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Unplanned Purchase and Personal Debt: A Relation Analysis

Compra não Planejada e Endividamento Pessoal: Uma Análise de Relação

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Abstract

Literatures on impulse purchasing and indebtedness have been studied separately for decades, mainly in studies in the areas of marketing and finances. Thereby, this research proposes a multidisciplinary study amidst the phenomenon that is impulse purchasing and personal debt. Therefore, the central objective of this study was to identify if there is a relation between impulse purchasing and personal debt within traditional retail. To reach this objective, a quantitative research was conducted, descriptive, cross-sectional and survey type. The sample contemplated 435 customers in a store. The data were collected in the environment of a shoe retail store in the country side of Espírito Santo - Brazil. The relations between variables were analyzed by the means of a multiple regression. The results showed evidence that, to the respondents, impulse purchasing can affect their income, but personal indebtedness is not necessarily prevenient from unplanned purchase.

Keywords: Impulse Purchasing; Consumer Behavior; Purchase Decision Process.

Resumo

A literatura de compra por impulso e endividamento vem sendo estudada separadamente por décadas, principalmente em estudos na área de marketing e finanças. Sendo assim, esta pesquisa propõe um estudo multidisciplinar entre os fenômenos de compra por impulso e endividamento pessoal. Logo, o objetivo central deste estudo foi identificar se há relação entre a compra por impulso e o endividamento pessoal no varejo tradicional. Para alcançar esse objetivo, realizou-se uma pesquisa quantitativa, descritiva, com corte transversal e do tipo Survey. A amostra contemplou 435 clientes de uma loja. Os dados foram coletados no ambiente de uma loja varejista de calçados no interior do Espírito Santo - Brasil. As relações entre as variáveis foram analisadas por meio de regressões múltiplas. Os resultados apontaram evidências de que, para os respondentes, a compra por impulso pode comprometer sua renda, mas não necessariamente o endividamento pessoal é proveniente da compra não planejada.

Palavras-chave: *Compra por Impulso; Comportamento do Consumidor; Processo de Decisão de Compra.*

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Introduction

Purchase decision process presents divergences in the way this topic is approached. When analyzed on the economic theory optic, the consumer purchase decision process is understood in rational way. In this sense, consumer choice will result in a utility function, originated from a mix of the involving attributes of a given purchase situation, and the purchase option will be accomplished considering an analysis aiming to the maximum utility, as well as the consumer's well-being (HALL; LIEBERMAN, 2003).

Concerning a previous process before the purchase, in a similar way, one of the marketing approaches defends that purchase decision originates from a process involving some steps, such as, problem recognition, search for product information, analysis of the available alternatives, purchase decision and, finally, evaluation after purchase (BLACKWELL *et al.*, 2005; KOTLER; KELLER, 2006).

On the other hand, still in this context of analyzing the consumer purchase decision process, there are specific conditions that may cause unplanned purchase, associated to a strong desire in consuming, followed by pleasant sensations and slow cognitive control, what is named as impulse purchase (BILLIEUX *et al.*, 2007). This phenomenon is characterized when the consumer needs a certain product immediately, and cannot wait for it and does not evaluate the consequences of this kind of consumerism in long-term basis. However, this can cause a lack of control in the moment of purchase, resulting in acquisition of products and services without needing them (MUELLER *et al.*, 2011).

Similarly, the consumerism of goods and services many times implies consequences, such as the increase of personal debt. Debt has been approached by researchers of economic trend (EINSTEN; HONCH, 2007; GLICK; LANSING, 2010; Lee, 2011), and a great deal of the studies approach the antecedents and determinants of debt, verifying its relation with socioeconomic and demographic variables, as well as macroeconomic ones, such as, inflation, taxes, income, interest rates (PAKER, 2000; ERASMUS; MATHUNJWA, 2011).

Other researchers like Livingstone and Lunt (1992), Stone and Maury (2006) and Nepomuceno and Laroche (2015) stated that personal debt should be understood in

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an interdisciplinary way and not only in economic basis; actually these authors defend that variables like psychological and sociological factors, values, situational factors should be taken into consideration in the process of studying such phenomenon.

