



Call center satisfaction and customer retention in a co-branded service context

Call center
satisfaction

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Abstract

Purpose – This paper aims to examine call center satisfaction in an escalated call center context where callers are organization members of the primary/leveraged brand and have purchased additional co-branded services as part of their membership. It also aims to examine the relationship between call center satisfaction and actual retention of both the co-branded service offered and the primary brand (call center operated by the membership organization).

Design/methodology/approach – The survey data used in the analyses involve a sample size of 88 respondents, all members of a large, national nonprofit organization in the USA. Factor analysis and logistic regression were used to test the propositions.

Findings – The results indicate that caller satisfaction has four dimensions similar to those found in SERVQUAL. Although call center satisfaction dimensions are not significant for co-branded service retention, the empathy dimension is most important to primary/leveraged brand retention.

Research limitations/implications – One of the limitations of this research is that it tests the propositions within a single firm regarding calls concerning a single category (insurance). Future research should attempt to replicate these findings in other call center contexts.

Practical implications – Caller perceptions of service quality (specifically empathy) in the wake of a perceived service failure, while not very helpful to co-branded service retention, actually mitigate primary/leveraged brand membership loss.

Originality/value – This study addresses the lack of research tying escalated call center satisfaction and both retention of the co-branded service in addition to retention of the primary leveraged brand using actual retention data.

Keywords Customer satisfaction, Brands, Services, Customer retention, Call centres, Customer service management

Paper type Research paper



Introduction

When the car dealer included a $7 \times 24 \times 365$ two-year highway assistance program from an independent but well-reputed service organization, Tom, a single parent of two children, decided to buy the new car. Eight months later when the car suddenly stopped on the Interstate, Tom immediately called the service organization for help. After two hours and several unreturned phone calls he became increasingly unhappy and started contemplating whether buying from that car dealer was really the smart thing to do after all.

In an effort to offer more value to customers firms are increasingly entering into strategic alliances with third party organizations that involve the actual creation or fulfillment of a product or service (Lei and Slocum, 1992). Third party affiliations have the potential to complement a firm's product or service offering, allowing the company to broaden its service offering in areas outside of its current area of expertise (Brandenburger and Nalebuff, 1997).

From a branding perspective companies have long recognized the benefits of using strong brands in extending into new categories (Aaker and Keller, 1990) and linking their products with strong brands from other companies through, for example, sponsorship (Amis *et al.*, 1999; Cliffe and Motion, 2005; Cornwell and Maignan, 1998). In other instances, firms "co-brand" their services to form a new "composite" brand (Arend, 1992; Motion *et al.*, 2003; Washburn *et al.*, 2000). For example, credit card companies such as Visa, MasterCard, and American Express frequently co-brand their services (e.g. American Express/Delta Airlines Skymiles Card). Additionally, firms license their brands for use by other companies, collecting royalties on the arrangement (Bass, 2004; Henderson and Sheldon, 1992; Quelch, 1985). This practice is commonplace in the entertainment industry (Bass, 2004). For example, movie studios in an effort to boost revenue streams frequently license merchandise to other firms (e.g. toys, books, magazines). Working with a third party to create enhanced customer value, however, is not without risk (DiPietro, 2005). Service failure by a third-party supplier has the potential to damage the image of the principal's brand (Adler, 2005; DiPietro, 2005; Pandya, 2000). A reduced image caused by a bad experience with the agent may create an incentive for the customer to switch patronage.

According to Hirschman (1970), management discovers the organization's inability to satisfy its customers via two feedback mechanisms: exit and voice. Whereas Hirschman's (1970) work addresses issues pertaining to one-to-one customer-supplier relationships, the current research addresses the relationship between customer satisfaction with the handling of problems regarding a co-branded service with customer retention to the co-branded service and the primary/leveraged brand[1]. While researchers have acknowledged and examined the potential benefits and detriments of brand sharing arrangements (Kumar, 2005), no research exists with regard to the impact of problem resolution with a co-branded service to customers' continued use of the services of the primary/leveraged brand. This issue, however, is of vital importance to managers. The primary purpose of leveraging a brand through co-branding is to expand its presence and profitability. Therefore, increases in customer defections in a brand's primary market space have the potential to erode or even destroy a brand's value and market presence.

An important context in which the issue of co-branding becomes relevant is in the call center services context. There is tremendous growth both in co-branded services

(Blackett and Boad, 1999), in the growth in number of outsourced service functions through decoupling (for example, call center services to India) (Friedman, 2005), and in the number of call centers worldwide (Anton, 2000). As a testament to the latter, three percent of Americans worked for a call center in 2002 according to *Fast Company* magazine with growth projected to double by 2010 (McGray, 2002). With regard to co-branding, in 1994 McKinsey and Company estimated that the number of corporate alliances, including co-branding ventures, was growing at 40 percent per year, and that co-branding charge card volume increased 20 percent over a two-year period, representing one-third of total charge card volume (Blackett and Boad, 1999).

