

Analysis of impulse buying and its relationship with psychological variables in a sample of population from the South of the State of Sonora

Análisis de las compras impulsivas y su relación con variables psicológicas en una muestra de habitantes del Sur del estado de Sonora

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Abstract	Resumen
<p>The purpose of this proposal is to analyze the behavior towards impulse purchases and its relationship with psychological variables in a sample of the inhabitants of the city of Navojoa, Sonora, this study was born from the historical analysis of consumption, an analysis was carried out to contrast the hypotheses proposed, in addition the most significant correlations were sought and an analysis was made through the Statistical Package for Social Sciences (SPSS) program. This in order to identify the factors that affect the impulses towards purchase, its influence with gender, in order to identify with the support of the literature the psychological causes that could affect consumer behavior. The results indicate that self-esteem is significantly linked to impulse purchases, a low level of self-esteem implies making impulsive purchases more frequently, in this sense there are no significant differences by age or gender.</p>	<p>La presente propuesta tiene por objeto analizar el comportamiento hacia las compras impulsivas y su relación con variables psicológicas en una muestra de los habitantes de la ciudad de Navojoa, Sonora, este estudio nace del análisis histórico del consumo, se llevó a cabo un análisis para contrastar las hipótesis planteadas, además se buscaron las correlaciones más significativas y se hizo un análisis a través del programa Statistical Package for Social Sciences (SPSS). Esto con el fin de identificar los factores que inciden en los impulsos hacia la compra, su influencia con el género, para de esta forma identificar con el apoyo de la literatura las causas psicológicas que pudieran afectar el comportamiento del consumidor. Los resultados apuntan que la autoestima está ligada significativamente a las compras impulsivas, un nivel bajo de autoestima conlleva a realizar compras impulsivas con mayor frecuencia, en este sentido no existen diferencias significativos por su edad o sexo.</p>
Impulse Buying, Self-Esteem, Materialism	Compras Impulsivas, Autoestima, Materialismo

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Introduction

Studies of impulse buying are necessarily based on the historical analysis of consumption. That said, the economic-social strategies adopted by various countries in response to this fact have led to a great deal of research into the different manifestations that consumers assume in the face of the phenomenon of consumption.

Veblen's classic model of economics (1899/1979) provides a historical background on purchasing. This model explains the purchase phenomenon based on the Price - Demand relationship, i.e., a decrease in price leads to higher demand. However, there are cases in which there is no such direct relationship, such as, for example, the theory of Conspicuous Consumption. This theory states that there are situations in which consumers are attracted to expensive products in order to show and demonstrate their wealth. Therefore, there will be a direct relationship between wealth and conspicuous consumption (Luna, 1998).

This urge to buy can lead to serious problems and become a real nightmare when it becomes addictive and causes indebtedness. Compulsive purchases, also called abnormal acquisition disorder, lead to the acquisition of unnecessary things, with severe economic repercussions, serious family/labor crises or legal problems that can cause difficult situations. The compulsive action is directly related to self-esteem, as it tends to improve the mood, but this mood will be temporary, it is interesting to understand that these are situations that are fixed from within people, hence it is considered a disorder. Although the cost of compulsive shopping disorder has never been calculated, it is estimated that impulse buying manages more than \$4 billion in annual purchases in North America (Kacen & Lee, 2002).

Since the middle of the last century, interest in impulse buying behavior began to emerge. Early work focused primarily on decision making in a purchase context and how the environment stimulated unplanned purchases (Sarabia Sanchez & Schmidt, 2004). One of the first authors to address impulsivity in purchasing was Rook (1987), who defined it as a strong feeling of irresistible urgency, without conscious planning. This impulsivity is difficult to resist and control, as it allows the experience of anticipated pleasure.

Subsequently, Rook and Fisher (1995) suggest that impulsive behavior can be associated both with negative behavior (primitive, immaturity and even stupidity), leading to negative consequences in the financial field and also in personal aspects, being associated with low self-esteem; as well as with situations in which impulsivity is seen as neutral or in a favorable way according to the point of view of the social norm, for example, deciding to buy something impulsively for a two-for-one offer or buying a gift on impulse because a friend is ill. In an era of consumerism, it is of interest to study impulse buying, taking into account that stimuli from the immediate context can be conducive to impulse buying. From market sectors, understanding such a phenomenon favors the promotion of impulse buying. In an era of consumption, it is of interest to study impulse buying, taking into account that the stimuli of the immediate context can be conducive to impulse buying. In this regard, Rook (1987) pointed out that most shoppers had strong impulse buying tendencies, influenced by innovations in the market, credit cards, store sales, store opening hours, among others.

