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INFLUENCE OF USAGE AND CONTRACTUAL BINDS ON CUSTOMER RETENTION IN CONTINUALLY DELIVERED SERVICES: EVIDENCE FROM THE PHYSICAL FITNESS BUSINESS

Influência do uso e vínculos contratuais na retenção do cliente em serviços prestados continuamente: evidências do negócio de condicionamento físico

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ABSTRACT

Attempts to preserve the bond with customers and to create means to increase firms captured value is a persistent management concern and subject of extensive academic research. From the service-dominant logic perspective, no value is created until the beneficiary of the service, often the customer, uses the products or services of a firm in its particular context. Therefore, the purpose of this paper is to show that there is a direct relationship between member usage and customer retention in continually delivered services. Data were extracted in the context of physical fitness business. The proposed model included price and membership length to evaluate membership renewal. Using logistic regression and unidirectional ANOVA, the results show that frequency of use was the most relevant variable related to customer retention. Surprisingly, price and membership length showed no impact on retention. We discuss these findings in the perspective of value creation.

Keywords: Continually delivered services; Customer retention; Customer usage; Fitness Business; Repurchase.

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INFLUÊNCIA DO USO E VÍNCULOS CONTRATUAIS NA RETENÇÃO DO CLIENTE EM SERVIÇOS PRESTADOS CONTINUAMENTE: EVIDÊNCIAS DO NEGÓCIO DE CONDICIONAMENTO FÍSICO

Influence of usage and contractual binds on customer retention in continually delivered services: evidence from the physical fitness business

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RESUMO

As tentativas de preservar o vínculo com os clientes e de criar meios para aumentar o valor captado pelas empresas é uma preocupação persistente da administração e objeto de extensa pesquisa acadêmica. Da perspectiva da lógica dominante do serviço, nenhum valor é criado até que o beneficiário do serviço, geralmente o cliente, use os produtos ou serviços de uma empresa em seu contexto particular. Portanto, o objetivo deste artigo é mostrar que existe uma relação direta entre o uso de membros e a retenção de clientes em serviços continuamente entregues. Os dados foram extraídos no contexto de negócios de aptidão física. O modelo proposto incluía preço e duração da associação para avaliar a renovação da associação. Usando regressão logística e ANOVA unidirecional, os resultados mostram que a frequência de uso foi a variável mais relevante relacionada à retenção de clientes. Surpreendentemente, o preço e a duração da associação não mostraram impacto na retenção. Discutimos essas descobertas na perspectiva da criação de valor.

Palavras-chave: Serviços entregues continuamente; Fidelização de clientes; Uso do cliente; Negócios de fitness; Recompra.

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INTRODUCTION

The positive outcomes associated to the engagement in a regular exercise program amass. Individuals and organizations, both public and private, acknowledge that physical activity is a good mean not only to improve health but also, and especially, to avoid diseases and health care costs associated with them. Yet obesity has become a global epidemic and one in two adults and nearly one in six children are overweight or obese in OECD countries (OECD, 2017) while non-communicable diseases account for the major cause of death worldwide (WHO, 2014).

Concurrently, fitness and sport related businesses struggle with high rates of customer churn, with attrition rates in the range of 35% to 45% (McCarthy, 2007), and retaining clients remains one of the most daring challenges for managers in the health and fitness industry. Despite those figures, the global health club industry has shown continuous growth over past years. The total industry revenue reached more than US 87 billion in 2017 in services provided in 64 countries around the world and serves 175 million consumers, not counting the totality of data from China (IHRSA, 2018). Data from the International Health, Racquet and Sportsclub Association (IHRSA) have been a reference for scientific publications and are reliable data source for this sector (Munaier & Tavares, 2019; Pojednic, Polak, Arnstein, Kennedy, Bantham & Phillips, 2017).

In the physical fitness business (PFB), such as sports and fitness clubs, organizations derive profits by offering services in a form of a plethora of human movements. Similarly, to the definition proposed by Briggs et at. (2016), PFB can be defined as continually delivered services (CDS) where customers enter into a membership or contractual relationship with the service provider and services are delivered to the customer repeatedly over the course of time.