Considering the theories previously mentioned and the context of impulse purchase, the process of purchase decision can be considered beyond the traditional steps and processes of decision making, and those traditional models get restrained and limited when analyzed in the field of unplanned purchase. Recent studies on this subject (SALEH, 2012) bring new contributions about the consequences of how impulse purchase can cause to consumers, such as, the existence of negative effects after an impulse purchase. Taking into consideration the identification of the existence of the effects after an impulse purchase, personal debt has been seen as a possible effect related to impulse purchase in traditional retail market. In this sense, this research work aims at identifying the relation between impulse purchase and personal debt in traditional retail market.

Despite this topic has been investigated worldwide by scholars from marketing area (ROOK; FISHER, 1995; YOUN; FABER, 2000; VOHS; FABER, 2007; MUELLER, et al., 2011; BOONCHOO; THOUMRUNGROJE, 2017; BELLINI; CARDINALI, 2017), there is still a limited number of studies conducted in emerging markets. Therefore, it is quite relevant the study of such topic in order to understand better the relation between the ambience of retail shops and the act of unplanned purchases in an environment where both consumerism and credit has increased significantly. Besides, the study of such phenomenon propels conditions to analyze consumers purchase profile, offering possibilities to the companies in the use of more adequate marketing strategies to their target, helping in this way the managerial decision making in enterprises.

The structure of the present article is as follows: after this introduction, there is a theoretical review on the literature concerning impulse purchase, personal debt and study hypothesis. Then, the methodological procedures, analysis and results and finally the conclusions, implications of this research work and suggestions for further studies.

PUC-SP

Impulse Purchase

Aiming at providing better comprehension on impulse purchase as a phenomenon, impulsiveness can be defined as the absence of reflection between a stimulus (generated, for example, by the environment in which the individual is inserted) and the response of the individual (DOOB, 1993). In this sense, Rook & Fisher (1995, p. 306) defined impulse purchase as "the tendency of the consumer in buying spontaneously, without thinking deeper about it, in a immediate way."

Therefore, impulse purchase differs from the other ways of buying, but the speed in which the consumer decides do purchase a good or service, and the quick decision leads to a more frequent number of decisions based in impulse purchase (GERBING, AHADI; PATTON, 1987; BARRAT; PATTON, 1993).

The present study discusses the unplanned purchase as a synonym of impulse purchase, in which the acquisition of a certain good is decided inside a store, without having previously identified the actual need of purchasing that product or service (ROOK, 1987; BEATTY; FERREL, 1998; YOUN 2000). In this study, the factors that influence the phenomenon of impulse purchase were arranged into three large groups: the first group consists of specific/behavioral factors of each consumer and is composed of determinants like mood swings, inner levels of impulsiveness, altered emotional state, personality traits, psychological conflicts and so on. (HOCHE; LOEWENSTEIN, 1991; ROOK; FISHER, 1995; BEATTY; FERREL, 1998; HAUSMAN, 2000; DHOLAKIA, 2000).

The second group is about the influence of external or environmental and situational factors in impulse purchase, such as, merchandizing actions in the point of sale (promotions, ads, promotional gifts, prize draws) as well as environment influences as stimuli for purchase, like nice atmosphere of the shop, pleasant odors, agreeable music and also the influence of cultural factors. All those elements can determine the characterization of the phenomenon of impulse purchase (ROOK; GARDNER, 1993; YOUN; FABER, 2000; EROGLU; MACHLEIT; DAVIS, 2001; SHIV; FEDORIKHIN, 2002; FATHI; BUDIONO, 2015).

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The third group focuses the influence of technological innovations in impulse buying. Such innovations provides an approximation between the firms and consumers, aiming at rising the frequency of such phenomenon. As examples of technological innovations we can mention the convenient stores operating 24 hours a day, specific TV channels for product selling, e-commerce, credit facilities, access to credit cards etc. (LEHTONEN, 2000; JONES et al., 2003; VOHS; FABER, 2007; WU; CHEN; CHIU; 2016).

According to Pelau (2012), consumers purchase by impulse because they have forgotten to plan the future in long term basis and understands consumers "have forgotten" the use of their rationality in the moment of buying. In another study, Mihic and Kursan (2010) tested empirically the correlation between situational and environmental factors and the behavior of impulse purchase and their findings state how promotional activities, empathy and the ability of sale team, as well as shop location, odor attractiveness actually stimulated impulse purchase by the consumers in the analyzed sample.