With this as a backdrop, most consumers at some point will interact with call centers supplied by an outside third-party organization (co-branded or not). As a result, the impact of these calls on customer behavior will become increasingly important for managers.

With regard to call centers in particular, growth of the call center industry has resulted in a numerous research studies into the industry. The majority of these studies, however, have focused on operational issues associated with efficient call center management (examples include: Bordoloi, 2004; Gans *et al.*, 2003; Zohar *et al.*, 2002).

Research regarding call centers, customer satisfaction, and customer loyalty has been much less explored. Bennington *et al.* (2000) found that customers are less satisfied with call center operations than they are with more traditional office-based (in-person) services. Furthermore, researchers have found that most of the metrics used to efficiently manage call centers are not positively correlated to customer satisfaction (Feinberg *et al.*, 2000; 2002; Miciak and Desmarais, 2001).

The call center industry tends to accept that “first call resolution” and customer satisfaction go hand-in-hand. Monger *et al.* (2004) state that “field experience in measuring customer satisfaction indicates that caller satisfaction – both with the CSR and with the company in general – will be 5 percent to 10 percent lower when it takes more than one call to solve the issue than it is when the issue is resolved on the first call.” That conclusion would appear to be supported by the research of Feinberg *et al.* (2000), which found that of the 13 call center operational metrics studied, only two predicted caller satisfaction: percentage of calls closed on first contact and average abandonment rate.

Such results, however, are not universal. Feinberg *et al.* (2002) found in a study of banking/financial services, that first call resolution was not related to caller satisfaction. Similarly, research by Miciak and Desmarais (2001) found that first call resolution does not always achieve high customer satisfaction.

Even if the ability to have resolution with the customer on the first call were the goal, clearly it is not always feasible, as some calls will need to be escalated to achieve resolution. These escalated calls would frequently represent opportunities for service recovery. Numerous researchers have demonstrated a positive benefit of effective service recovery on customers’ attitudes and behavior (DeWitt and Brady, 2003; Hart *et al.*, 1990; Mattila, 2004; Mattila and Patterson, 2004; Smith and Bolton, 1998). Similarly, research has found that call center service recovery operations can have a positive influence on customers’ attitudinal loyalty (Mattila and Mount, 2003).

Currently, however, we are unable to find any research tying call center satisfaction and actual behavioral loyalty (e.g. increased share-of-spending, increased retention

rates, etc.). Furthermore, with regard to service recovery at call centers and customer behavior, no research exists linking caller satisfaction with escalated calls on customers' actual purchase behavior.

This study addresses these needs by examining the relationship between satisfaction and retention for customers using an escalated call center. Callers are organization members who have purchased additional services offered as a part of their membership.

From a theory contribution perspective the present study explores the impact of caller problem resolution in a call center context on retention of both the primary brand and the co-branded service.

Background

The call center studied in this research is run by the primary/leveraged brand (a member organization) on behalf of its members regarding issues concerning its co-branded services, which are operated by third party. Hence, the organization operates its call center as an ombudsman between its co-branded service providers and members who did not receive closure to an existing issue with the service provider (see Figure 1).

This setting is unique in that it is not simply an in-house or out-sourced call center operated on behalf of a vendor. Customers are members of the primary brand and rely on this brand name call center to help them resolve issues with problems occurring with vendors from which they purchase services. Hence it is very similar to a principal negotiating with an agent to do a job (e.g. resolve conflicts with service vendors via the call center). According to the positive theory of agency a principal-agent agreement may be defined as:

A contract where one or several persons (principal(s)) hires another person (agent) to execute a service on their behalf, which involves delegating some decisive authority to the agent (Jensen and Meckling, 1976).

In short, the agent is contracted to perform the task as though the principal did it him/herself and to act in the principal's best interest.