One distinguished characteristic of PFB is that, for the customer, the only way to extract value from its membership or affiliation to such organizations, and therefore justify its renewal, is by means of physical exertion. It's a value co-creation process where the customer makes the bulk of the work. The nature of the service encounters in PFB allows customer derive value from direct interactions with staff and use of the facilities resources. In this sense, there is a true experiential perception of value-in-use which characterizes the value co-creation process as defined by Gronross (2011).

Prahalad and Ramaswamy (2004) argue that the meaning of value and the process of value creation are shifting from an enterprise centric view to personalized consumer experiences and that high-quality interactions which enable a customer to co-create unique experiences with the company are key to creating new sources of competitive advantage. Babin et al. (1994) proposed a multidimensional representation of value that is able to capture the subjective worth of shopping for the consumer in the process that creates value from services: utilitarian value and hedonic value. Utilitarian value is defined as a general evaluation (judgment) of functional benefits and sacrifices (Overby & Lee, 2006). Utilitarian value incorporates cognitive aspects related to task completion and efficient use of consumer resources, been therefore closed linked to the economic notion of value (Babin & James, 2010). Hedonic value is defined as a general evaluation of experiential or experienced benefits and sacrifices in the form of entertainment and escapism, where the act of consumption goes beyond the mere completion of a needed task (Overby & Lee, 2006).

From the service-dominant (S-D) logic for marketing, no value is created until the beneficiary of the service, often the customer, uses the products or services of a firm in its particular context and therefore value is "always uniquely and phenomenologically determined by the beneficiary" (Vargo & Akaka, 2009). In S-D logic value is co-created through the combined efforts of the firm, employees, consumers, shareholders, government agencies and other entities involved in any type of exchange, but ultimately determined by the beneficiary (the consumer). The notion of co-creation of value in S-D logic suggests that experience and perception are essential for value determination.

Awour et al. (2015) argue that value as an experience is emotional, physiological and psychological, therefore subjective, and all the company can do is offer the prerequisites for co-creation of value. These prerequisites include elements that will foster customer engagement with proposed activities. The company then hopes that the set of conditions offered (context and content) can potentially create value. The context is the

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physical space or scenario of the experience where the co-creation activity will be performed. The content refers to the set of stimuli to which the customer must react or respond. Perception of value in context and content will lead the customer to engage with the proposed activities and invite the supplier to reciprocally create value. Mencarelli and Lombart (2017) investigated the links between perceived value, satisfaction, attitudinal loyalty and behavioral loyalty and found that perceived value (utilitarian and hedonic nature) has a stronger impact than satisfaction on attitudinal loyalty and actual repurchasing behavior.

From the experience approach of value-in-use, there's the possibility that the customer perceives negative value as the customer experience outcome with the service provider can be perceived either positive or negative (Medberg, Gummerus & Tregua, 2016). Negative experiences may diminish the likelihood for a customer remain doing business with a service provider. Past empirically studies have shown and give support to the assumption that high usage levels influence the likelihood of a favorable customer decision towards renewing the contract in service relationships, with recurring customers showing higher usage patterns than defectors (Bonfrer et al., 2007). Finally, perceived usefulness and perceived ease of use were also positively related to increased service usage and customer retention in service-based contracts (Wangenheim, Wünderlich, & Schumann, 2017).

1 THEORY AND HYPOTHESES

Direct link between usage and customer retention

Many factors can contribute for the maintenance or lapsing from a membership relationship. Bhattacharya (1998) proposes that the length of time one stays member in an organization strength the ties with the organization and therefore may serve as a proxy for satisfaction or the value derived from the membership. Indeed, the membership length is negatively associated with the cancellation rate, i.e. the longer the customer remains a member the larger the odds for renewing a paid membership (Bhattacharya, 1998).