Other scholars approached not only the impulse purchase determinants but also some possible consequences generated by such phenomenon (ROOK; FISHER, 1995; SALEH, 2012). As previously described, because it is a fast decision process, with low cognitive ane evaluative control of the consequences in long-term basis, impulse purchase can cause risks to the individual (ROOK; FISHER, 1995). Thus, there is a rich study field on impulse purchase and its relation to several sorts of analysis in marketing research. Nevertheless, despite the existent synergy, the interactive study between impulse purchase and personal debt is still limited in both national and international academic production.

The Debt

Due to the fact it is a relevant topic for the contemporary days, personal debt has been approached by different authors (NEPOMUCENO; LAROCHE, 2015; WALTER et al., 2015). In a summarized way, Chawla e Uppal (2012) defined debt as resulting from creditors and debtors, predicting the amounts, debts, deadlines and obligations.

Regarding personal debt (and not corporate debt), the lifetime cycle theory (MODIGLIANI; BRUMBERG, 1954) along with the permanent income hypothesis (FRIEDMAN, 1957) play an important role to understand this kind of phenomenon. Both theories are related to macroeconomic models and sustain the consumer's rationality and also that the individual's income rises gradually throughout the time, passing by a phase of restrained income to a financial wealth accumulation by the time of retirement.

Considering the explanatory variables related to debt, aspects like gender, ethnicity, educational level, access to number of credit cards a person, mortgage renegotiation, family history and so on were approached in different studies in the area (LIVINGSTONE, 1992; TOKUNAGA, 1993; NORUM, 2008; FOSCHT et al., 2010). Among the macroeconomic variables, there is inflation, taxes, income, interest rates that enable the understanding of determinants of rising of debt levels in the families (PARKER, 2000).

Livingstone & Lunt (1992), by their turn, argued that personal debt must be discussed in an interdisciplinary way, using a mix of subjects related to applied Social Sciences and not only the traditional economic approach. The authors claim that is necessary to consider the economic effects (like the ones propelled by income), but also some determinants like lifetime cycle models, social rules, psychological and sociological factors, attitudes, values and others. The empiric results of the study carried out by Stone e Maury (2006) corroborate such statements and reinforce that financial factors, as well as situational and psychological ones impact the use of income and generation of debt. Nepomuceno & Laroche (2015) observed in their research work that materialism correlates positively with personal debt.

Concerning the relationship between marketing and personal debt, Baker & George (2010) concluded that there are results indicating that exposure to TV ads rises the inclination to look for bank loans in order to consume and get personally in debt, emphasizing that mass media impacts family debts.

Cynamon & Fazzari (2008) sustain that product innovation as well as how social reference groups may influence and be determinant to the increase of personal debt. It is important to reinforce, however, that personal debt in the present study was taken as the

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process of cumulative debts in short-time basis, resulting from consumerism of goods available at most retail shops, such as, outfits, shoes and alike.

Study Hypothesis

By the analysis of the theoretical studies previously described here, it is possible to see that demographic variables (i.e. age, gender, family size, education) and economic factors (income, employability, risk, interest taxes) are related to personal debt levels as shown by Campbell (2006). However, this is a still low explored and incomplete field in terms of knowledge. Personal debt, for the context of the present study, was focused under marketing point of view, specifically in one of the most frequent practices in the process of consumer purchase decision making in retail market: impulse purchase. Thus, the personal debt profile analyzed here consists of debts originated from consumerism in short period of time.

National Trade of Products, Services and Tourism Confederation (CNC, 2011) with the intent to understand and provide a profile of the personal debt of Brazilians carries on a National Inquiry about Indebtedness and Default (PEIC). A survey is applied in all state capitals in Brazil, getting data from 18,000 consumers. PEIC aims to diagnosis the consumer debt level. In June 2017, the results of this survey showed that 76.6% of family debts are generated by credit cards, followed by 15.5% from payment in installments and personal bank loan (11.1%). 58.1% of those families had insolvency in one kind of debt, while 23.5% had bills or debts unpaid and 9.1% stated having no financial resources to pay their debts.

Therefore, the efforts employed in this study aimed, primarily, to identify the relation between the unplanned purchase in traditional retailers and its impact in personal debt. According to Ottaviani & Vandone (2011) and Pelau (2012) the allegedly rational size often indicates that consumers still purchase paying in installments even if they are with restrained income. Such observations worked as starters in this research work, and there are a few studies focusing the consumer behavior in terms of his/her difficulties in evaluating the consequences of their own purchase decisions. In this sense, Saleh (2012), Rook (1987) e Hoch e Loewenstein (1991) analyzed the impulse purchase

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and the post-purchase effects. In this research work, the rise of personal debt has been considered one of these probable effects. Then, it was analyzed the relation between impulse purchase and income reduction and personal debt. Thus, the research hypotheses are as follows:

H1: Impulse purchase is positively related with income reduction due to personal debts.

