THE STUDY OF COMPULSIVE BEHAVIOR IN ONLINE SHOPPING

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Despite the prevalence of Internet in our everyday life, little is known about consumer buying behavior in on-line purchases. Moreover, consumer buying disorder (CBD), one of the new addictions of the era, is poorly researched in the Romanian literature. This study aimed at identifying whether this disorder is present among Romanian students that purchase on-line through a questionnaire applied to 100 students attending the University „Dunarea de Jos" of Galati. An analysis of the responses yields that a 13% of the studied sample indeed presents characteristics of this disorder and confirms previous global studies that the compulsive buyers are majoritarian women. This work increases our understanding of on-line consumer buying behavior and will contribute to future research on similar topics.

Key words: Compulsive Behavior, Online Shopping, marketing

1. Introduction

In today's society, shopping are not made just for the fulfillment of basic needs, like the need to eat, to drink, to be clothed, but are often carried out without planning / thinking in advance and even without a real need of purchased products or services. Compulsive buying and the motivation is often not rational, most of the time people not realizing this, especially in the context of "shopping" that has become a socially acceptable addiction. Almost 6%[29] of the American population suffers from compulsive buying behavior, but the trend is growing and this percentage could be true for Romania.

The impulsive/compulsive behavior concern increasingly more people, as demonstrated by the increasing number of studies on this topic in recent years in the international literature. Together with other pathologies such as addiction to gambling, Internet, food or sex - CBD is part of the "new addictions" which have "conquered" the world.

The purpose of this paper is to study the phenomenon from a behavioral perspective and marketing one. It aims to identify the existence of CBD in the population of students in their online buying behavior and are contributory factors: Internet using periods, personality, income etc. The study is relevant from both social and sociological point of view and in terms of online marketing.

This type of research has application both in creating a psychological-sociological pattern of the Romanian on-line consumer and in marketing study. Knowing what determines a consumer to purchase without an extended process of decision is helpful in creating promotions for online sites that sell, for example, coupons. The study also will provide a more in depth view of the online consumer purchase decision and this will serve in his typical portrait building, contributing to existing data.

Internet and new technologies have become an integral part of our lives facilitating communication, information search and purchase of any products and services. Online transactions are becoming simpler and faster and certainly have made our life easier, since only a click can bring in a few days everything we want at our door.

Therefore, the generation that grown up with the Internet - today's students as part of Generation Y[30] - is primarily at risk to develop CBD since they are most familiar with the online world than any other generation. A US study (Pastor, 2000) revealed that students spend almost 12% of their budget online.

[29] Koran LM, et al.- Quality of life for patients with obsessive-compulsive disorder- American Journal of Psychiatry; 153:783-788, 1996

[30] Tulgan B. -Not everyone gets a trophy. How to manage generation Y – 2009, Wiley Imprint 16-th january 2013 from http://www.google.ro/books?hl=en&lr=&id=zYPVuhFDahEC&oi=fnd&pg=PA1&dq=generation+Y&ots=SjKvKu3oJE&sig=okzpJvZcf_038dj3snRc-QeZIFs&redir_esc=y#v=onepage&q=generation%20Y&f=false

With this information in mind, the second part of the paper, I will discuss the new "addiction" compulsive buying behavior and online world.

2. Literature review

2.1 Compulsive buying behavior

The compulsive buying behavior is a part of "new age" addictions, but this behavior has been identified even before this. In the early XX-th century, German psychiatrist Emil Kraepelin[31] invented the term "oniomania" describing unstoppable impulse to buy.

Many authors have attempted to define this syndrome but never reached a consensus. McElroy[32] (1994) describes the syndrome as a chronic and repetitive behavior emerged as a primary response to the unfortunate events and Faber and O'Guinn[33] (1992) define the CBD as a type of inappropriate behavior, an excessive and disruptive lifestyle of people who are intrinsically determined and have the impulsive desire to buy.