Besides the length of the membership, the actual usage of the organizational resources available for the patron also influences the decision for continuing the relationship with the service organization. Over time customers make comparisons about what they actually use with what they should have used and adjust their expectations accordingly. Bolton e Lemon (1999) argue that customers fairness evaluation of the level of economic benefits derived from usage in relation to the level of economic costs (payment) influences their satisfaction and subsequent usage of the service. Therefore, managing customer usage levels becomes a key component in the customer-service provider relationship in the quest for long-term profitability (Bolton & Lemon, 1999).

Customers usage of recurring service providers, such as mobile carriers, cable TV subscriptions and internet access, and their repurchasing behavior have been studied and results show a causal relationship between lower usage and desertion. Many models that study the direct link between usage and retention involve assumptions about how customers learn from usage and make inferences about the expected utility of subsequent usage (Bonfrer et al., 2007).

Therein lies one of the most important inferences about the customer behavior in relation to his/her experience of using recurring services and the decision to maintain the bond with the service provider. If the volume of service usage is perceived below of a certain threshold, i.e. what the customer considers fair and appropriate, then the updated expectations about the utility of future usage based on antecedent factors is put in check (Bolton & Lemon, 1999; Bonfrer et al., 2007).

The overall assumption is that decreasing in service usage has a negative impact in the continuance of the service and is directly related to customer attrition rate. Danaher (2002) developed a model of retention related to usage for subscription services and showed that if a customer does not use a service and the price is kept constant over time then he or she may lack justification for renewing the subscription. Dover and Murthi (2006) also reported that usage behavior could be an important predictor of the length of the customer relationship with a firm. Usage has an asymmetric effect on customer attrition rate, i.e. an increase in usage reduces the hazard of leaving and a decrease in usage increases the risk of drop out, with the former having a greater impact on customer lifetime (Dover & Murthi, 2006).

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Customer usage and service repatronage in PFB

Several studies have attempted to relate customer usage to customer retention. As showed previously, there's a positive correlation between customer usage levels with attitudinal and buying behaviors, i.e. the deeper and broader the usage the higher the likelihood of repeated purchases.

In PFB value is co-produced by the customer in the process of using the service provider resources, both tangible and intangible. The ultimate customer outcome is a physical transformation, either external, through morphological changes, or internal, through enhanced functional capabilities, or both. Those outcomes only ought to be obtained through frequent exposure to training stimuli, which requires regular attendance.

Ferrand, Robinson and Valette-Florence (2010) considered frequency of attendance as an important attribute related to overall satisfaction and repurchase intention in health clubs. The authors found that overall satisfaction positively influences frequency of attendance, which in turn had a positive impact on repurchase intention, acting as a mediator variable. The authors argue that regular usage, i.e. frequent visiting, is a form of behavior that may be directly related to other behaviors, such as intention to repurchase. However, the authors point out to lack of research dealing specifically with the impact of frequency on repurchase intention and call for further investigation on this subject.

Garay et al. (2014) studied the impact of individual characteristics and usage (weekly attendance) on membership retention in a health club and found that monthly frequency is positively and strongly related to adherence. Individuals who go to the gym more than eight times in a month have a higher probability (50%) of staying than of abandoning the activities, regardless of age.

Although seemed obvious from a logical deductive standpoint, the relationship between club members weekly frequency and repurchase intention is not always straight forward. Gonçalves, Meirelles and Carvalho (2016) did not find a direct link between weekly frequency of use and repurchase intention or member satisfaction. It's important to notice that in their study Gonçalves et al. (2016) operationalized retention as an attitudinal construct. They did not measure actual behavior, i.e., actual membership renewal but rather the intention to repurchase.

Since behavioral intentions do not always correspond to actual behavior, Clavel San Emeterio et al. (2017) conducted a study to predicted dropouts at a sport center based solely on actual customer behavior. The authors include number of visits per month as one of the eleven variables utilized in their model to predict retention. Their results showed a positive relationship between usage and retention, with customers who accessed more often and registered longer stays showing a higher likelihood of staying members of a private fitness center.

From the above discussion we propose that in recurring services scenarios a low usage pattern twist customers value perception towards a negative one, which in turn impact behavior (repurchase). So, the purpose of this study is to provide support for the premise "low usage equals negative value" by examining the relationship between usage behavior (frequency of use) and member retention (membership repurchase) in a health club context. The following hypothesis are proposed:

H₁: Usage is direct and positively related to customer retention.