H2: Unplanned purchase is one of the factors composing an individual's personal debt.

Methods

In order to fulfill the objective proposed for this study, a quantitative, descriptive and cross-sectional survey was carried out. The population of this study consisted of individuals who declared purchasing from retailers. The choice for this sector was based in the fact retailers are very representative in Brazilian scenario. For example, the tissues, clothing and shoes trade generated in 2014 a net sales income of R$ 18,4 billions (IBGE, 2014). In this way, as representatives of this population and due to its relevance in shoes sector, the sample of this research was composed of customers who purchase shoes from retailers located in the state of Espírito Santo, Brazil.

A shoe store was chosen to compose the sample, and this shop is frequented by consumers from classes B and C. The researcher was formally authorized to interview the customers. Concerning the treatment of quantitative data, this was adjusted from a sample composed of customers selected in a non-probabilistic manner, that is, by convenience.

The technique used to data collection was based in a structured questionnaire, composed by three groups, as presented in Table 1.

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Table 1 – Questionnaire Structure

Group	Construct	Proxy
Group 1	Impulsiveness Scale	EI1 – Impulse Purchase
Group 2	Indebteness Scale	EE1 – Income commited by debts
		EE2 – Use of the credit card for purchase in installments
		EE3 –Bringing credit cards
		EE4 – Full payment of credit card bill
		EE5 – Having gotten a bank loan
		EE6 – having many installments to be paid
		EE7 – Payment using a bank check with a previous date
		EE8 – Purchase now, think about it later.
		EE9 - Budget committed because of debts
		EE10 – Having debts because of lack of planning
		EE11 – Despite having personal debts, the person keeps purchasing
		EE12 - Having delaying debts
		EE13 - Debts are often paid with a delay
		EE14 – I have often debts to be paid.
Group 3	Sample Characteristics	Gender
		Age
		Civil Status
		Family Income
		Education
		Employed or unemployed

Source: Elaborated by the authors.

The first group treated the phenomenon of impulse purchase having one generic question, in order to measure the level of impulsiveness in the purchase of each customer, based in a scale of impulsiveness developed by Rook e Fisher (1995).

The second group englobed the personal or family debt according to the National Inquiry on Indebtedness and Default (CNC, 2011). The scale that measured the indebtedness level in this study was the same one used by PEIC, but it was adapted and revised by an expert in the area of marketing. This scale involved 14 statements, described as follows: 1 concerning committed income with debts in general; 1 generic question aiming to verify the frequency of the interviewees debts and 12 statements describing the most responsible for indebtedness and consumerism among the interviewees, that is, credit cards, using checks with anticipated dates to be paid in the future, payment in installments, payment of the credit card bill, personal bank loan, acquisition of goods without previous planning, delaying in paying debts, paying debts and keeping purchasing using credit even being in debt. The third group represents the sample.

All statements from groups 1 and 2 were structured according to an agreement scale, from 1 to 5, which varied from I totally disagree to I totally agree, apart from the statement "committed income with debts" – EE1 – which got the following scale: 1 – none, 2 – a little; 3 – fair; 4 – considerably and 5 – highly.

A pre-test of the questionnaire was applied with a sample of 20 respondents (consumers who claimed purchasing shoes regularly), in order to validate the questionnaire's content. This pre-test was performed in May 2013. A positive result was obtained from the respondents, without any record of difficulty in interpreting or understanding the questions by the respondents, which enabled the start of data collection.

Data collection was performed in a shoe's store. The customers were approach randomly without a profile definition. The average time for response to the proposed questionnaire was approximately eight minutes by each customer and his/her participation was considered valid only after responding to all the questions. The responses were obtained confidentially and the process was explained individually to all customers who entered the store in the determined period. The data collection period started on May 10th and finished on May 26th, 2013, totalizing 435 valid responses.

The analysis of data was performed with a sample characterization and multiple linear regression analysis. In order to meet the declared objective of this study, two multiple linear regressions were performed, where the first one had as dependent variable "committed income with debts" – EE1, and the independent variables were the generic variable representing impulse purchase (impulse purchase – EI1) and other 12 variables (see table 1) describing the indebtedness according to CNC (2011). The second model of multiple linear regression used as dependent variable the statement "I often have debts to be paid – EE14" and the other 13 were statements used as independent variables.