2.2 Compulsive VS impulsive buying behavior

Some clarifications are necessary to understand the concept of compulsive behavior. Impulsive and compulsive behaviors, although similar, are not the same. **Impulse** purchases are determined by external stimuli - for example when waiting in line at the cashier, can add small sweets, a dose of juice or a pack of gum in your shopping cart. **Compulsive** shopping, on the other hand, are determined by internal stimuli, perhaps a feeling of unease that the buyer wants to eliminate or makes the buyer happy or feel better, etc. But immediately, after purchase, positive feelings are replaced by guilt and even depression.

2.3 Compulsive shopping and determining factors

Compulsive buyer disorder was identified in 2% of the global population and the majority of those suffering from this syndrome consists of women aged between 35 and 40, social middle classed - although the gender gap may be artificial (Guerreschi[34], 2012). Black Donald says, however, that pathology is manifested in the early age of 20 and over time "blossoming" into mature disease.

In a study conducted in 1994, McElroy concluded that most products purchased by compulsive buyers are designed to improve appearance, personal image and attractiveness and the vast majority of goods are never used and are hidden, sent as gift or thrown away.

Among the determinant factors of compulsive behavior is unhappiness. As I mentioned earlier, many people can get over the domestic, everyday problems, distress and trouble through the shopping experience, although the wellness feeling can be very ephemeral. Consequently, compulsive behavior becomes repetitive as it produces brief moments of happiness (Muredda[35], 2007). Another important role is played by contemporary society that has caused major changes in buyer behavior. Materialism is encouraged by promotional campaigns which determines people to evaluate in terms of what you have and how you look rather than their own abilities and values. For Belk (1988) the goods we own reflect and contribute to our identity in such an extent that material things become an extension of ourselves.

DeSarbo and Edwards[36] (1996) identified the following predisposing factors of compulsive buying behavior:

- Anxiety;
- Perfectionism;
- Low self-esteem;
- Imagination;
- Impulsivity;
- Search of thrills;
- Indecision;
- Dependence on other people and their opinions directly related to the searching of other people approval;

[31] Kraepelin, E. –Psychiatrie- (8th ed.). Leipzig: Verlag von Johann Ambrosius Barth, 1915
[32] McElroy S., Phillips K., Keck P. -Obsessive Compulsive Spectrum Disorder- Journal of Clinical Psychiatry, 55, 33-53, 1994.
[33] O'Guinn T.C., Faber R.J- Compulsive buying: A phenomenological exploration- Journal of Consumer Research, 16, 147-157, 1989.
[34] Guerreschi C.- Le nuove dipendenze- Società italiana di intervento sulle patologie compulsive, 2012
[35] Muredda G.M -Shopping Compulsivo e Disturbi Alimentari. Una ricerca Esplorativa- 2007 – 10th December 2012 http://www.cedostar.it/tesi/tesi_shopping_compulsivo_muredda_2007.pdf
[36] DeSarbo W.S, Edwards E.A.- Typologies of Compulsive Buying Behaviour- Journal of Consumer Psychology, 231-262, 1996

- Keeping control.

As circumstantial factors there were identified:

- confrontation avoidance - avoiding confrontation with their own problems and trying to escape from difficult situations;
- Denial - characteristic of all addicted people, compulsive buyers tend to deny they have a problem as a form of defense against stress and anxiety;
- Isolation;
- Materialism- we discussed above. Apparently, those suffering from CBD are more materialistic than the general population.

2.4 E-commerce and compulsive buying behavior

The European Commission defines online trading / e-commerce as any form of commercial transaction in which the parties interact electronically rather than by direct physical contact, and all commercial transactions carried out electronically in order to improve market effectiveness and business processes.[37]

In Romania, there are already 3000 to 4000 to 8 million Internet users and over 330,000 online transactions occur monthly in the retail sector plus utility payments through 3D secure system. In the first quarter of 2012 over 7.3 million clicks were recorded which achieved 35,000 sales (valued at 5.2 million lei) with 16,500 links, and no more than 405,000 lei in bonuses received through the 2Parale system. Other sources indicate that Tuesdays, Wednesdays and Thursdays are the days when sales are getting higher, the preferred interval for online shopping is 10.00 AM to 11.00 AM and the most expensive shopping is made between 3 and 5 PM.