Not all principal-agent contracts are good fits, and many have imbedded conflicts of interest. The separation of work (i.e. principal delegating responsibility to the agent) may create problems related to opportunistic behavior, asymmetric information and monitoring costs. Conflict of interest between principal and agent together with the

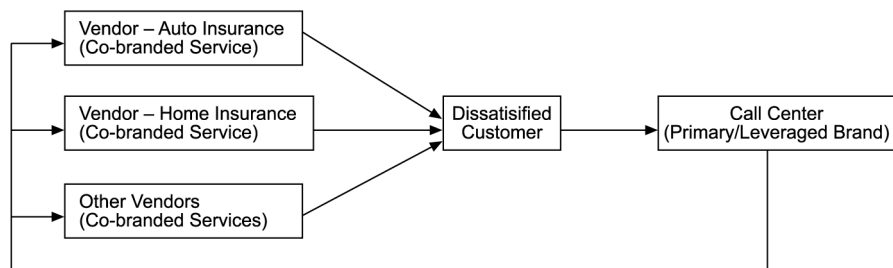


Figure 1.
Structure of relationship between member customer, primary leveraged brand and co-branded service provider

monitoring and bonding mechanisms to reduce them are termed agency costs. According to Jensen and Meckling (1976) these agency costs consists of:

- monitoring expenditures made by the principal to regulate and monitor the behavior of the agent;
- bonding expenditures made by the agent to reassure principals; and
- residual agency costs, or costs due to unresolved conflicts of interests between agent and principal.

This raises the issue of how to monitor the agents' performance with the lowest agency costs in order to secure an efficient and effective implementation of the principal's policy. Kiewiet and McCubbins (1991) proposes four methods by which the principal can overcome the general principal-agent problems:

- (1) screening and selection of agents;
- (2) contract design;
- (3) monitoring and reporting (e.g. police patrol oversight, fire alarm oversight); and
- (4) institutional checks.

In this study the call center acts as a monitoring system for the principal concerning the quality of the third party firm's performance.

In addition to the research cited earlier, the issue of co-branded product satisfaction and primary brand retention builds upon two distinct yet interrelated streams of research: service quality and customer satisfaction.

Service quality theory

Parasuraman *et al.* (1988) distinguish manufacturing quality from service quality by categorizing the former as "objective" and the latter as "perceived" quality constructs. The work of quality leaders such as Deming and Juran focused on conformance to manufacturing specifications that could be objectively measured by scientific instruments (for example, see Deming, 1986; Juran, 1988). Service quality, however, reflects a consumer's perception about an organization's overall excellence or superiority (Parasuraman *et al.*, 1985, 1988). Parasuraman *et al.* (1988, p. 16) also argue that this perception is distinct from satisfaction, noting:

[...] perceived service quality is a global judgment, or attitude relating to the superiority of the service, whereas satisfaction is related to a specific transaction.

Determining the processes by which these perceptions are formed, however, has proven to be a difficult task. Today, service quality is widely regarded to be a multi-dimensional construct (Brady and Cronin, 2001; Dabholkar *et al.*, 1996). As a result, a number of scales have been proposed to measure service quality (Dabholkar *et al.*, 1996; Grönroos, 1984; McAlexander *et al.*, 1994; Parasuraman *et al.*, 1988).

Perhaps the most widely utilized tool for measuring service quality is the SERVQUAL scale (Parasuraman *et al.*, 1988, 1991). Parasuraman *et al.* conducted focus groups and then formal surveys of customers in several different service industries to develop lists of attributes that define service quality in general. The lists were condensed by correlational analysis into five major categories:

- (1) *Tangibles*. The appearance of physical facilities, equipment, personnel, and communications materials.
- (2) *Reliability*. The ability to perform the promised service dependably and accurately.
- (3) *Responsiveness*. The willingness to help customers and to provide prompt service.
- (4) *Assurance*. The knowledge and courtesy of employees and their ability to convey trust and confidence.
- (5) *Empathy*. The caring, individualized attention the firm provides its customers.

The existence of these dimensions is somewhat controversial among some researchers. Some have criticized the methodology used to identify them (for example, Brown *et al.*, 1993; Carman, 1990). It is important to remember, however, that the list is intended to describe dimensions of service quality common to all services, and is therefore unlikely to encompass all the properties of any particular service industry. Nonetheless, the five dimensions have been well accepted by service industry managers as having strong face validity (Rust *et al.*, 1994).

Satisfaction theory

The ability of the service provider to meet expectations of customers with regards to the different facets of service quality is what ultimately determines the level of customer satisfaction/dissatisfaction. Customer satisfaction has been defined as a consumer's fulfillment response, including levels of under- or over-fulfillment (Oliver, 1997, p. 13). Under-fulfillment or negative disconfirmation (Oliver, 1980) will cause customer dissatisfaction, i.e. a state of cognitive/affective discomfort caused by an insufficient return relative to the resources spent by the consumer at the stage of the purchase/consumption process (Fornell and Wernerfelt, 1987).