The analysis of impulse buying is becoming increasingly important today due to the following factors (Sánchez, F. J. S. *et al.*, 2004):

The rise of emotional communication: there is an increasing tendency on the part of companies to carry out a type of communication that can move customers on an emotional level when making a purchase. Currently, there is more and more competition at the retail level, which leads sellers to the intensive use of emotional stimuli at the point of sale. It is very important for consumers to have a unique shopping experience, and to achieve this, brands must first persuade customers to buy their products or visit their physical store or website, often through the use of emotional marketing stimuli. Thus, within the shopping environment, it is common to use elements in the place of sale such as the internal decoration, the smells, the intensity of the light, the music, the organization of the store or the attention perceived by the customer. The emotions derived from the consumer's exposure to such stimuli in the shopping environment, together with underlying psychological factors, have been positively related in the scientific literature to impulse buying behavior (Rook and Hoch, 1985; Rook, 1987).

There is an increase in the degree of materialism in society, which leads to consumers increasingly needing material goods to feel good, which can lead to insufficiently deliberate purchases and an imbalance between spending and income.

Some authors mention the relationship between impulse buying and regret, which is conceived as a combination of cognitive and affective components of impulse buying and, within this framework, they understand regret. In this sense, Verplanken and Herabadi (2001) develop a general measure of impulsive buying tendency that includes both cognitive aspects, such as the absence of planning, and affective aspects, including regret.

The authors point out that regret can be an emotional response that can occur after an unplanned purchase is made in this sense in a study conducted by Rodriguez, Saucedo, Hernandez and Gutierrez (2016), which aimed to identify compulsive buying behavior among men and women in Saltillo, Coahuila it was found that women show a more compulsive attitude when making unnecessary purchases, out of their budget, but that brings happiness unlike men, this addiction becomes in the short term in a pathological disorder.

In this sense in a study conducted by Rodriguez, Saucedo, Hernandez and Gutierrez (2016), which aimed to identify compulsive buying behavior among men and women in Saltillo, Coahuila it was found that women show a more compulsive attitude when making unnecessary purchases, out of their budget, but that brings happiness unlike men, this addiction becomes in the short term in a pathological disorder.

In this sense, it is proposed to analyze the internal factors that influence impulsive buying behavior. That is to say, to analyze the personal variables: age, gender and degree of materialism, and the psychological variables: emotional stability and level of self-esteem.

H1: There are significant differences in impulse buying behavior between men and women.

H2: There is a negative relationship between the level of self-esteem and the impulsive buying behavior of consumers.

Methodology

This study is quantitative in nature and for the contrast of hypotheses an ANOVA analysis and correlations were carried out through the Statistical Package for Social Sciences (SPSS) program.

An instrument constructed by González, Apaolaza and Hartmann (2019) was selected which is divided into 4 variables: Impulsivity in shopping, emotional stability, self-esteem and materialism, with Likert-type scale from 1 to 7, where 1=strongly disagree and 7=strongly agree, based on the following scales respectively: the Impulsive Buying scale by Rook and Fisher (1995), the Emotional Stability scale by Gosling *et al.* (2003), the Rosenberg Self-esteem scale (Pullman *et al.*, 2000) and Richins' (2004) Materialism scale.

Rook and Fisher's (1995) Impulsive Buying Scale measures the relationship between impulsive buying and consumers' buying behaviors.

Rosenberg's (1965) self-esteem scale measures the degree of respect and acceptance that people have for themselves.

The emotional stability scale of Gosling *et al.* (2003) measures the ability to socialize, openness to change, self-control and planning, agreeableness and emotional instability.

Finally, Richins and Dawson's (1992) materialism scale treats materialism as a value that influences how people interpret their environment and how they structure their lives. Richins and Dawson define materialism as "the importance attached to ownership and acquisition of material goods in achieving major life goals or desired states."

Subjects will be selected randomly and by convenience in an age range between 25 and 65 years and the selection criteria will be as follows:

- Be between 25 and 65 years of age.
- Have their own income.
- Residing in the southern part of the state of Sonora (Alamos, Etchojoa, Huatabampo and Navojoa).

- The sampling method will be by convenience, respecting the inclusion criteria.

A type of convenience sampling has been used, arbitrarily sent through google forms the link to respond through social networks, email, through networks of people in conjunction with a group of social service students. A total of 322 responded but only 280 subjects met the selection criteria, and these responses were eliminated.

The reliability analysis of the instrument was done through Cronbach's Alpha.

Results

The results of Cronbach's Alpha consistency denoted .783 which indicates that the instrument is reliable since the closer it is to the number 1, the greater the reliability of the instrument.

Seventy percent of the respondents are female and the remaining 30% are male, 51% of them have a bachelor's degree, 32% have postgraduate studies and the remaining percentage has high school and middle school, according to the level of income that ranged between \$3,312 and \$55,000 or more Mexican pesos, 35% of the subjects under study earn between \$3,312.00 and \$9,186 pesos per month, 26% earn between \$9,187 pesos and \$13,369, being the low income levels the predominant ones in the selected sample.

Table 1 presents the mean values and standard deviations for each of the items that make up the impulse buying dimension; in general terms, the level of impulse buying is average in each of the items.