Although online commerce industry is relatively a newcomer on the Romanian market and some companies are only now discovering its benefits, online shopping has a growing trend among Romanian Internet users and their behavior is less investigated.

In addition, increasingly more people globally purchase products and services, causing researchers to try to understand the expenditure style or pattern on this non-traditional channel. The number of companies who have already entered the online world is steadily increasing and they are interested in understanding how the sales volume could be increased, how to increase the attractiveness of sites and the effectiveness of marketing campaigns.

In Romania, it has not been achieved so far an in-depth research regarding the compulsive buying behavior, either online or "offline". The phenomenon was more on the theoretical side. In his "Consumer behavior - insights into the Internet age" Topan Flavia mentions that this "extreme" behavior led by extreme emotions and desires of individuals, is a newly discovered one and studies are still at an early stage. Therefore, this paper aims to bring empirical evidence to confirm or refute the theory and provide valuable information to those responsible for creating and implementing marketing strategies and online advertising.

2.5 Concluding words

From the investigation led by Garcia and Donthu[38] (1999) it can be concluded that those who "consume" in the online media are more impulse towards off-line buyers. It seems also that those compulsive buyers - notwithstanding that they are more sensitive to marketing stimuli - are more likely to use cards for online shopping. In addition, ADTECH (advertising company) found in a study that four out of five Internet users are impulsive buyers.

With this ratio in mind, it might deduce the compulsive consumer's incidence of all ages who have seen the Internet as an environment where they can shop without being disturbed, away from disapproving eyes of family and friends.

3. Methodology

3.1 The studied problem

The purchase of goods no longer satisfies a necessity but becomes itself a necessity whose reasoning is not entirely logical.

This study aims to identify if there is some compulsive behavioral among students of the University Dunărea de Jos of Galați.

[37] Directive 2000/31/EC accessed on 10 December 10th 2012 at http://www.llrx.com/features/eu_ecom.htm.
[38] Donthu N., Garcia A.- The Internet shopper- Journal of Advertising Research, 39, 52-58, 1999

Research Objectives

The present research is hoped to answer the following questions:

1. What is the average number of years that respondents use the Internet?
2. What products are bought most frequently and which is the average number of products / services purchased monthly and yearly basis - when shopping online.
3. What is the payment method used in online respondents, and how the revenue is intended exclusively for purchase?
4. To what extent there can be identified the impulsive/compulsive shopping characteristics from the respondents' behavior ?

These objectives are to reach the research problem while pursuing purchasing behavior in the online environment in order to build student profile from UDJG that exhibit the characteristics of a compulsive buyer in online shopping.

Research Assumptions

1) University "Dunarea de Jos" of Galați students as members of "Y" Generation grown up using IT at an early age. (Tulgan, 2009)
2) The most commonly online purchased products are related to holidays reservations, travel packages - (Ojetti, 2012)
3) Debit/credit card is the main tool used by students in online payment (Ojetti, 2012).
4) At least 6% of respondents have the characteristics of a compulsive buyer (Koran, 1998) and most compulsive buyers are women (Guerreschi 2012).
5) Buyers who have compulsive tendencies not always have the impulsive tendencies and vice versa (Edwards, 1992).

3.2 Research design

The approach chosen for this research is one based on deduction. This means that after the gathering of the sufficient data from the sample selected in the database, we will deduce information about the reference population. Consequently, the present research is more exploratory than explanatory.

Due to lack of secondary resources on buyer behavior in the online Romanian students we have appealed to achieving a primary research.

The chosen research method was that of investigation. The surveys are a popular method because the collection of data and the large number of population as well. In order to match with the goal of research and to study online behavior - an online questionnaire seems best suited to investigate population reference.

3.3 Collecting data

In the data collection process we used as a tool an online questionnaire created using the platform "Google Docs" that can be found at:
https://docs.google.com/spreadsheet/viewform?formkey=dFA3T0dwZzVNRkttQmQxTElqVDVIVXc6MQ

Before posting on the UDJG Facebook groups, the questionnaire was sent by private message to 10 students to pretest. The link to the questionnaire was later posted on the Facebook group whose members were part of the reference population. The form was available to be completed online from December 5th 2014 to January 4th, 2015.

