CONSUMER FINANCIAL SACRIFICE (CFS) SCALE: a consumer behavior perspective

Abstract

In the consumer behavior and marketing fields, although the term sacrifice has usually been associated with the value perceived by the consumer, studies about the 'financial sacrifice' for the purchase of a product are still incipient. Through a literature review it was possible to identify gaps both for measurement and for an adequate definition of this construct in the consumer behavior perspective. From this, it was proposed in this article a scale to measure the financial sacrifice for purchase and it presented the concept that financial sacrifice is the act or the willingness to give up something valued, aiming at the acquisition of something else of greater value. After reviewing the literature and following systematic steps, the Consumer Financial Sacrifice - CFS scale was developed. The results indicated that the proposed scale has good levels of reliability and validity, being single dimensional, formed by three items. This study contributed to highlight that the financial sacrifice can generate both negative and positive aspects for the consumer.

Key-words: Financial Sacrifice. Scale Development. Consumer Behavior.

Introduction

Sacrifice is a construct specially explored in studies in the fields of anthropology, history and religion. Its meaning is complex because it implies a diversity of experiences related to the sacred, to give up something, to offer or to consecrate something or someone, among different things. In general, the act of sacrificing involves an element of suffering and moral transformation for those who perform it and/or for the sacrificed object or individual (Bubbio, 2013).

In the marketing field, sacrifice begins to be of interest of researchers at the end of the 1980s. From the study by Belk, Wallendorf and Sherry (1989), this construct was described as one of the possible characteristics and manifestations of the sacred. The authors turn to the understanding of the (des) sacralization processes inherent in consumer behavior. From this research, cultural aspects related to sacred, spiritual and religious consumption began to permeate the area's research (Belk & Tumbat, 2005).

But it is not only in this religious sphere of consumption that it is possible to observe sacrificial practices. In general, sacrifice, as revealed by Shilling and Mellor (2013), can be perceived in three ways: a) as expenditure/cost/expense, considering that this expenditure is a producer of the sacred phenomenon (Bataille, 1989); b) as 'scapegoat' in a community (Girard, 1995), and c) as a transcendent exchange, when individuals give up/give away something of themselves or objects they possess in exchanges that are transcendental rather than merely utilitarian (Simmel, 1990). From this, it can be seen the three forms of sacrifice, to a greater or lesser extent, are acts of consumption in which something or someone is consumed, in a way that they are possible opportunities for research in the field of consumer behavior.

In the consumption perspective, the study of sacrifice is still justified by the very popularization of the term among the individuals of contemporary society. It is not difficult to find in the discursive manifestations of consumers the word in question when they want to refer to some kind of effort to achieve something. The sacrifice in (not) acquiring and (not) using a given product is part of the current vocabulary, permeated by financial and identity crises. Therefore, the analyzed construct encompasses and impacts the atmosphere of consumption, as well as the way in which a person behaves in it.

Some studies that indirectly adopt Bataille's (1989) expenditure perception to describe sacrifice can be observed, turning to the elements of cost and expense related to the purchase of a product. Liljander and Strandvik (1995), for example, understand the sacrifice made by the client to acquire a good or service as the cost and price effort, so that from this is valued product satisfaction. The purchase intention, therefore, is affected by this monetary sacrifice perceived by the consumer (Fong et al., 2015).

Even with a certain evolution in the field represented especially in the form of sacrifice as cost, research in the area of Marketing that approaches the sacrificial aspects in the consumption is still in need, especially when it is verified the popularization of the term in the social environment, used in a colloquial way. Most of the times, this construct is portrayed as a component of perceived value (e.g. Dodds & Monroe, 1985; Flint, Woodruff, & Gardial, 1997; Lapierre, 2000; Teas & Agarwal, 2000; Woodall, 2003; Lin, Wu, Chuang, & Kao, 2007) rather than as an isolated element that has a direct influence on consumer behavior. In addition, the measurement of the sacrifice still presents itself as a gap in the area. Measurement implies the possibility of describing and accessing data in order to understand a certain phenomenon of interest. In a survey conducted on ACR website (Association for Consumer Research), in July 2017, no results were identified using the terms "financial sacrifice scale". Using the same search procedure in the ProQuest database, we also did not identify documents with the searched terms. In Brazil, with the terms of the search was not manuscript identified in a Spell-database search with the terms "escala de sacrifício financeiro". The lack of results in the searches performed is presented as a gap in the area, since the measurement implies the possibility of describing and accessing data to understand a certain phenomenon of interest. Therefore, it is understood the importance of the construction of measurement scales that are bases of sustentation for the development of the sciences (Churchill, 1979).