Trust

For Berry (1995), trust is perhaps the most powerful relationship marketing tool available to a firm. Barreto et al. (2015) maintain that trust is an intention or an attitude of being vulnerable to the actions of another party that occurs when it is concluded that the other party has principles and values, competences or abilities, in addition to expressing a desire to do good on the part of those who trust themselves.

Characteristics of the firm, such as consistency, competence, honesty, responsibility and cooperation between the parties, produce a relationship that can be long lasting (de Paula Baptista et al., 2011), and can even build emotional bonds with customers, in face of the development of trust and commitment between the parties (D'Angelo et al., 2006).

The benefits of gaining consumer trust on the part of the firm are notorious, since trust and commitment in the commercial relationship increasing loyalty and word of mouth (Broeckelmann & Groeppel-Klein, 2008;

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O'Cass & Carlson, 2012; Ravald & Grönroos, 1996). After all, it is precisely in the interaction between consumer and service provider that experiences occur, interfering and determining trust (Guardani et al., 2013).

The unsuccessful experiences lived by customers in their votes of trust, especially when they experience supplier neglect, can negatively impact the desire for a new purchase (Munaier & Las Casas, 2019). Such characteristics of trust, originally attributes of human relations, have been carried over to commercial relations and have been an intense area of research in marketing (e.g. Bastos et al., 2015; Broeckelmann & Groeppel-Klein, 2008; D'Angelo et al., 2006; Guardani et al., 2013; O'cass & Carlson, 2012; by Paula Baptista et al., 2011; Raval & Grönroos, 1996).

Moreira and Silva (2015) showed that trust reflects in a augment willingness to behavioral loyalty and repurchase in Portuguese private healthcare services. Thus, it is possible to suppose that a longer business contract allows the company to build up relationships based on trust, increasing the chances of the individual choosing to repurchase their service package at the end of their contract.

Finally, Bhattacharya (1998) showed that membership length exerts a significant negative effect on the lapsing rate and the hazard of lapsing declines, at a diminishing rate, with increasing membership duration. Therefore, we propose:

H₂: Membership length positively influences customer retention.

Price

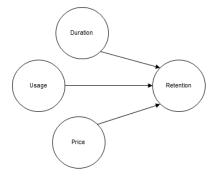
Using a price perception scale, Ferrand et al. (2010) showed that perceived price has a negative direct influence in repurchase intentions meaning that the more customers perceived the price to be expensive, the less likely they were to say they intended to renew their membership.

Bolton and Lemon (1999) introduced the concept of customer payment equity. Equity is the customer's evaluation of what is "fair," "right," or "deserved" and customers make judgments about payment equity by comparing their current payment and usage levels with normative ("should") expectations. The authors suggest that customer compares his or her current payment with normative expectations, evaluating whether the payment is higher or lower than the customer thinks it should be based on their personal assessment of satisfaction.

In line with this assumption we propose that lack of usage deteriorates the price perception of what the customer considers as "fair". Therefore, it is expected that price will have an indirect influence on customer's repurchase decision. We define hypothesis 3 as follows:

H₃: Price exerts a direct effect on customer retention.

Figure 1. Conceptual model of this article



2 DATA AND METHODS

Divided into three stages, this manuscript begins with the theoretical foundation on the frequency of use, membership length, trust and price, and their influence on customer repurchase behavior. With the proposed theoretical basis, hypotheses were presented. The second stage consists of a multivariate analysis of sample set of 181 health club members collected from three different commercial health clubs in the urban area in the city of Belo Horizonte (Brazil) to analyze, using logistic regression and unidirectional ANOVA techniques, whether the frequency of use, membership contract length and the last price paid in their package impacted the repurchase

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behavior at the time of renewal. In the third phase, conclusions, limits and suggestions for further research are proposed.

To better observe the methods used for the multivariate quantitative analysis of this article, a methodological association matrix (Mazzon, 2018) was proposed, as shown in Figure 2.