The questionnaire is based on the one used in research Ojetti Angela, "I comportamento del consumers online: un'ánalisi statistics compulsivo nell'e-commerce dello shopping" a survey conducted among Italian students in 2012[39].

The questions were translated into Romanian, the questionnaire was posted on the Internet in Romanian.

At the end of data collection, we obtained 100 valid responses to questionnaires that were fully taken into account in the analysis of survey.

Quiz design

The quiz contains 17 questions, seven were open questions and four closed questions.

[39] The paper can be accessed at http://tesi.eprints.luiss.it/8153/1/ojetti-tesi-2012.pdf

Three questions which are lists from which the respondents must choose between 1 and 3 possible answers and are designed to identify consumer`s preferences for a certain type of product or a particular method of payment and to identify income classification.

Of the remaining questions, some are intended to identify frequency and others are created using Likert type items measuring agreement or disagreement- their purpose was to find out whether respondents have the characteristics or tendencies of the compulsive and impulsive buyers, respectively.

3.4 Sampling

The reference population consists of UDJG both graduate and master's students, Internet users who have a Facebook account and who purchase online. The students are the first generation that was basically "raised" with IT - and the most capable to adapt to technology requirements. In addition, from an early age, young people are accustomed to owning their own budget or a card that can be used at own will. Therefore, they are at highest risk of developing compulsive buying disorder.

In order to achieve this survey, students studying the business were selected because, regardless of specialization, e-commerce subject is ubiquitous and very discussed. Therefore, economists students have more information about e-commerce and are more prepared, perhaps, than others in making decisions on acquisitions in this environment.

Sampling method was a non-probabilistic one, meaning that the sample is one of convenience: the questionnaire was sent only to UDJG students, who are members of the "official" UDJG groups, like UDJG main group, the group of 1st, 2nd, 3rd, etc grade students.

We chose this method because the distribution of students by these group types shows the interest in real and constantly accessing information and prevalence of the use of this medium for information exchange besides academic UDJG portal. Currently UDJG official Facebook group has over 6,500[40] members, both students and teachers. Facebook has proven to be a common method of application of questionnaires in UDJG. Both myself and my colleagues made use of this method and found that the response rate is higher, the period of time is relatively short compared to other "off-line" methods and with good results. Pecuniary reasons is also another advantage.

Of the 15,557 students in the Galati academic environment, UDJG has enrolled a total of 2,449[41] students for the academic year 2014-2015. So, with a confidence level of 95% and a confidence limit of 9.73%, a sample consisting in 100 students is required to be investigated to obtain representative results[42].

4. Results

As we mentioned earlier in the methodology section of this paper, 100 valid questionnaires were obtained and considered. All 100 respondents bought online at least once.

The general profile of respondents:

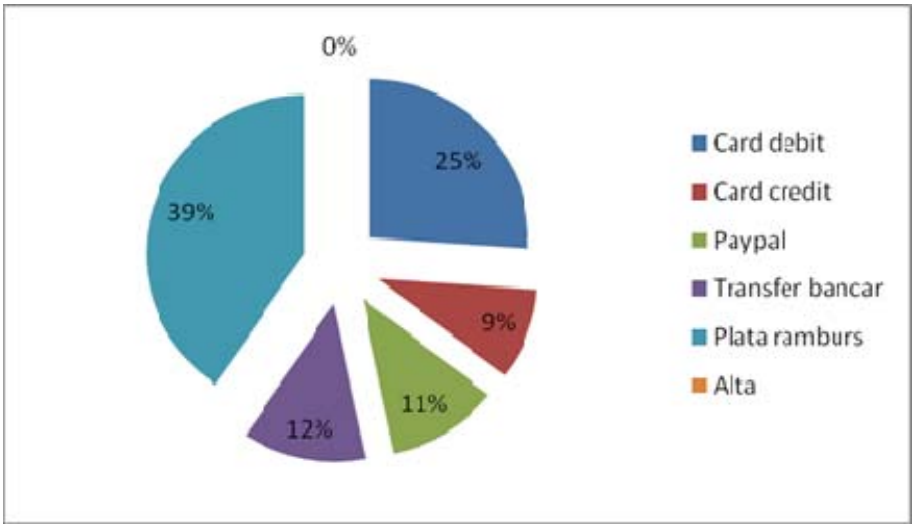
Among survey respondents, 81% follows an undergraduate program at UDJG and the remaining 19% are included in a master's program. The average age of the respondents is 21 years, with a majority of 66% female and 34% male representation (a valid representation for UDJG students as the women percentage of the total population of students is 69% and men 31%).