Aiming to fill the gap described previously, this study searches to develop a scale for sacrifice in consumption from the perspective of cost proposed by Bataille (1989). Among consumer activities, buying is understood as a crucial element in the sacrificial perspective. Consumer decision-making involves analyzing the costs of buying or not buying a given product perceived by this individual. Such process is critical to understand consumer behavior and develop the composite marketing planning (Engel, Blackwell & Miniard, 1995). Therefore, the proposed scale turns to the buying process. With this objective, it is sought to establish a base of support of the sacrifice in the Marketing area, collaborating with the increase of the production of international and national research focused on this theme.

To this end, this paper is divided as follows: in addition to the introduction, a section on sacrifice from the financial perspective is developed, followed by the elements of scale construction. Final considerations are pointed out at the end of the study.

The sacrifice and its financial perspective

To sacrifice means "to make sacred". That comes from the Latin word *sacrificere*, a junction of the terms *sacer* (sacred) and *facere* (do) (Badje, 2005). Initially, its conceptualization was associated with religious issues and the search for a change from a person or object of the profane domain to the transcendent domain and worship of God (Mateus, 2008). For Belk, Wallendorf and Sherry Jr. (1989), the individual gives up something important, in order to establish a contact with the sacred. In this perspective, sacrifice prepares the individual for a communion with the sacred experience, reinforcing the extraordinary character that it possesses.

In consumption, sacrifice may involve monetary or non-monetary elements (Dodds, Monroe & Grewal, 1991; Lapierre, 2000). For example, perceived benefits and sacrifices can be built from the intrinsic and extrinsic attributes of the product, including texture, quality,

price, performance, service, and brand (Zeithaml, 1988). In particular, as Fong et al. (2015) highlight, most marketing literature points out that the purchase intention is affected by the perceived monetary sacrifice by the consumer.

Therefore, the study of sacrifice in consumption involves the perspective of value perception. This is an element associated with what the individual gives and receives in the purchase of a good or service. Some authors treat this theme with greater emphasis, such as: Zeithaml (1988), who developed an exploratory study to elaborate a conceptual model of the relationship between price, quality and value perceived by consumers; Dodds, Monroe and Grewal (1991) studied the effect of price, brand, and store information on consumer perceptions of quality, value, and willingness to purchase the good or service. In addition, Caruana, Money and Berthon (2000) developed an exploratory research to understand if value acts as a moderator between quality of service and customer satisfaction. Lastly, by performing two experiments, Teas and Agarwal (2000) studied the relationship of extrinsic effects (price, brand name, store name and country of origin) in consumer perception of quality, sacrifice and value.

New studies emerged from these authors perspective, such as: Woodall (2003) who developed a dimensions of perceived value summary, and identified among these several types of sacrifice (including the monetary) linked to time consumption; Sumaedi, Bakti and Yarmen (2012), studied the relationship between consumer behavioral intentions and other latent factor (like satisfaction, perceived value, perceived sacrifice) and service quality. Chang (2013) studied the processing motivation to price perception, by highlighting the influence of fluency on price-perceived quality, price-perceived monetary sacrifice or purchase intention. Tseng (2016), in one of his experiments, analyzed the relationships among a green promotion setting, perceived nonmonetary and monetary sacrifice, and purchase intention toward the list price.

