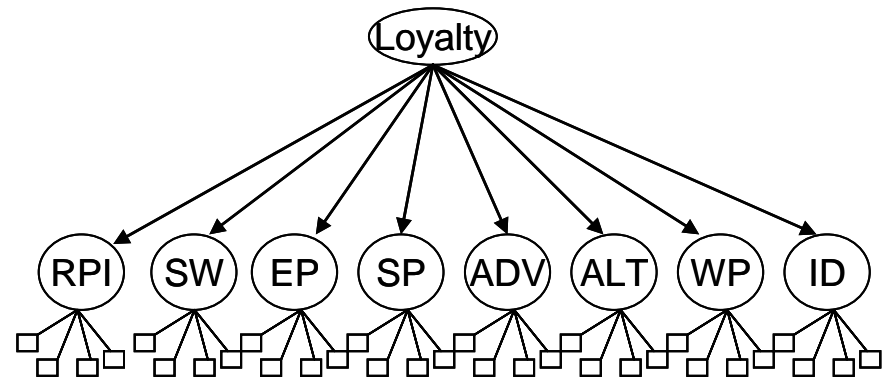


Figure 1d: Eight First-Order Factors of Loyalty

**Figure II: Service Loyalty: One Versus Two Versus Three Dimensions
Disaggregated (Item-level) Models**

RPI = repurchase intentions, SW = switching intentions, EP=exclusive purchasing, SP = strength of preference, ADV = advocacy, ALT = altruism, WP = willingness to pay more, EC = exclusive consideration, ID = identification with the service provider