	N	Media	Deviation Standard
1.1. I often buy things spontaneously.	280	4.26	1.653
1.2. I often buy things without thinking, carried away by the emotion of the moment.	280	3.89	1.903
1.3. If I see something I want, I buy it.	280	4.28	1.863
1.4. "I buy first and think later" describes me well.	280	3.22	2.000
N valid (per list)	280		

Table. 1 Descriptive statistics of the compulsive buying dimension
Source: Elaborated with own data

Table 2 shows the ANOVA model where impulse buying is related to the sex variable. Given the significance level of .781, it is established that there are no differences between impulse buying habits and gender.

	Sum of squares	gl	Mean quadratic	F	Sig.
Between groups	2.615	1	2.615	.078	.781
Within groups	9365.085	278	33.687		
Total	9367.700	279			

Table 2 ANOVA model with sex variable
Dependent variable: impulse buying
Source: Elaborated with own data

Table 3 shows the ANOVA model relating impulse buying with the variable level of schooling, obtaining a significance level of .854, which shows that there is no difference between impulse buying habits and level of education.

	Sum of squares	gl	Mean quadratic	F	Sig.
Between groups	26.360	3	8.787	.260	.854
Within groups	9341.340	276	33.845		
Total	9367.700	279			

Table 3 ANOVA model with schooling level variable
Dependent variable: impulse buying
Source: Elaborated with own data

Table 4 shows the ANOVA model where impulse buying is related to the income level variable. Given the significance level of .624, it is established that there are no differences between impulse buying habits and consumers' income level.

	Sum of squares	gl	Mean quadratic	F	Sig.
Between groups	88.401	4	22.100	.655	.624
Within groups	9279.299	275	33.743		
Total	9367.700	279			

Table 4 ANOVA model with income level variable,
Dependent variable: impulsive buying
Source: Prepared with own data

	N	Media	Deviation Standard
2.1. I would like to be able to buy more luxury items; it would make me happier.	280	3.35	1.976
2.2. I admire people who can afford expensive houses and cars.	280	4.01	2.021
2.3. I like to acquire expensive items with which I can impress and give a good image..	280	2.37	1.565
2.4. Some of the most important achievements in life include the acquisition of material goods.	280	3.99	1.845
N valid (per list)	280		

Table 5 Descriptive statistics of the materialism dimensión
Source: Prepared with own data

Table 5 shows the mean values and standard deviations for each of the items that make up the materialism dimension, the item with the highest mean response "I admire people who can afford to acquire" is at a medium level, the item with the lowest mean response "I like to acquire expensive items with which to impress and give a good image" is at a low level.

The ANOVA tables performed with the categorical variables and materialism do not indicate significant differences.

	Sum of squares	gl	Mean quadratic	F	Sig.
Between groups	79.307	3	26.436	3.132	.026
Within groups	2329.603	276	8.441		
Total	2408.911	279			

Table 6 ANOVA model with schooling level variable -
Dependent variable: Self-esteem
Source: Elaborated with own data

Table 13 shows the ANOVA model where self-esteem is related to the variable level of schooling. Given the significance level of .026 lower than .05, it is established that there are differences between the level of self-esteem and the level of schooling of the participants.

	Sum of squares	gl	Mean quadratic	F	Sig.
Between groups	85.107	4	21.277	2.518	.042
Within groups	2323.804	275	8.450		
Total	2408.911	279			

Table 7 ANOVA model with income level variable -
Dependent variable: Self-esteem
Source: Elaborated with own data

Table 7 shows the ANOVA model where self-esteem is related to the income level variable, given the significance level of .042 lower than .05, it is established that there are differences between the level of self-esteem and the level of income perceived by the participants.

Finally, Spearman's correlation analysis was carried out where the self-esteem variable was directly correlated with the self-esteem variable Sig. .049 and the other correlations were low and/or negative It is demonstrated through the ANOVA analysis that H1 is rejected because there are no significant differences between the degree of impulsive buying between men and women, i.e. the sex of the subjects is not influential for their tendency to buy.

For H2 it was found that the self-esteem of the subjects surveyed does influence their relationship with impulse buying, as well as the level of schooling associated with the subjects and self-esteem with the level of income, these results are conclusive with the findings of Henning and Prestes (2009), who found that 24.3% of impulse buying is explained by low self-esteem and materialism. In this same sense there is agreement with the study conducted by Muñoz (2019) who found that although compulsive buying is not a determinant of low self-esteem, these variables are associated, i.e. they are linked to each other.

The statement made by Kacen and Lee (2002) is confirmed, compulsive action is directly related to self-esteem, as it tends to improve mood.

Conclusions

Understanding consumer behavior allows us to analyze decision making in unplanned situations, which is crucial for decision makers in companies; however, these behaviors are often derived from personal situations, situational stimuli, intense emotions, social pressures, materialism or simply lack of self-regulation. This study shows how the self-esteem variable is influential in the level of impulsive purchases of the people surveyed, which usually has significant economic repercussions for consumers, and can lead to unnecessary expenses, debts and long-term financial problems.

Educating the population financially will allow them to make informed decisions about their purchases and with the level of indebtedness they manage as mentioned by Murillo, Acosta and Quintero (2021), but in the case of impulsivity, characteristics such as emotional intelligence and anxiety that lead to a low level of self-esteem should be addressed, Bojorquez (2021).

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