In this sense, the concept of consumer value is subdivided in two dimensions of behavior; they are: economic dimension, which involves the prices perceived in the transaction, and the psychological dimension, which encompasses the emotional and cognitive influence of the elements (Currás et al., 2015). As in the perception of value, sacrifice in consumption also involves two dimensions, already described previously as monetary and non-monetary. In this perspective, Lapierre (2000) states that customer sacrifice is defined as the global monetary and non-monetary costs invested in order to complete a transaction or in the pursuit of a relationship with a supplier.

This perception of value of the product means to compare the quality and benefits associated with the sacrifices related to the payment of the price requested for that good (Monroe, 1990). It is important to note that the price of a good, can provide several important information for the consumer. Thus, when assessed negatively, it represents an economic sacrifice (Fong et al., 2015).

Based on the understanding of sacrifice, developed by the authors cited in this article, a conceptualization of purchase a product sacrifice was established with the purpose of constructing and validating the a measurement scale. Thus, the sacrifice of buying a product from the financial perspective is defined as the act or the willingness to give up something valued, aiming at the acquisition of another.

Scale Construction: Consumer Financial Sacrifice (CFS)

With the purpose of proposing a scale to measure the financial sacrifice in the product acquisition, it was adopted the perspective of Churchill (1979), a classic proposal in the development of scales in the Marketing area. Authors performed initially a state of the art review of the literature related to sacrifice in different fields, but with focus on marketing and consumer behavior. After that, it was started to develop the scale carefully following Chuchill (1979) proposed steps, as follow.

Step 1: Construct domain specification

The initial step consisted in the effort of defining the construct boundaries and analyzing its possible dimensionalities. According to Churchill (1979, p. 67) "It is imperative that researchers consult the literature when conceptualizing constructs and specifying domain". For this, a bibliographic research was carried out contemplating the main elements of the sacrifice construct. A total of 68 papers were evaluated in different areas of knowledge (anthropology, sociology, psychology, economics and marketing), from which it was possible to conceptualize the financial sacrifice for the purchase of a product, as previously presented. The main conceptions of the sacrifice found in the bibliographic research are shown in Table 1.

Table 1:
Sacrifice Definitions

Author	Year	Sacrifice Conception	Study Field
Sykers	1748	Whatever is given or offered in a Solemn manner immediately to God, 'so as that Part of it or the Whole is consumed'.	Anthropology
Smith	1894	Communion between the god and his worshippers by joint participation in the living flesh and blood of a sacred victim.	Anthropology
Hubert & Mauss	1897	Sacrifice is a religious act which, through the consecration of a victim, modifies the condition of the moral person who accomplishes it or that of certain objects with which he is concerned.	Anthropology
Bataille	1989	Sacrifice restores to sacred world that which servile use has degraded, rendered profane.	Economics
Evans-Pritchard	1956	A way of doing business between gods and men. A bargain is struck. There is an exchange.	Anthropology
Zeithaml	1988	Sacrifice as a component of price and quality perception	Marketing
Monroe	1990	The sacrifice is represented by the selling price and all subsequent costs to the customer of acquiring, installing, maintaining, and using the product over its useful life.	Marketing
Simmel	1990	The economic exchange - whether it is of objects of labor or labor power invested in objects—always signifies the sacrifice of an otherwise useful good, however much eudaemonistic gain is involved.	Economics
Freud	1996	A form of renunciation of something that has value to the individual	Psychology
Van Lange et al.	1997	The propensity to forego immediate self-interest to promote the well-being of a partner or relationship.	Psychology
Flint, Woodruff e Gardial	1997	Sacrifice as a component of perceived value	Marketing
Pine & Gilmore	2000	The customer sacrifice is the gap between what a customer settles for and what he wants exactly	Marketing
Lapierre	2000	Customer sacrifices are the overall monetary and non-monetary costs that the consumer invests in giving to the supplier in order to complete a transaction	Marketing
Lacan	2005	The sacrifice is destined the capture of the other as such in the network of desire.	Psychology
Mateus	2008	Sacrifice is the self-denial of something under the perspective of achieving it more intensely and increased	Sociology
Matear	2014	Sacrifice is a transformational behavior that evokes a sense of meaningful personal loss, and is performed for the benefit of the relationship in which the act is embedded.	Marketing

In this research, considering the attributes of the construct, sacrifice was defined as a one-dimensional element (because it represents a general measure), a multiple reflexive type, and its measurement was performed by items that reflect the effects on the construct variation.