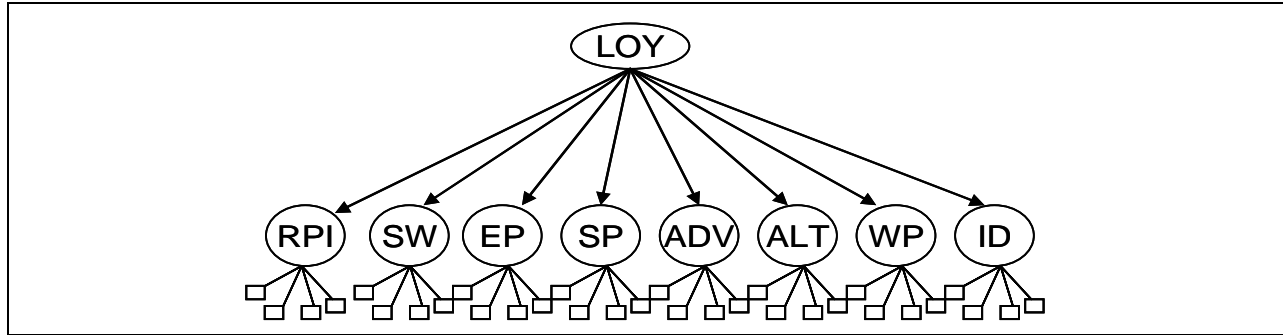


Figure 2a: One Higher-Order Factor of Loyalty

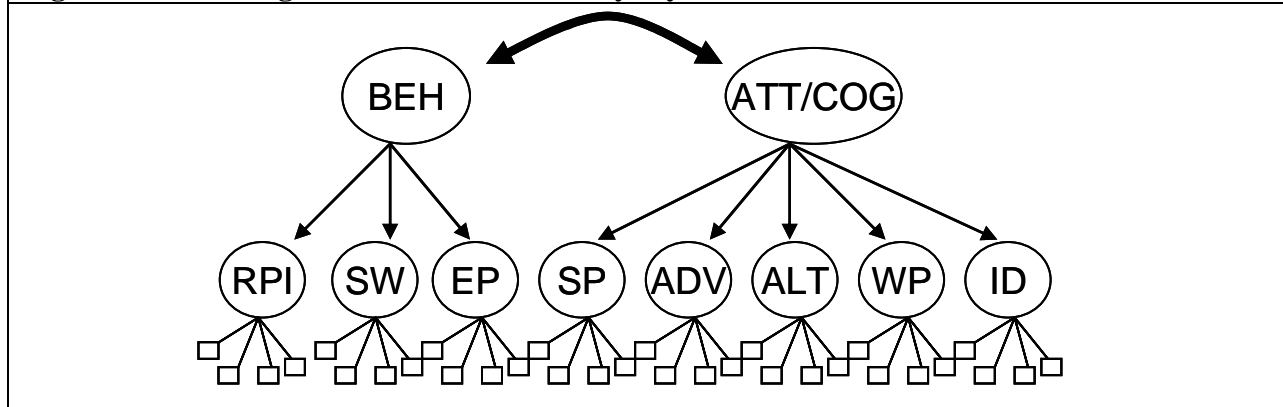


Figure 2b: Two Higher-Order Factors of Loyalty – Behavioral and Attitudinal/Cognitive

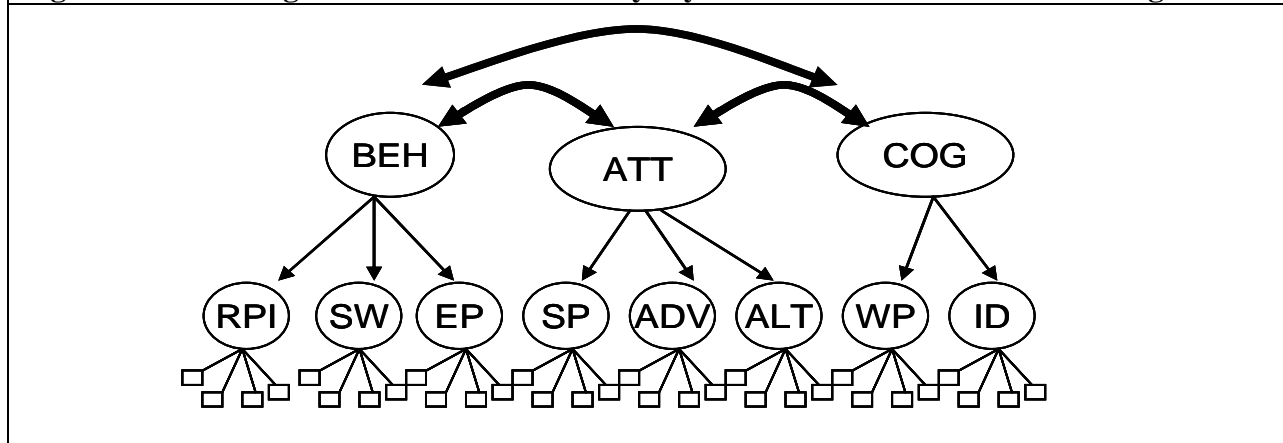


Figure 2c: Three Higher-Order Factor of Loyalty – Behavioral, Attitudinal, and Cognitive

**Figure III:
Service Loyalty: One Versus Two Versus Three Dimensions
Partially Aggregated Models**

RPI = repurchase intentions, SW = switching intentions, EP=exclusive purchasing, SP = strength of preference, ADV = advocacy, ALT = altruism, WP = willingness to pay more, EC = exclusive consideration, ID = identification with the service provider