Analysis and Results

Sample Characteristics

In the analyzed sample the following aspects were observed: most part of the interviewees were female, single, high school incomplete level, age varying from 25 to 29 years old, 90% were employed, 30% had an estimated salary around R$2,000.00, 38.85% do their purchases every three-month period and 70% of the sample do their purchases alone.

Therefore, this sample can be described as being heterogeneous, validating the collected sample, that is, there are no tendencies or majorities that might invalidate data. Thus, the sample is not classified in terms of social class, income, age and gender enabling a generic analysis and not of a determined group.

Multiple Linear Regression

In order to answer the hypothesis elaborated for this study, as data analysis technique, a multiple linear regression was performed. Firstly, conditions to use multiple linear regression were verified to validate its use. The conditions were: (1) Linearity; (2) Normality of Distribution of Residuals; (3) Homoscedasticity Principle or constant variances; (4) Multicolinearity between the explanatory variables.

Thus, as a way to check linearity, it was verified the existence of linear relation between the variables of the studied constructed. The normality of distribution of residuals was verified by a standardized residuals graphic and by Kolmogorov-Smirnov Test. Homoscedasticity principle or constant variance was checked in the graphic of dispersion of standardized residuals, by which it was possible to verify a constant variance of random distribution of residuals.

At last, multicollinearity was identified by the analysis of variance inflation factor (VIF). According to Hair *et al.* (2006), the maximum value accepted for VIF is 5.0, meaning that values over 5.0 would sign problems with multicollinearity. In tables 2 and

4, it is possible to notice that all VIF show values under 5.0, therefore, no problems with multicollinearity were identified. Thus, it was validated the use of multiple linear regression.

Next, the results of the two models of multiple regressions analyzed the relation between "debts" and "impulse", in order to test the two hypothesis of this research (H1: impulse purchase is positively related to committed income; H2: Unplanned purchase is one of the responsible factors that form the respondent's personal debt).

The first hypothesis (H1) was tested by the use as dependent variable the first generic question representing debt "committed income due to debts" (EE1) and as independent variables, the generic question of the construct impulsiveness "impulse purchase" (EI1) and other 12 statements (EE2 to EE13) representing debt according to the data disposed by PEIC (2011). Thus, the following results are displayed in Tables 2 and 3.

Table 2. Multiple Regression – Dependent Variable "Committed income due to debts" – EE1.

Model	R	Square R	Adjusted Square R	Standard Error	Statistics			
					F	gl1	gl2	p-valor
1	0.703	0.495	0.479	0.790	31.721	13	421	0.00

a. Predictors: Constant, EI1 – Impulse purchase, EE2 – Purchase paid in installments in credit cards, EE3 – Carrying credit cards, EE4 – Payment of the Credit Card Bill, EE5 – Having a bank loan, EE6 – Having installments to be paid, EE7 – Payment using current account check with a postponed date, EE8 – Purchase now, think it over later, EE9 – Budget commitment due to debts, EE10 – Having debts do to lack of planning, EE11 – Even in debt, I keep purchasing, EE12 – Having debts in delay, EE13 – Paying debts with delay.

b. Dependent variable: EE1 – Income committed due to debts

Value tests:

- ANOVA: significative
- Linearity.
- Normality - Kolmogorov –Smirnov Test
- Homoscedasticity or constant variance.
- Multicollinearity.

Source: Research Data.

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Based on information displayed by table 1, it can be verfied that R^2 value, which is explained by variables EI1, EE2, EE3, EE4, EE5, EE6, EE7, EE8, EE9, EE10, EE11, EE12, EE13, consists of 49.5% of the proposed model, that is, such variables explain 49.5% of the itens that compromise income with debts.