The study of customer dissatisfaction and complaining behavior has gained momentum over the years (Day and Landon, 1976; Folkes, 1984, 1988; Gilly and Gelb, 1982; Bearden and Teel, 1983; Richins 1983a, b, 1985, 1987; Singh, 1990). Research has indicated that dissatisfied customers can choose among a variety of strategies when exhibiting complaining behavior such as to seek redress, disseminate negative word of mouth and/or exit. In a review of the complaint literature, Robinson (1978) underscored the historic emphasis on consumer orientation, reporting that almost all the studies focused on the person filing the complaint and the nature of the complaint. Briefly, previous research has found that dissatisfied customers choose to seek redress, engage in negative word-of-mouth behavior, or exit, based on the perceived likelihood of successful redress (Day and Landon, 1976; Day and Bodur, 1978; Day *et al.*, 1981; Gilly and Gelb, 1982; Bearden and Mason, 1984; Bearden and Teel, 1983; Richins, 1983a, b; Folkes, 1984; Folkes *et al.*, 1987; Folkes and Kotos, 1985; Singh, 1990), their attitude toward complaining (Richins, 1980, 1983a; Bearden and Mason, 1984), the level of product importance (Richins, 1985), and whether they perceive the problem to be stable or to have been controllable (Folkes, 1984).

Whereas satisfaction with a service or service provider may be a strong incentive for customers to maintain or increase current retention rate, dissatisfaction with a service or service provider may be a strong incentive to exit from the interaction. The

primary focus of this research has been to explore whether a customer chooses one particular type of complaint behavior (i.e. exit) as a result of dissatisfaction. In fact Reichheld and Sasser (1990) argue that for suppliers of services, customer defection may have a stronger impact on the bottom-line than scale, market share, unit costs, and other factors usually associated with competitive advantage, thus making this particular type of behavior in this context important.

Hypothesis development

Both researchers and managers have accepted the premise that customer satisfaction results in customer behavior patterns that positively impact business results. Research has found that customer satisfaction has a measurable impact on purchase intentions (Bolton and Drew, 1991; Kumar, 2002; Mittal *et al.*, 1999, 1998), on customer retention (Anderson and Sullivan, 1993; Bolton, 1998; Mittal and Kamakura, 2001; Perkins-Munn *et al.*, 2005), and on share-of-wallet (Keiningham *et al.*, 2003, Perkins-Munn *et al.*, 2005).

Furthermore, researchers have demonstrated a positive benefit of effective service recovery on customers' attitudes and behavior (DeWitt and Brady, 2003; Hart *et al.*, 1990; Mattila, 2004; Mattila and Patterson, 2004; Smith and Bolton, 1998). Similarly, research has found that call center service recovery operations can have a positive influence on customers' attitudinal loyalty (Mattila and Mount, 2003).

Therefore, we hypothesize that:

H1. Caller satisfaction will be positively associated with retention of the co-branded service.

As noted earlier, co-branded relationships are not risk-free. Service failure by a third-party supplier has the potential to damage the image of the principal's brand (Adler, 2005; DiPietro, 2005; Pandya, 2000). A bad experience with the co-branded service performed by a third-party may actually act as an incentive for customers to defect from the primary brand.

Therefore, we hypothesize that:

H2. Caller satisfaction will be positively associated with retention of the primary brand.

Methodology

The data

The data came from a 2003 telephone survey of callers to an escalated call center operated by a large US non-profit membership organization. Respondents were randomly selected to participate in the survey. All callers to the escalated call center had an equal chance of being called. In total, 630 surveys were completed. The response rate was 77 percent.

The questionnaire contained 14 closed-end questions regarding satisfaction with various aspects of the escalated call center contact. The list of questions was generated as a result of a literature review of call center satisfaction (e.g. Bennington *et al.*, 2000; Sambandam, 2001), in-depth interviews with call center members and company officials operating the call center, and analysis of open-end comments to pre-test versions of the questionnaire. These needs were then organized into a smaller number of managerially relevant groupings using K-J analysis[2] (Bossert, 1991).

Cost/time requirements of the organization demanded that the fielding of the questionnaire not exceed ten minutes. As a result, the questionnaire contained 14 closed-end questions regarding various aspects of the escalated call center contact, with an opportunity for open-ended comments. One of the primary functions of the escalated call center was to address member issues with products/services obtained through the organization. Questions could be thought of as falling into two broad categories:

- (1) satisfaction with various attributes of the call center service; and
- (2) satisfaction with various attributes and overall service satisfaction with the co-branded product/service purchased through the organization.

All closed-end questions used a 1 to 10, end-anchored scale to assess members' level of satisfaction.