Step 2: Generating Items and Validating Content

The second step was characterized by the activities of item generation (Churchill, 1979) and validation of face and content (Costa, 2011). For that, the reflective nature of the construct and the definition presented previously were considered. Based on an exploratory study operationalized through a theoretical study and a focus group (performing in July 2015) composed of marketing and consumer behavior specialists, it was possible to list 19 items to compose the proposed scale. Then the items were submitted to the evaluation of nine marketing specialists (3 PhD and 6 PhD students). For Churchill (1979), the use of focus groups can bring advantages at the item-generation stage and the use of specialists to evaluate the development of scaling items has been commonly used in marketing (e.g. Zaichkowsky, 1985; Babin & Burns, 1998).

The items in which six or more of the nine reviewers rated as representative of the construct were maintained for the next stage of scale development. This process resulted in 11 items, out of 19 originally submitted. Subsequently, the 11 items were sent for evaluation by two PhDs in marketing, which resulted in four rounds of evaluation, incorporation of suggestions, modification and new submission for evaluation. At the end of this process, 10 items remained that were considered fit to be included in the measurement instrument. Of course, the finds from literature were also considered to validate this step.

Step 3: Decisions about responses

In the process of deciding which scale of inquiry would be used for items, a 7-point type Likert scale was used, ranging from 1 (totally disagree) to 7 (totally agree). This type of scale is widely used in the social sciences (Devellis, 2003) because it presents, among other advantages, psychometric consistency and easiness of the respondents to indicate their degree of agreement with the affirmative (Costa, 2011). Also, respondents tend to have a good comprehension of this scale format.

Step 4: Construction of the research instrument

The construction of the instrument was characterized as the finalization of the decisions made in the content and face validation phases, and the choice of the verification scale. Therefore, a pre-test was applied with nine consumers, with different profiles of gender, age, profession and income, where difficulties were detected in the understanding of two questions, which were excluded from the questionnaire. Finally, the final instrument was composed of 8 items, as shown in Table 2.

Table 2:
Items proposed for the scale of sacrifice to buy a good

Code	Scale Items
SF1	To buy _____ I do not mind compromising my finances
SF2	To buy _____ I am willing to save part of my income
SF3	To buy _____ I give up activities that bring me pleasure

SF4	To buy _____, I change my shopping routine to save money
SF5	When I buy _____, I am looking to demonstrate status with the groups I am a part of
SF6	As I strive to buy _____ I am rewarded for the satisfaction of possessing it
SF7	To buy _____ in a store, I do not mind wasting too much time
SF8	To buy _____ I want, I am willing to do overtime at work

In the elaboration of the instrument for the data collection phase, the questions were randomly distributed, with content (8 questions), socioeconomic (5 questions), and demographic (7 questions) items.

Step 5: First sampling activity

The purpose of this stage was to generate a first data collection that would enable exploratory tests to be performed, aiming at the purification of the measurement instrument (as demonstrated in step 6 below).

The first data collection was performed in August 2015 from an online questionnaire, whose link was disclosed through social networks and e-mail, and used as a product to measure the purchase of a smartphone. The decision to choose this product to compose the questionnaire was mainly motivated by the wide use of cell phones by different consumer profiles. In addition, the smartphone is one of the most desired items for retail purchases, with estimated sales for the year 2017 in value of R$ 40 million in Brazil (Brigatto, 2017). With regard to online data collection, Lefever, Dal, & Matthíasdóttir (2007) state that the online data collection carries the potential of accessing a large and geographically distributed population. There are two main advantages in the process of data collection via the internet, the first is related to cost reduction (Couper & Rowe, 1996; Bethlehem, 2010) and the second refers to the speed of its driving (Bethlehem, 2010; Gunter et al., 2002).