Figure 2. Methodological association matrix.

Figure 2. Methodological association matrix.							
Research Objectives	Analysis Techniques	Expected search results					
Analyze whether the frequency of use of the individual in the last three months positively impacts the renewal status	Logistic Regression and Unidirectional Anova	It is expected that the results of the techniques used will validate H ₁ and differentiate the frequency of use of customers who renewed from those who did not.					
Analyze whether the duration of the last H ₂ package purchased by the individual positively impacts the renewal status	Logistic Regression	It is expected that the results of the techniques used will validate H ₂					
Analyze whether the price of the last H ₃ package purchased by the individual influences the renewal status	Logistic Regression and Unidirectional Anova	It is expected that the results of the techniques employed will validate H ₃ and that there the higher the price the less the renewal probability					

Source: Elaborated by the authors from Mazzon (2018).

3 ANALYSIS OF RESULTS

Descriptive Statistics

The data of 181 consumers of ongoing services were treated, who, at the time of renewing their service packages, chose or not to maintain their status as customers of the firm. 99 (54.7%) customers opted for continuity, while 82 (45.3%) decided to quit commercial relations. Table 1 shows the demographic data of the 181 individuals observed in their consumption, as well as the VIF and tolerance of the three independent variables observed, which demonstrate that there is no multicollinearity in the chosen variables. For the multivariate analysis proposed in this article, the statistical software IBM SPSS 22 was used.

Through the VIF (Variance Inflation Factor) it was possible to identify that the variables did not present multicollinearity, a problem in the adjustment of the model that can impact the parameter estimation. A VIF less than 10 and a tolerance greater than 0.1 indicate the absence of multicollinearity (Hair Jr, Black, Babin & Anderson, 2014; Vieira, 2012).

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Tabla	1	Descriptive	Statistics
LADIE	1.	Describitve	STATISTICS

		N	%
Gender	Female	109	60,2
	Male	72	39,8%
Age	Between 18 and 24 years	16	8,9%
	Between 25 and 39 years	79	43,6%
	Between 40 and 59 years	49	27,1%
	60 years old or older	37	20,4%
Variable	Description	Tolerance	VIF
Frequency	The frequency of use of services by the individual in the last 3 months before renewal	0,99	1,02
Last Package	The last monthly plan purchased by the individual, which may vary from 1 to 12 months in duration	0,95	1,05
Last Price	The last price paid by the individual to his monthly plan. Nominal installment amounts, ranging from R\$ 55 to R\$ 529, depending on the service package and duration.	0,96	1,05

Source: Elaborated by the authors

Logistic Regression

The objective of binary logistic regression is to analyze a set of independent variables in relation to a dichotomous categorical response, in other words, a dependent variable assumes only two values (Vieira, 2012), as is the case with the present manuscript: non-renewal status (0) and service plan renewal status (1). This technique promotes the Logit Transformation which aims to transform the values of the discrete binary dependent variable of the logistic regression into an S-shaped curve (logistic curve), representing the probability of an event (Hair Jr et al., 2014). This probability is then used to form the odds ratio, which acts as the dependent variable in the logistic regression.

Since there are three variables to be analyzed regarding the individual's status - frequency of use in the last three months, duration of the last service package and price paid in the last service plan - the Backward (LR) method was chosen, or Reverse Elimination (Likelihood Ratio). As described in the tutorial of the software used - SPSS 22 -, the removal test is based on the probability of the likelihood ratio statistic based on the maximum partial likelihood estimates, where in block 0 none of the variables are found. In block 1, all are listed and, from this block 1, the selection takes place gradually backwards, eliminating variables that do not obtain significance less than 0.05.