To the benefit of this study behavioral data were also appended to the file. Approximately one year after the survey was conducted, the organization provided the membership statuses of respondents (to determine if they renewed their membership, allowed the membership to expire, or cancelled the membership outright) and respondents' product/service renewal statuses. Hence actual retention was coded as a dichotomous variable (1-0) where those customers who renewed their service were coded as 1.

The primary analytic goal of the paper is to examine the relationship between caller satisfaction and primary/leveraged service brand membership retention, and caller satisfaction and co-branded product/service retention. Therefore, only respondents who had the opportunity to let their membership lapse following contact with the call center and prior to the date associated with the appended behavioral data were included in the analysis.

Additionally, some of the multiple vendors that provided the firm-sponsored products and services provided incomplete product/service renewal data (i.e. the organization could not provide with certainty status regarding customer defections for the product). As a result, we only included the services that maintained accurate renewal data. Of these, only one product category (automobile and homeowner's insurance) had a sample size large enough to test the relationship between satisfaction and product retention adequately.

The final sample size used in this analysis consisted of 88 members who used both services (auto and home insurance) and had the opportunity to let their memberships lapse within the time frame of the analysis and called regarding the organization's co-branded automobile or homeowner's insurance policy. The sample consisted of 65.8 percent males, 34.2 percent females with an average age of 68 and membership renewal frequency of 5.56 times.

Preliminary analyses

Since limited, if any, work related to this issue has been reported in the literature, a preliminary analysis included the creation of multiple and single item scales using factor analysis via principal components, with the aim of using these components as predictors via principal components regression (PCR). Rather than rely on an atheoretical model that is completely data driven, however, we use a variation of PCR proposed by Gustafsson and Johnson (2004) that is designed to estimate models based

on theory[3]. In the case of this analysis, the theoretical dimensions proposed by SERVQUAL were taken into consideration when conducting the analyses.

Is it important to note, however, that these scales are not based on the specific SERVQUAL attributes of Parasuraman *et al.* (1985, 1988, 1991), therefore this should not be construed as a test of the SERVQUAL model. Nonetheless, researchers and practitioners have been advised to crosscheck various items in their satisfaction and service quality questionnaires to see that they are in representative of one of the five broader SERVQUAL constructs. For example, Rust *et al.* (1994, p. 33) state that:

[SERVQUAL is] intended to describe the dimensions of quality common to all services, and is therefore unlikely to encompass the special properties of any particular service ...] Nevertheless, the five areas have been well accepted by service industry managers as having strong face validity, and no list should be considered complete until it has been checked for representation of the SERVQUAL dimensions.

The use of a priori theory not only ensures interpretability of factors, but also is of increased importance when using principal components to identify factors when examining fewer than 20 variables. Hair *et al.* (1995) state that:

Kaiser's Latent Root or eigenvalue criterion yields accurate results when the number of variables is between 20-50. In instances when the number of variables are less than 20 (in our case), there is a tendency for this method to extract a conservative number of factors (too few).

Prior to conducting PCR, call-center attributes were assigned by the authors to the various SERVQUAL dimensions. An exploratory factor analysis was then conducted on these variables (with the exception the three items that had very large percentages of missing data) to validate the appropriateness of these groupings based on cross-correlations in the data. The following multiple criteria were used to make a decision regarding which attributes belonged to the various factors:

- *A priori theory criterion.* The theoretical dimensions proposed by SERVQUAL were taken as an "a priori criterion" when conducting the analyses. This ensures the interpretability of factors.
- *Interpretability of factors criterion.* Several different factor specifications were used but the three-factor model arrived at the cleanest solution (high loadings on factor and low loadings on other factors) supporting the a priori criterion.
- *The "scree plot" criterion* (Catell, 1966). This criterion indicated that the "elbow" occurred at the chosen factor number.
- *Percentage of variance explained criterion.* Finally, the variance explained criterion was employed where an 85 percent variance explained threshold was used.

Items that cross-loaded were removed. The resulting components are shown in Table I.

Component 1 contained attributes that were assigned by the authors to both Empathy and Reliability. A second order factor analyses was conducted on Component 1. The analysis revealed the best fitting two sub-components with 94.5 percent of cumulative explained variance. One item, "fully addressed all questions" cross-loaded, and was therefore removed from further analyses (see Table II).