Table 3. Estimated coefficients to the dependent variable "income committed due to debts" – EE1

Model		Non Std coefficient		Std. coefficient	t	p-valor	VIF
		B	Std. Error	Beta			
1	Constant	0.459	0.242		1.895	0.059	
	EI1 – Impulse Purchase.	0.076	0.034	0.100	2.253	0.025	1.642
	EE2 – Purchase paid in installments in the credit card	0.114	0.028	0.167	4.006	0.000	1.452
	EE3 – Carrying credit cards.	0.045	0.032	0.063	1.391	0.165	1.696
	EE4 – Payment of the credit card bill.	-0.065	0.040	-0.061	-1.613	0.107	1.191
	EE5 – Having a loan.	0.052	0.030	0.062	1.723	0.086	1.093
	EE6 – Having installments to be paid	0.193	0.034	0.273	5.689	0.000	1.916
	EE7 – Payment with current account check with a future date.	0.082	0.033	0.098	2.501	0.013	1.290
	EE8 – Purchase now, think it over later..	0.012	0.032	0.015	0.359	0.720	1.485
	EE9 – Budget committed due to debts.	0.121	0.051	0.144	2.357	0.019	3.108
	EE10 – Being indebtedness due to lack of planning.	0.028	0.058	0.031	0.481	0.631	3.502
	EE11 – Even with debts, keep purchasing..	0.068	0.035	0.104	1.936	0.054	2.406
	EE12 – Having delaying debts.	0.174	0.050	0.148	3.487	0.001	1.499
	EE13 – Paying debts in delay.	-0.021	0.027	-0.035	-0.773	0.440	1.722

Source: Research data.

The results displayed in table 3 indicate a significative model in 5% level to the variables: "impulse purchase" – EI1, "purchase in installments using credit card" – EE2, "having installments to be paid" – EE6, "payment using current account check with a postponing date" – EE7, "budget committed due to debts" – EE9 and "having debts in delay" – EE12. Such results corroborate the existence of possible implications or impulse purchase, as identified by Rook (1987), Hoch & Loewenstein (1991) and Saleh (2012).

In a similar way, the first adjustment to the model provided evidences that according to the customers of the shoe store, impulse purchasing may compromise income of the interviewee in paying debts. Simultaneously, the results show that paying for the shops in installments by the use of credit cards or paying using current account checks with previous date agreement (the person agrees with the the shop the best date to deposit the check, so the date is not the present one) and compromising the personal budget can also compromise budget with debts. Therefore, the first hypothesis of the present research (H1: *impulse purchasing is positively related to compromising income to debts*) was supported according to the findings and results.

In order to test the second hypothesis (H2), the second multiple regression assumed as dependente variable the second generic variable of the construct referring to indebtement ("I often have debts to be paid – EE14) and as independente variables it has been kept "impulse purchasing" (EI1) and as independent variables, adding these ones to the 12 variables related to debt according to CNC (2011). The regression showed results that can be observed in tables 3 and 4. In table 3, it can be observed by R^2 that variables (EI1, EE2, EE3, EE4, EE5, EE6, EE7, EE8, EE9, EE10, EE11, EE12, EE13) explain 63% of the proposed model.

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Table 4. Multiple Regression – Dependent Variable "I often have debts to be paid" – EE14.

Model	R	R^2	Adjusted R^2	Std Error	Statistics			
					F	gl1	gl2	p-valor
2	0,793	0,630	0,618	0,896	55,053	13	421	0,00

a.Predictors:Constan, EI1 – Impulse purchasing, EE2 – Shops in installments using credit card, EE3 – Carrying cards, EE4 – Credit Card payment, EE5 – Having personal loan credit, EE6 Having installments to pay, EE7 – Payment using pre-date agreement using current account check, EE8 – Purchase now, think it over later, EE9 – Compromising budget due to debts, EE10 – Being in debt due to lack of planning, EE11 – Even with personal debts, I keep purchasing, EE12 – Having debts in delay, EE13 – Payment of debts in delay.

b. Dependent variable: EE14 – Having debts

Tests:

- ANOVA: significance
- Linearity.
- Kolmogorov –Smirnov Test
- Constant variance.
- Multicolinearity.

Fonte: Research data.

Table 5. Estimated coefficients to dependent variable "I often have debts to be paid" – EE14.