Student- online consumer profile

The UDJG student uses the Internet for about 8 years, from the age of 13 years- considering the average age of the respondent- confirming the hypothesis that the current student was indeed "grown" with IT from a young age. As online purchasing habits, he / she acquires 2 products per month and 19 products per year on average.

Payment method Fig. 1) most commonly used is cash payment used by 39% of respondents, the debit card is used in 25%, 12% bank transfer -procent close to PayPal which is used by 11% of respondents indicating some doubt over online payment methods. Although 3D Secure system was recently introduced, UDJG students still prefer traditional methods.

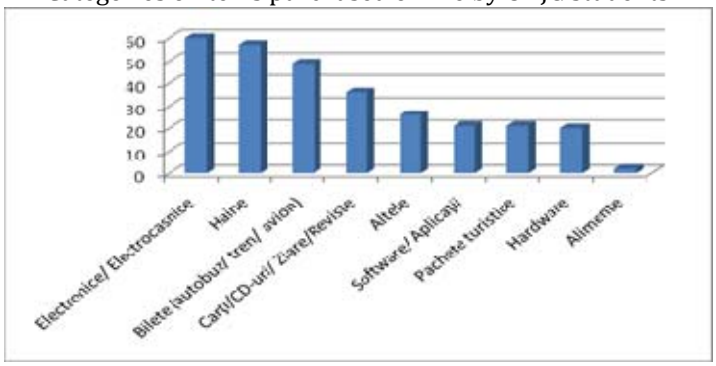
[40] From the UDJG official group accessed on January 15th 2015, at https://www.facebook.com/groups/288509380428/
[41] From the UDJG official site - http://www.ugal.ro/ugal/bin/view/University/Prezentare
[42] Sample size calculations were made using online educational software BOLD which can be accessed at http://bold-ed.com/calculator.htm#confidence



The method of pay- The distribution percentages depending on the payment method of the online purchases.

With regard to products or services purchased on-line, some of the most frequently chosen items are clothes (chosen by 57 respondents), results can be explained by the female majority of respondents, the remaining frequently chosen products are electronics (60 choices / 100 respondents) and tickets (49 choices / 100 respondents).

Goods / services purchased on-line
Categories of items purchased online by UDJG students



Another variable measured was a subscription to the newsletter online shops such as Amazon, E-mag etc, which would have an influence on the purchasing behavior of those enrolled through e-mails or receiving attractive offers.

Only 78%respondents out of 100 have this type of subscription, on average 5 sites, spending an hour a day going through the available offers .

Data on the number of annual purchases and the number of subscriptions for the 78 respondents were entered into SPSS to test the correlation between the two variables.

Pearson correlation between the number of annual subscriptions and the number of purchases

Correlation

		NoOfSubscriptions	NoOfPurchases/Year
NoOfSubscriptions	Pearson Correlation	1	,360**
	Sig. (2-tailed)		,001
	N	78	78
NoOfPurchases/Year	Pearson Correlation	,360**	1
	Sig. (2-tailed)	,001	
	N	78	78

**. Correlation is significant at the 0.01 level (2-tailed).

The result confirms that indeed there is a correlation, with Sig = 0.001, a lower value of 0.05 indicating that it is significant. It showed a positive relationship between the two variables with R = 0.36. Consequently, we can say with 95% confidence level that there is a positive relationship between the number of subscriptions and the number of purchases made per year. However, although correlated, a direct relationship between the two can not be stated with certainty. This can however be useful to marketers for further research.