Using the PCR methodology of Gustafsson and Johnson (2004), scales were created using attributes (containing more than one item) with factor loadings of 0.5 or higher

MSQ 16,3	Factor		
	1	2	3
278	Fully addressed all questions raised	0.906	
	Cared about issue or concern	0.823	
	Fairly represented both your interests and firm/organization	0.801	
	Did a good job of explaining product or policy	0.788	
	Courteous		0.910
	Spoke clearly		0.882
Table I. Initial factor analysis	Answered in a timely manner		0.921

Table II. Second order factor analysis on factor 1	Sub-factor	
	1	2
	Cared about issue or concern	0.901
	Fairly represented both your interests and organizations' interest	0.883
	Did a good job of explaining product or policy	0.932

via principal components. The eigenvalues for the empathy and assurance dimensions were 1.835 and 1.904. Additionally, Cronbach's alpha tests were conducted on each scale. The alphas for the empathy and assurance dimensions were 0.904 and 0.856 respectively, well above the acceptable range (i.e. greater than 0.70) for all scales (Nunnally, 1967).

The resulting scales consisted of attributes that were a priori assigned to four of the various SERVQUAL dimensions. The only component missing from the SERVQUAL dimensions was "Tangibles" (the appearance of physical facilities, equipment, personnel, and communications materials). Given that we are examining components of call center satisfaction, however, its exclusion is intuitive. While we recognize that the alignments are not perfect, because of the apparent face validity of the constructs, we will refer to the various dimensions using the SERVQUAL labels for the remainder of this paper[4].

Descriptive statistics for all the final variables used in the models are given in Table III.

Hypotheses tests

In essence, *H1* and *H2* predict that satisfaction related to customers' call center interaction will be positively related to co-branded product retention and primary/leveraged brand retention respectively. To test these hypotheses, models were tested using logistic regression analysis. To test *H1*, co-branded service retention was the dependent variable. To test *H2*, primary brand membership retention was the dependent variable.

To test whether there was a relationship between caller satisfaction and co-branded service retention, logistic regression analyses were conducted to develop predictive models of the relationship between changes in members' satisfaction with the

	Empathy	Reliability	Assurance	Responsiveness
Empathy	8.19 (2.47)			
Reliability	0.624	8.07 (2.54)		
Assurance	0.677	0.525	9.18 (1.45)	
Responsiveness	0.495	0.566	0.431	8.18 (2.75)

Table III. Descriptive statistics and correlations of scales/items used ($n = 88$)

Note: The diagonal includes mean and standard deviations (in parenthesis) of the scale/items used and the lower triangle denotes the Pearson correlations between the scale/item means

dimensions of call center service quality and co-branded service retention. The corresponding specification of the logistic regression model is:

$$P = \exp(b_0 + b_1x_1 + \dots b_nx_n)/(1 + \exp(b_0 + b_1x_1 + \dots b_nx_n))$$

where P is the probability of the actual retention (i.e. repurchase = “yes”), \exp is the exponential function and is written as $\exp(x)$ or $e^{(x)}$, where “ e ” is the base of the natural logarithm and is approximately equal to 2.7183, b_0 is the intercept, $b_1 \dots b_n$ is the coefficient for the predictor variable and $x_1 \dots x_n$ is the value of the predictor variable.

The objective of these analyses was to assess the influence of specific predictor variables on actual retention (factor scores were used to represent the SERVQUAL dimensions identified from the factor analysis). To this end, several model specifications were tested. As an initial step, all call center service quality dimensions and demographic covariates collected (age, gender, tenure with the organization, and retirement status) were entered on one step into one model. None of the demographic covariates were statistically significant, however, and were eliminated from the regression.

The results of the logistic regression reveal that none of the dimensions measured regarding the service quality of the call center were statistically significant. Therefore, to check for the possible influence of co-branded product satisfaction on the relationship between satisfaction with call center service quality and co-branded service retention, overall satisfaction with the co-branded service was added to the model. Once again, however, nothing is significant. As a result, $H1$ is not supported by our findings.

To test whether there was a relationship between caller satisfaction and primary/leveraged brand retention, logistic regression analyses were conducted to develop predictive models of the relationship between changes in members’ satisfaction with the dimensions of call center service quality and primary/leveraged brand retention.

As with the initial model of co-branded product retention, all call center service quality dimensions and demographic covariates collected (age, gender, tenure with the organization, and retirement status) were entered on one step into one model. Again, all demographic covariates were not statistically significant, and were eliminated from the

regression. Logistic regression results using each dimension as a predictor of primary/leveraged brand retention are presented in Table IV. The coefficient estimates, the Wald statistic and the model chi-square statistic are presented to examine overall model fit. Because several model specifications are being compared, the odds ratio (i.e. Exponential Beta) and the Nagelkerke R^2 (Nagelkerke, 1991) statistics to compare model performance[5].