Model		Non-standard Coefficient		Standard Coefficient	t	p-valor	VIF
		B	Std. Error	Beta			
2	Constant	-0,494	0,274		-1,801	0,072	
	EI1 – Impulse purchase	0,024	0,038	0,024	0,621	0,535	1,642
	EE2 – Shops paid in installments in credit cards.	0,096	0,032	0,106	2,964	0,003	1,452
	EE3 – Carry credit cards.	0,064	0,037	0,068	1,764	0,079	1,696
	EE4 – Paying the credit card bill.	0,091	0,045	0,065	2,013	0,045	1,191
	EE5 – Having a bank loan.	-0,017	0,034	-0,016	-0,506	0,613	1,093
	EE6 – Having installments to be paid.	0,267	0,038	0,286	6,954	0,000	1,916
	EE7 – Paying with check with a postponing date.	0,123	0,037	0,111	3,292	0,001	1,290
	EE8 – Purchase now, think it over later.	-0,020	0,037	-0,020	-0,542	0,588	1,485
	EE9 – Budget commited with debts.	-0,034	0,058	-0,030	-0,575	0,566	3,108
	EE10 – Having debts due to lack of planning.	0,304	0,066	0,257	4,635	0,000	3,502
	EE11 – Even with personal debts, the consumer keeps purchasing things.	0,103	0,040	0,119	2,593	0,010	2,406
	EE12 – Having acumulated debts.	0,044	0,057	0,028	0,775	0,439	1,499
	EE13 – Paying debts that are delayed.	0,217	0,031	0,274	7,039	0,000	1,722

Source: Research data.

The results of the second regression (see table 5) reveal a significant model in level 5% to the following variables: "purchase in installments in credit card" – EE2, "payment of the credit card bill" – EE4, "having installments to be paid" – EE6, "payment with current account check with a postponing date" – EE7, "having debts due to lack of planning" – EE10, "even in debt, I keep purchasing" – EE11, and "payment of debts in delay" – EE13.

The first model supported hypothesis H1, stating that impulse purchasing is positively related to compromising the individual's personal income to debts. Besides impulse purchasing, it can be verified that payment of installments using credit card, pre-dated current account checks, paying debts in delay also compromise an individual's income to debts payment. According to the perception of the interviewees, the mentioned variables compromise their income.

The second model brought evidences that (according to the interviewees) the composition of debt is not perceived as originated from unplanned purchasing, that is, having debts to be paid is not exactly from an impulse purchase event. Thus, the second hypothesis of this study (H2: unplanned purchase is one of the responsible factors composing the respondent's indebtedness) was rejected.

As a complement, the results of the second regression point to evidences of shops paid in installments using the credit card, the full payment of credit card invoice, payment using pre-date current account checks, lack of planning, the persistence of purchase even being in debt, and payment of delayed debts can be the components of individuals indebtedness.

So, according to the answers provided by the interviewees and from the proposed hypothesis, it is possible to realize that personal indebtedness may be associated to prompt assessment to credit, as well as, payment options like installments (using credit cards), pre-dated current account checks, along with lack of planning that might influence the personal indebtedness.

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Conclusions

This research work aimed at identifying the relationship between impulse purchasing and personal indebtedness in traditional retail market. In order to fulfill this objective, two hypothesis were proposed, being the first one (H1) supported in this study, so, impulse purchasing is positively related to income compromising with debts. The second hypothesis (H2) was rejected, that is, unplanned purchasing does not tend to be part of the responsible factors for an individual's indebtedness. Therefore, it is possible to conclude that by using multiple linear regression that impulse purchasing might compromise the income of the interviewees with debts, but not necessarily the unplanned purchase causes a personal indebtedness.

This research work provided some academic contributions concerning the study of impulse purchasing and personal indebtedness in Brazil, providing evidences to anyone who dedicate himself/herself to marketing studies, such as, how customers tend to get personal indebtedness not exactly due to impulse purchasing but because of the facilities of credit assessment, which might be a cause of a possible rise in personal indebtedness.

Regarding management, this study enabled the identification of the profile of the analyzed consumers, his habits, his relationship to indebtedness and aspects related to the way people get more debts. Such managerial information may be determinant to corporations in a way they can review their sales strategies, aiming to get more competitive advantages comparing to its competitors.

However this study has got some limitations. The first one is related to the fact the survey was carried out with customers of a single store, so it as sample by convenience. Thus, as a suggestion for further studies, it is recommendable the research is conducted in more stores, sectors and regions. It is also important that further studies consider longitudinal inquiries in order to diminish the macroeconomic effects. Another suggestion is the analysis of the facilities to credit assessment and how this can influence the personal indebtedness and the impulse purchase.

Finally it can be verified from adjusted R^2 values that model 1 explained 47.9% of the income compromising with debts. However, the second model explained 61.8% of the variables composing the individual's indebtedness. Based on the explanatory power

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of the proposed models, it has been concluded that other variables also explain the phenomenon. Thus, it is suggested that future studies identify in the literature other variables that might be determinant to explain this phenomenon.

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