As an initial procedure of analysis, the adequacy of the data was verified in order to identify unanswered questions, errors and / or discrepant values. Therefore, three questionnaires with missing or discrepant values were excluded. At the end of this process, a total of 145 valid questionnaires were obtained. In the sample, 74 (51.0%) were women and 80 (55.2%) were unmarried. Almost all of the respondents, 144 (99.3%) respondents have higher education level (incomplete, complete or postgraduate). The age varied from 19 to 60 years, with family income between R $ 600,00 and R $ 30,000.00. Such sample composition indicated suitability in terms of heterogeneity, which ensured adequate and necessary conditions for carrying out the next step.

Step 6: Scaling refinement procedures

At this stage, the data was processed and analyzed aiming to proceed to the first sequence of refinement of the scale. Its operation consisted in analyzing the behavior of the measurement items eliminating those that did not present a bivariate correlation psychometric adequacy, internal consistency and factorial adequacy. In order to do so, the bivariate correlation matrix (Pearson) was extracted from the set of items, the results of which are shown in Table 3. The correlation matrix analysis showed that some measurements presented statistically null values ($p < 0.05$). Considering the assumption that items should be reflective of the latent construct, it is understood from this analysis that items with a factorial load of less than 0.3 (items SF6, SF7 and SF8) should be candidates for scale elimination. Thus, it was decided that in the next phases of analysis these items would be eliminated.

Table 3:

Correlation of items set

Code	SF1	SF2	SF3	SF4	SF5	SF6	SF7
SF2	0,52						
SF3	0,57	0,54					
SF4	0,53	0,44	0,59				
SF5	0,39	0,38	0,42	**0,29**			
SF6	**0,13**	**0,14**	**0,16**	**0,22**	**0,03**		
SF7	**0,13**	**0,21**	0,38	**0,22**	0,32	**0,11**	
SF8	**0,18**	**0,08**	**0,15**	**0,14**	**0,23**	**0,19**	0,36

As a form of appreciation and adjustment of the consistency of the measure and possible exclusion of items, two rounds of analysis were performed: a) data adequacy test for factorial analysis (Kaiser-Meyer-Olkin test (KMO) and Bartlett's sphericity test); B) Exploratory Factor Analysis (EFA) and; C) reliability test (Cronbach's Alpha). At the end of this process, the best fit (without item SF5) presented the following results: Kaiser-Meyer-Olkin test of sampling adequacy (KMO = 0.798) and Bartlett's sphericity (χ^2 = 191,821, df = 6, p <0.001), demonstrating the adequacy of the data for factorial analysis (Hair Jr., 2005).

In the extraction of factors, only one eigenvalue above 1, as predicted was observed, with a variance extracted from 64.81%, a value considered satisfactory. In the internal consistency verification procedure, a measure of the reliability of the scale, a Cronbach alpha value of 0.818 was obtained, which suggests that the set of items presents a good internal consistency.

The results of the factorial scores and commonalities of each variable are shown in the Table 4. In order to extract the factors, it was used the main components method (with number of factors defined by size eigenvalues greater than 1) and orthogonal rotation by the varimax method. In the results of the factorial scores of variables and commonalities, it was possible to observe that all items presented high scores (above 0.7), a fact that indicates a good fit in the factorial structure.

Table 4:
Scores and commonalities

Code	Scale Items	Scor.	Com.
SF1	To buy a smartphone, I do not mind compromising my finances	0,813	0,661
SF2	To buy a smartphone, I am willing to save part of my income	0,769	0,592
SF3	To buy a smartphone, I give up activities that bring me pleasure	0,843	0,711
SF4	To buy a smartphone, I change my shopping habits to save money	0,793	0,628

In view of the set of analyzes carried out (correlation, exploratory factorial and Cronbach's alpha), it was identified that after the elimination of some items, the final result signaled that the remaining items are consistent and adequate for measuring the financial sacrifice construct for purchase. However, Churchill (1979) suggests that this first purification process is not enough to consider the items as valid to measure the construct, so it is necessary to develop new field activity, as described below.