The results show that Responsiveness and Empathy are significant. Since no predictors were significant (even at $p = 0.10$) for co-branded service retention, the results indicate differing levels of importance of these dimensions for co-branded service retention versus primary brand retention (i.e. these dimensions seem to be more important for primary brand/membership retention).

To check for the possible influence of co-branded product satisfaction on the relationship between satisfaction with call center service quality and primary/leveraged brand retention, overall satisfaction with the co-branded product was added to the model. The results are shown in Table V.

The results are slightly different. While satisfaction with the co-branded service is not significant, Responsiveness is also no longer statistically significant ($p = 0.117$). Interestingly, Empathy is also no longer significant at the $p < 0.05$ level, although it is significant at the $p < 0.10$ level ($p = 0.07$). Of course, the p value of 0.07 reported is the result of a two-sided test, but in reality we would only expect the result to be positive (i.e. a one-sided test is appropriate, which corresponds to $p = 0.035$). As such, we believe $H2$ to be supported by our findings, both when and when not including co-branded product satisfaction for some of the call center attributes.

Table IV.
Logistic regression
analyses: call center
satisfaction as a predictor
of primary/leveraged
brand retention

	<i>B</i>	SE	Wald	Sig.	Exp(<i>B</i>)	Cox and Snell R^2	Nagelkerke R^2	X^2
						0.130	0.215	11.969
Empathy	0.983	0.457	4.628	0.031*	2.672			
Assurance	-0.097	0.357	0.074	0.785	0.907			
Reliability	-0.338	0.203	2.777	0.096	0.713			
Responsiveness	0.232	0.114	4.179	0.041*	1.262			
Constant	2.669	1.742	2.347	0.126	14.420			

Note: * = $p < 0.05$

Table V.
Logistic regression
analyses: call center
satisfaction as a predictor
of primary/leveraged
brand retention
(including co-branded
product satisfaction)

	<i>B</i>	SE	Wald	Sig.	Exp(<i>B</i>)	Cox and Snell R^2	Nagelkerke R^2	X^2
						0.146	0.245	10.278
Empathy	0.980	0.541	3.280	0.070*	2.665			
Assurance	-0.088	0.378	0.054	0.816	0.916			
Reliability	-0.354	0.239	2.196	0.138	0.702			
Responsiveness	0.195	0.125	2.456	0.117	1.216			
Product Sat.	0.134	0.113	1.411	0.235	1.143			
Constant	2.468	1.958	1.589	0.208	11.798			

Note: * = $p < 0.10$

Discussion

An unexpected finding from this research is that satisfaction with call center service quality did not significantly impact retention of the co-branded service, despite the fact that issues regarding the co-branded product were the *raison d'être* for the call itself. Instead, the perceived service quality regarding the handling of the call only impacted retention of the primary/leveraged brand.

Satisfaction with the handling of the customers' calls would logically be expected to play a role in customers' continued use of a service. Even when including customers' satisfaction level with the co-branded service, however, no dimension of call center service quality was linked to retention.

This counterintuitive result may occur because of the nature of the product itself: auto/home insurance. For many products, there is an inherent "stickiness" in terms of customers' continued use in spite of lower levels of satisfaction (Hogan *et al.*, 2002). This has been shown to be the case among financial products (Duncan and Elliott, 2004). Furthermore, empirical evidence would seem to suggest that customer stickiness is a factor in the insurance industry; the industry has very high retention rates as compared to other industries, with some carriers having retention rates in excess of 95 percent (Keiningham *et al.*, 2005).

This stickiness may in part be explained by the perceived costs associated with switching insurers (Burnham *et al.*, 2003). Fornell (1992, p. 10) notes that customers may choose not to defect despite lower satisfaction levels for a variety of perceived switching costs:

[...] search costs, transaction costs, learning costs, loyal customer discounts, customer habit, emotional cost and cognitive effort, coupled with financial, social, and psychological risk on the part of the buyer.

Therefore, customers may perceive that it is simply not worth the costs to switch insurance carriers despite lower levels of satisfaction.

Although satisfaction with the call center did not impact co-branded service retention, one overall dimension – Empathy – did impact retention of the primary/leveraged brand. This may in part be explained by a decline in the equity of the brand for the callers; it is important to remember that callers had unresolved issues associated with their co-branded auto/home insurance policies. Service failure by a third-party supplier has been shown to damage the image of the primary/leveraged brand (Adler, 2005; DiPietro, 2005; Pandya, 2000).