In order to find out whether respondents and student representatives, present characteristics of a compulsive behavior we used the scale achieved by Faber and O'Guinn- Compulsive Buying Scale - (Questions no. 7 and 8) adapted for online shopping.

The second scale used is the one created by Barratt - Impulsiveness Scale testing - (Question 9). Only 13 out of the 30 questions included in the scale were used motor impulsivity, non-motor and planning measuring. Therefore, these results do not necessarily show a compulsive or impulsive pathology (as shown above in the scales if they were fully implemented) in consumer behavior, but measures more than a manifestation of a tendency towards such a behavior.

Responses were scored and a final score was calculated each person. For Faber's and O'Quinn's scale, respondents who had cumulated a score of less than 1.34 were assigned as compulsive buyers. On the other hand, on the Baarrat's scale, people who have accumulated a score of 32 or higher were considered to have high levels of impulsivity (which could cause a problem with impulse control).

Compulsive buyers from UDJG

A percentage of 13% of the respondents proved to have a score associated with compulsive shopping syndrome. 84.6% of these are women and the remaining 15.4% men confirming Guerreschi`s research (2012) that most compulsive buyers are women.

So, the CBD students are in majority women that acquire 20 products online and having a monthly income for purchases between 200 and 500 Ron. Baratta's test results show that 18% of respondents are mostly impulsive, and 38% are compulsive. However, not all respondents are impulsive buyers are also and compulsive, and not all the compulsive buyers are also impulsive, showing that, although sometimes similar and complementary, these two methods are not one and the same. An interesting fact is that this test men lead by the level of impulsivity at a rate of 55.55% - which would be a possible topic for future research.

5. Conclusion

The purpose of this research was to study in compulsive buying disorder, one of the new addictions that can be met in 2% of the global population either online or offline.

Although this behavior is present and the number of people purchasing online is growing, little research has been done to study this phenomenon of compulsive buying disorder. Therefore, through this survey, we tried to bring empirical evidence to test the existence of at least some features of CBD among online buyers in Romania.

The most relevant results are the data from the Faber and O 'Guinn`s scale and they are related to the percentage of students who "suffer" from online buying disorder. Of the 100 respondents, 13 showed signs of this addiction and the number is significant considering the economic and social consequences associated with this type of behavior.

The online compulsive buyer profile is similar to that found in the research done on the subject and confirming previous studies. "Shopaholic's" are mostly women (84.6 of students CBD) with an average age of 20 years, when the first signs of pathology appear.

On the other hand, the student who has a history in using the Internet is still stuck in the traditional methods of purchase and show little confidence in online payment methods. He or she prefers payment by cash that somehow reduce the risk of compulsive behavior allowing easier order cancellation,compared to those made with a debit card / credit. However, he / she buys using the Internet as a medium annual average of 19 products that can be clothes, electronics, tickets etc.

Overall, these results can be harnessed to better understand the behavior of these people and especially students and to identify the factors that might determine the frequency and quantity of sales.

6. Research limitations and New Research Directions

- The results are limited to the extent that they offer only a numerical description rather than a detailed description providing a less elaborate representation of human perception; and although they offer an objective perspective, it can not be totally measured;
- The questions with predetermined answers do not necessarily reveal what people feel or think about a particular subject and in some cases are close to actual ones.
- Emotions, feelings, thoughts, interior reasons, intentions and opinions and other internal factors are not taken into account but their exterior manifestation- the behavior-which sometimes is not consistent or similar to the beliefs of the person;
- The investigator may omit certain phenomena due to concentration on testing hypotheses disregarding confirmation bias;
- It can not be determined for sure whether a respondent answered honestly;
- You can not certainly determine how the respondent was involved in completing the questionnaire, he or she may omit certain details or misunderstand the research context completely;
- While determining the income, the amount allocated exclusively for online shopping wasn`t taken into consideration.

Conducting a survey on Facebook also imposes certain research limitations:

- The length limitation of the questionnaire;
- Limitations determined by convenience sampling;

Finally, the results of this research could represent the starting point for future research on this phenomenon among Romanian students and, why not, among the online Romanian population. A research direction could be represented by the effects of online promotions on the student whether or not compulsive.

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