Step 7: Additional fieldwork

After consolidating the previous steps, the model used foresees the accomplishment of additional field works in order to carry out new tests with the scale and, if necessary, to perform a new cleaning purification of the items. In this sense, a new version of the scale was developed contemplating only the remaining items of the previous stages (SF1, SF2, SF3 and SF4), adding

questions related to the Brazil Economic Classification Criterion 2015 and social profile of the interviewees.

In search to have a sample of participant with adequate profile of consumers who carry out sacrifice to buy smartphones, the data collection was performed at natural settings (churches, schools, colleges and academies), and at the internet with a link available in social networks. The decision to use the internet too for data collection in this second round was justified by the significant index of online purchases of smartphone. The questionnaires were applied in the months of April, May and June of 2016.

At the end of the data collection process, 282 questionnaires were obtained, 12 of which were considered invalid due to lack of data or discrepant values. Thus, the final sample consisted of 270 valid questionnaires with a profile composed of 143 (53%) women, 187 (69.3%) singles and 62 (23%) indicated having children.

Regarding the level of formal education, 8 (3%) had a completed elementary education or an incomplete secondary school, 107 (39.6%) had a completed high school or incomplete superior education, 63 (23.3%) with a university degree or incomplete specialization and, 92 (34.1%) postgraduate. Age ranged from 18 to 67 years, with a socioeconomic classification distributed as follows: 40 (14.8%) belonging to class A, 151 (55.9%) of classes B1 and B2, 71 (26.3%) of classes C1 and C2, and 8 (3%) considered as belonging to classes D/E. In general, it can be said that the sample has heterogeneous characteristics suitable for the appropriate analyzes in this second sampling process.

Step 8: Additional Scale Purification Procedures

The objective of this step was to apply confirmatory factor analysis procedures to the new set of data (Table 5). For this step, a statisctical packaged well known in social sciences was used, since it allows the factorial extraction with an additional set of adjustment measures and hypothesis tests on the factorial scores. After verification of the interactions, it was decided to eliminate item SF1, as it presented a lower factor score and allowed the aggregate improvement in the adjustment measures. The final scale therefore included 3 items.

Table 5:
Confirmatory Factorial Analysis

VARIABLES	SCORES	CR*
Panel 1 - Factorial Items and Scores		
SF2 - To buy a smartphone, I am willing to save part of my income	0,726	7,390
SF3 - To buy a smartphone, I give up activities that bring me pleasure	0,592	7,270
SF4 - To buy a smartphone, I change my shopping routine to save money	0,740	**

Panel 2 - Adjustment Measures		
Adjustment Measure	**Observed**	**Fitness requirement**
Chi-square (χ2)	4,312	-
Degrees of Freedom (glm)	1	-
Reason χ2/glm	4,312	<5,000
p-value	0,038	>0,050
Quality adjustment index – GFI	0,990	>0.900
Comparative adjustment index – CFI	0,980	>0.900

Tucker-Lewis Index – TLI	0,939	>0.900
Regulated adjustment index – NFI	0,974	>0.900
Root Mean Square Error of Approximation – RMSEA	0,111	<0,080
Variance explained	64,60%	> 50%-

Note: * Significance at p <0.001; ** Item with score set to 1.

The results presented in Table 5 indicate a good adequacy of the scores (all above 0.59 and statistically non-zero). Adjustment measures are within the limits suggested in the literature, except for the p-value of the chi-square test and RMSEA. According to Costa (2011), in the case of p-value, the presented result is characterized as common in works with relatively large samples, which motivates the use of other measures. For RMSEA, Weston and Gore (2006) argue that sample size and complexity influence the appropriate cutoff values. In this sense, cutting criteria can result in incorrect rejection of acceptable models when sample sizes are smaller than n = 500 and when models are not complex, as in the case of this research. Thus, it is important to check the set of indicators for a better evaluation. In these terms, it is understood that the results indicate a good fit of the sample of items to measure the latent construct.