Failure of resolution of problems with the co-branded service may erode customer trust in the primary brand. Trust has in turn been shown to impact customer loyalty significantly (Sirdeshmukh *et al.*, 2002). In this case, an erosion of trust may occur for at least two reasons:

- (1) Customers may view the co-branding of the service as an explicit endorsement of it by the primary brand, therefore customers may in part "blame" the primary brand for what they perceive to be a poor recommendation. Fitzsimons and Lehmann (2004) found that under certain circumstances recommendations can be perceived negatively by the decision maker and can result in unexpected results in terms of ultimate choice, as well as a backlash toward the source of the recommendation.

- (2) Because customers are calling a center explicitly owned and operated by the primary brand, it is clear that customers are looking to the primary brand to resolve issues with the co-branded service. This implies that customers perceive a hierarchical relationship between the primary brand and the co-branded service. Therefore, customers may blame the super-ordinate brand for failure to resolve problems.

The results indicate that while third party co-branded relationships may be economically advantageous to firms, there is a potential downside risk should customers perceive problems with the co-branded service. Therefore, it is imperative that centers be properly designed and equipped to resolve customers' issues with co-branded services. This includes not only call related operational issues such as queuing, responding to the call in a timely fashion, and reduced waiting time, but also proper training of the call center representatives answering the calls. Moreover, when examining the results, one dimension seems to be more important to customer than others. Specifically customers seem to value benevolence/empathy as an important determinant of the decision of whether to retain the primary/leveraged brand. This points to the important conclusion that call center operators need to ensure that sufficient investments are made in call center staff training. These training efforts should focus on developing skills to instill benevolence related skills that convey to the customer that the company and the call center representative cares about him/her.

Finally, these results also have implications for selection of a co-branded service provider. Although the results do not indicate a significant effect of call center satisfaction on the co-branded service retention, they do indicate that problems with the co-branded service can impact retention of the primary/leveraged brand. Therefore, the primary brand needs to balance the financial benefits from offering a co-branded product or service with the costs (in terms of customer attrition) associated with potential customer dissatisfaction. This may require test marketing co-branded products prior to rollout to establish likely customer dissatisfaction and defection levels in order to model holistically the financial implications of any co-branded offering.

Limitations and opportunities for future research

From a theoretical perspective, although call center satisfaction has been examined and researched to a greater extent, this is the first study to engage in an examination of call center satisfaction on both primary/leveraged brand and co-branded service retention. It is important, however, to note some limitations associated with this study.

First, because this study focuses on only one product category, auto/home insurance, it has limited generalizability. Further research needs to be conducted to ascertain the ability to replicate these findings across a number of product categories and co-branding relationships.

Second, the primary/leveraged brand represented a membership organization. Therefore, future research needs to be conducted to see if these findings are generalizable for leveraged brands across product and service categories; for example, credit/debit cards, cosmetics, sporting events all have large co-branded segments.

Finally, we have examined the relationship between caller satisfaction attributes and retention for only one type of call center: an escalated call center owned and

operated by the primary/leveraged brand. Future analyses might reveal that the relationship varies significantly for non-escalated calls. In addition, it may also vary by the customer perceived ownership of the center (to the degree that the caller knows this information).

Despite these limitations, this research offers valuable insight and information into the impact of call center satisfaction with regard to co-branded services, and with regard to co-branding relationship in general. Our findings suggest that there is a potential downside risk to the primary/leveraged brand should customers perceive problems with the co-branded service.

Notes

1. By primary/leveraged brand, we mean the brand whose customer network is being used for expanding the brand's reach into new product/service categories.
2. K-J is a Japanese management technique designed to generate a hierarchical tree diagram of data. In this exercise, a team organizes a list of needs by group consensus. It uses a bottom-up approach, organizing the most detailed needs, and then seeing higher levels of organization in those groupings.
3. Using the approach of Gustafsson and Johnson (2004), the benefit categories (attribute clusters) in the model are used to structure the analysis. The researcher first extracts the first principal component from each subset of measures for each benefit (for example, Empathy attributes as a group, Assurance attributes as a group, and so on).
4. It is important to note that this is not designed as a test of SERVQUAL. Therefore the dimensions are not perfectly aligned. Because the dimensions extracted, however, intuitively correspond to the SERVQUAL dimensions, and labeling dimensions based on common themes among variables is standard practice, we refer to the various dimensions using the SERVQUAL labels.
5. Nagelkerke's R^2 is the most-reported of the R^2 estimates. It is a modification of the Cox and Snell coefficient to assure that it can vary from 0 to 1. That is, Nagelkerke's R^2 divides Cox and Snell's R^2 by its maximum in order to achieve a measure that ranges from 0 to 1. Therefore Nagelkerke's R^2 will normally be higher than the Cox and Snell measure (Nagelkerke, 1991).

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