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The SPSS statistical software returned the analysis of the three variables with two of them in the final model, after 2 steps. The eliminated variable was Last Price (sig = 0.164) in step 2. The variables that entered the model were Frequency (sig = 0.000) and Last Package (sig = 0.013), which means that the final model works correctly. In the Hosmer and Lemeshow test, sig = 0.362 in step 2. Vieira (2012) recalls that this test must have a result greater than 0.05. Therefore, through this test, your result also supports the final model. Finally, it is registered that the R2 of Nagelkerke, in step 2, was 0.326. And the combination of variables from the validated model (Frequency and Last Package) correctly classifies 74.6% of the status, with the status "Renewed" being more correctly classified (78.8%) than "Not renewed" (69.5%).

Analysis of the hypotheses

H₁: Usage is direct and positively related to customer retention.

With sig = 0.000 and exp. (B) of 3.783 for the Frequency variable, this paper presents a result of important inferences about the consumption behavior in ongoing services and what leads to remain a customer at the time of renewal: the frequency of use of the customer is crucial for their permanence in the contracted services. The odds of belonging to the renewed group are greater as the individual more frequently uses the contracted services (odds ratio = 3.783). A Unidirectional ANOVA was performed to confirm the difference in frequency between the non-renewed and renewed groups. With F (1,179) = 49,099; p = 0.000, it is possible to conclude that there are significant differences between the frequency of use of the individual who quits the services and the individual who renews their contract, validating hypothesis 1.

In accordance with other studies (Ferrand et al., 2010; Garay et al. 2014; Clavel San Emeterio et al. 2017), our findings show a positive and direct effect between frequency of usage (attendance) and customer retention. There are statistically significant differences between the frequency of use of customers who do not renewal their membership and customers who do so, therefore validating hypothesis 1. Data show that the higher the usage the higher the probability of customer renewal.

To better understand the amount of usage client toward their renewing attitude, an Unidirectional ANOVA was performed, having the binary variable "Status" with the values 0 (not renewed) and 1 (renewed) on the y axis and, on the x axis, slots of days usage on the last three months of the contract grouped as follows: 0-9 (n=30 or 16.6% of total), 10-19 (n=43 or 23.8% of total), 20-27 (n=47 or 26% of total), 28-33 (n=27 or 14.9% of total), and 34+ (n=34 or 18.8% of total).

With F (4, 176) = 14.372; p=000, the result shows that there's a statistical difference between these groups. As the non-renewed clients were classified as 0 and the renewed as 1, the statistical software SPSS created a mean of Status. It is possible to observe, in Figure 3, that customers with frequency from 0 to 19 are part of the groups that have an average below 0.5. It is possible to conclude that the majority of customers with services' usability in a less than 19 times frequency in the last 90 days of active contract belong to the "not renewed" status, which means, status 0. In other words, it is possible to conclude that clients who used 0-9 times in the last three months of active contract have the lowest odds to belong to the renewed contracts group and the group with 10-19 days usage times also presents a minor probability of renewing their contract. A DMS/LSD post-hoc test shows that there is statistical difference between 0-9 and 10-19 (sig=0,04). Clients who attended to their gym at least 20 times in the last three months have more odds to renew their contract. There is statistical difference between 20-27 and 10-19 (sig=0,00). Despite the groups of 28-33 and 34+ have a present higher mean of status, as shown in Figure 3, there's no statistical difference between them.

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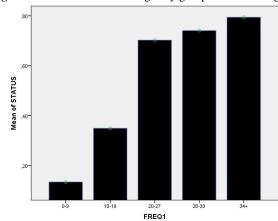


Figure 3. ANOVA between usage day groups and renewing status

H₂: Membership length positively influences customer retention.

With sig = 0.015 and exp. (B) = 0.679, it is possible to affirm that, contrary to what is hypothesized in this article and, to some extent, intuited by common sense, long-term of a contract, in this case, has an opposite effect to that of retention, since the logistic regression brought an odds ratio value less than 1 (0.679), not validating hypothesis 2.

There are many analyzes of this phenomenon and it is quite important to reflect about it. In the observed sample, it is evident the prevalence of short-term contracts possible due to the difficulty of those firms in selling longer-term service plans. Besides, the sale of shorter-term packages is also a common practice in the local fitness market. Among the 181 plans observed, 123 were of short-term (1 month), 40 were of medium duration (6 months) and only 18 had a duration of 12 months.