As noted by Dodds, Monroe and Grewal (1991), and Lapierre (2000), sacrifice in consumption involves both monetary and non-monetary aspects. In the scale, two items (SF2 and SF4) are directly linked to the financial aspect in the act of sacrificing. In turn, item SF3 brings the renunciation aspect also reinforced by Bataille (1989) in conceiving sacrifice as cost. This element intertwines the financial element, reinforcing the transcendental aspect related to the pleasure already described by Simmel (1990).

Step 9: Validity and reliability analysis of the final scale

This step is considered one of the most important, since it aims to confirm the characteristics of validity and reliability. Convergent and discriminant validities are usually presented. With regard to the convergent validity (points out the adequacy of the set of items in terms of repeated measures of the construct), the critical ratio (CR) values of the statistical output were adopted as reference. In this sense, it was observed that all values were statistically non-zero (p <0.05), which indicates the existence of a variation of the items coming from the latent construct. Confirmation of this verification indicates that evidence of convergent validity has been achieved (Moutinho & Huarng, 2012).

In relation to the discriminant validity (which indicates the degree to which two measures are different), it was not possible to carry out such an evaluation because the construct was measured in a unidimensional manner, in accordance with the proposed objectives.

Finally, the reliability analysis was done by internal consistency analysis, using the Cronbach alpha coefficient. The final value of the three items was 0.726, which indicates a good and accepted internal consistency in the set of items.

Step 10: Developing standards and recommendations

This last stage consists in the development of recommendations for scale application. It is considered that although the scale has been applied in the purchase of a specific good, it is possible to use it to verify the sacrifice for the purchase of different products. In the instrument, the recommendation is for items to be randomly distributed. It is also suggested the use of a 10-point verification scale, since these always present good results (Matell & Jacoby, 1971).

Final Considerations

The proposal developed in this study was to design a scale for measuring financial sacrifice for the purchase of a product. The results presented here indicate that the objective of the research was satisfactorily achieved, with the development of a metric based on three items (affirmations), using a Likert-type verification scale. The result, obtained by means of analyzes and refinements, is presented in Table 6, set out below.

Table 6:
Proposed scale for financial sacrifice for purchase of a product

Scale Items
To buy _____ I am willing to save part of my income
To buy _____ I give up activities that bring me pleasure
To buy _____, I change my shopping routine to save money

The results of this paper have practical implications for retail, insofar as the scale can be used to measure the sacrifice performance by clients, thus facilitating the development of actions that may reduce the possible perceived negative effects of the sacrifice act and reinforce the positive ones. In the current economic scenario, with scarce resources, wants and needs of consumers are often translated into a sacrifice to buy, which, among other things, impairs the buyer's income, producing reduction or elimination of consumption of other items: it is a trade-off where cognitive and emotional aspects are present.

It can be considered that when it occurs to the extreme, such aspects produce negative factors for the consumer, their families and even for the economy. Thus, the monitoring of sacrifice for purchase becomes an important element, since there is a strong appeal of consumption, generating the need for an instrument, rigorously developed and validated, as presented in this study.

In academic terms, the proposition of a scale for measuring sacrifice for the purchase of products already constitutes a relevant contribution, since it was not identified in the literature an instrument with such characteristics to measure an act so common in current times. Developing a measurement method for the purchase sacrifice also contributes to the encouragement of studies focused on the central construct of this paper, helping to strengthen and expand the applicability of sacrifice in different perspectives and spaces of consumption.

Even with possible contributions presented on this article, some limitations were identified during the study. In particular, the fact that the proposed scale has been tested with a single product. Although this is not a major problem, it is recommended that academic efforts be undertaken to validate the scale involving goods, services and consumption experiences.

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