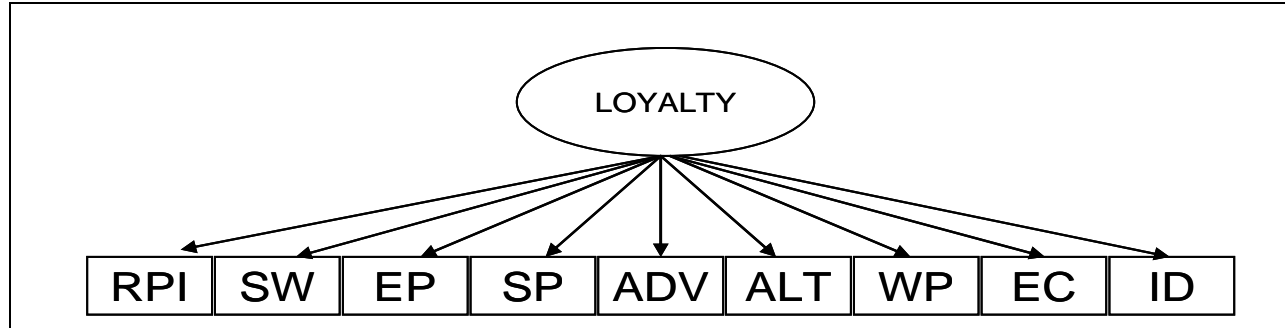


Figure 3a: One Higher-Order Factor of Loyalty

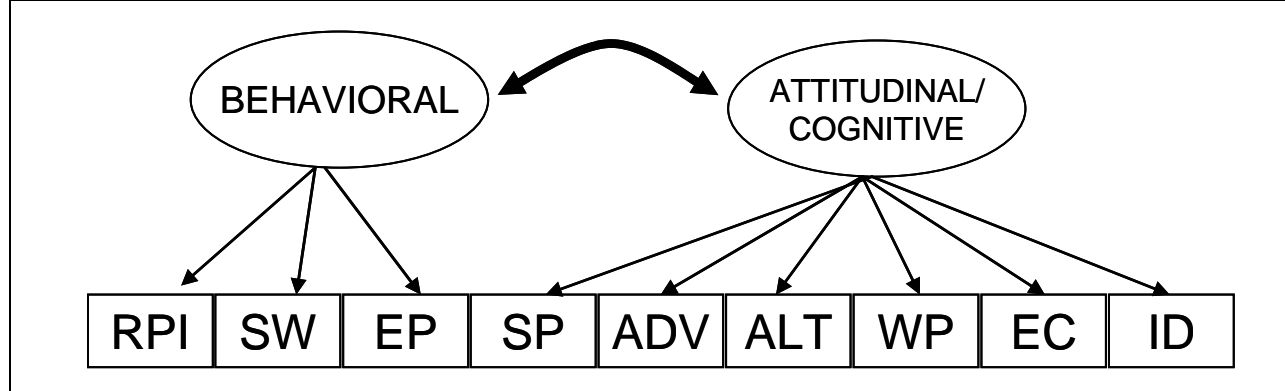


Figure 3b: Two Higher-Order Factors of Loyalty – Behavioral and Attitudinal/Cognitive

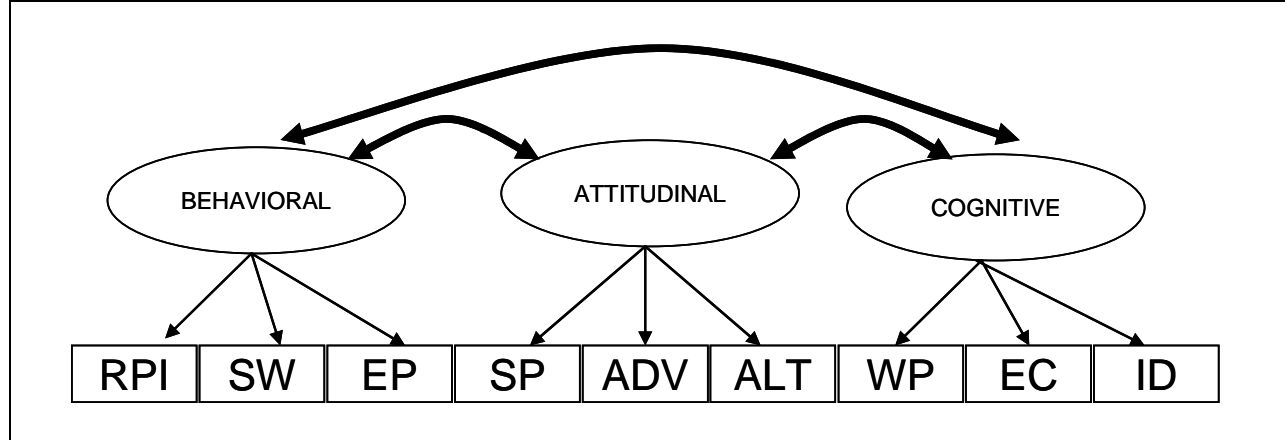


Figure 3c: Three Higher-Order Factor of Loyalty – Behavioral, Attitudinal, and Cognitive