But another aspect appears, when this information is crossed with frequency of use. The low prevalence of long-term contracts renewal might be due to negligence of the service provider towards their clients. Falling to address customers low usage patterns may compromise the trust-commitment bond within the customer-firm relationship. In a long-term contract a firm is granted the opportunity to meet customers' needs and develop a positive value perception, therefore enabling the customer to easily justify his/her repurchase decision. The low number of long-term contracts by the time of renewal in the present study might be an evidence of negligence.

The present study therefore reveals that short-term plans are more likely to be renewed. However, based on the available data, it is not possible to affirm that short-term plans are better neither for firms (due to the fragility in the financial management of incomes) nor for the client (since long-term plans have lower monthly fees). The heart of the matter may be in the firm's customer relationship management orientation to encourage clients to regularly attend the facilities and guarantee their usage.

H₃: Price exerts an indirect effect on customer retention.

In logistic regression, the last price paid by the individual in their service package had a sig = 0.164, excluding this variable from the final model and demonstrating that there is no statistical impact on the analysis of the client's renewed or non-renewed status. A Unidirectional ANOVA was performed to assess whether there is a significant difference between the prices of the previous plans of those who renewed or not and, with F (1, 179) = 1,135; p = 0.288. It is possible to conclude that, in fact, the price paid in the previous purchase does not impact the probability of renewal or abandonment of continued services, not validating H3.

CONCLUSIONS

The purpose of this article was to analyze the impact of the frequency of use, the duration of the service package and price in the decision to renew the service contract in CDS firms. The contribution to the literature is precisely in the observation of these three consumption variables among themselves. The chosen locus was the

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fitness and wellness market. Thus, the managerial contribution of this article is to provide managers of this segment with data on the frequency of use and the risks, for customer retention purposes, to neglect it.

The proposed hypothesis that service usage in CDS increases the odds of contract renewals was supported. This study analyzed customer attendance on three months prior time of renewal and found that its impact on customer retention is statically significant.

It is important to note that the logistic regression rated the status "Renewed" (78.8%) better than "Not Renewed" (69.5%). One possible explanation is that the customer has developed the habit of exercising frequently, as evidenced in its high usage/attendance, however without establishing strong bonds with the service supplier or due to causes beyond the firms reach, such as relocation or personal relationships with other patrons. In any case the customer may continue to consume physical fitness services but might look for another supplier.

Two hypotheses were not statistically supported. It is not possible to say that buyers of long-term plans are more likely to renew their contracts. This non-validation can, ultimately, also be considered a finding of the present article. And also, is not possible to say that price impacts clients' decision to renewal or not. Customers will renew or not regardless the price ticket, whether low or high. Thus, it is not necessarily a matter of price. It's a matter of use! It is in the frequency of use that relies the individual propension to renew their package of services. The more they use it, the greater their tendency to renew their contract. For this reason, it is essential that the firm close monitors customers attendance and the actual use of the contracted services.

Firms that sell shorter-term plans find themselves in the need to repeatedly get the vote of trust of their current customers, so that they remain with the firm on a monthly basis. On the other hand, in case of long-term contracts the firm has a broader chance to own the customer mind and heart. One recommended way to do it is encouraging their customers to use the facilities regularly.

The questions proposed are: 1) PFB that sell long-term service, how many times, during the term of the plan, do they strive to encourage their customers to use their services? 2) Is not negligence of firms regarding their customers usage of services the finding that the bigger the plan purchased, the lesser the chance of the individual renewing their service package [exp. (B) = 0.679]?

Thus, as contributions to the management literature of the CDS, in particular to PFB, this article seeks to point, as a practical application, the need to manage the frequency of use of customers, especially in the last 3 months before the renewal period (for medium and long-term plans). It is fundamental: to manage each customer frequency as if each one had purchased a short-term package. Thus: do not neglect its use!

In this research, customers' perceptions of perceived value and perceived quality in the services received were not tested, neither of customers who renewed nor of customers who did not renew their plans, these being not only limitations of this manuscript, but also suggestions for further research.

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