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## Compulsive buying behavior on the internet

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### Abstract

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 Faculty of Economics and Business Administration of Iași**. 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.

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### 1. Introduction

In today's society shopping is not solely for the purpose of satisfying some basic needs, such as the need of food, water, clothing etc. and very often it is done without thinking and without actually needing the said products/services. The buying is often impulsive and the reasons behind it are not evaluated rationally and most of the time people do not even realize it, especially since shopping has become **a socially acceptable addiction**. Almost **6% of the population in America it is said to be suffering of the Compulsive Buying Disorder (CBD)** but the "trend" is on the rise and the percentage may very well apply to Romania as well.

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The impulsive buying behavior problem concerns more and more people, fact demonstrated by the increasing number of studies done on the topic in the last few years. Together with other pathologies, such as gambling, internet, food and sex addiction- CBD is part of the new “addictions” that have taken over the world.

The purpose of this thesis is to study the compulsive buying phenomenon from a behavioral and marketing perspective. The study is about identifying whether the Romanian student population suffers to a certain degree of CBD in their online shopping behavior and what are the factors that favor it: the internet history, personality, or income level or other. This is particularly important both from a sociological point of view and a marketing point of view.

This type of research has application both in the creating a sociological-psychological sketch of Romanian online consumers but also in the field of Marketing. Knowing what determines consumers to buy without having a prolonged decisional process is helpful in designing promotions for online sites that sell, for example, vouchers. And not solely for these fields- this type of information is applicable in any field concerned with buying decision. Moreover, it will provide an insight into the decisional buying process of online consumers which is helpful in creating a portrait of typical Romanian online consumer adding to the existent data.

Internet and the new technologies have become an integrated part of our lives making is easier to communicate, research information and purchase any kind of products and services. The online transactions are becoming simpler and faster and have definitely made our lives easier since only one click can bring in a few days whatever we want on our doorstep.

However, the generation that has been brought up with the Internet – the students of today- is mainly at risk of developing CBD considering that they are the most accustomed to the online world than any other generation. A US study (Pastore, 2000) has revealed that students spend almost 12% of their budget online.

With this in mind, in the second part of the research paper I will discuss about the new “addiction”, compulsive buying behavior, and the online world.

## 2. Literature review

### 2.1. Compulsive buying behavior

Compulsive shopping is part of the new age addictions, yet this behavior has been identified before. At the beginning of the 20th century the German psychiatrist Emil Kraepelin invented the term “oniomania” to describe the unstoppable impulse to buy.

Many authors have attempted to define the syndrome of compulsive shopping but a consensus was never reached. McElroy (1994) has described it as a chronic and repetitive behavior developed as a primary response to unhappy events, while Faber and O’Guinn (1992) define CBD as a “type of consumer behaviour which is inappropriate, typically excessive, and clearly disruptive to the lives of individuals who appear impulsively driven to consume”.

### 2.2. Compulsive and impulsive buying

A few clarifications are necessary to be made in order to understand the concept of compulsive behaviour.

Impulsive and compulsive behaviour, while similar, are not the same issue. Impulsive buying is the purchase determined by outside stimuli- for example, when waiting in line at the cashier register you add a snack, or a soda or gum to your shopping cart. In the case of compulsive buying, the desire to buy comes from within, maybe an anxiety feeling that the individual wants to calm, or maybe buying to make oneself feel happier, better etc. On the other hand, the compulsive buyer tends to not resist to impulses associated with positive feelings, such as pleasure, gratification and relief. However, immediately after the purchase, these positive feelings are replaced with guilt and even depression.

### 2.3. Compulsive buyer & influencing factors

The Compulsive Buying Disorder has been identified in 2% of the world population and the majority is composed of women between 35 and 40 years, medium social class – although this gender difference may be artifactual (Guerreschi, 2012). Black Donald affirms, however, that the pathology manifests itself in the early twenties and with the passing of the time it blooms into a “mature” disorder.

In a study done in 1994 McElroy concluded that the majority of the products that are bought by compulsive buyers are intended for improving physical appearance, personal image and attractiveness and most of the goods are never used, are hidden, or given as a present or thrown away.

Among the causes that determine compulsive buying we can count unhappiness- unhappy people discover that through the shopping experience they manage to cope better with suffering, even if it is momentarily, and consequently they tend to repeat these behaviours to feel better (Muredda, 2007). Another important role is played by the contemporary society which has brought about important changes in the buying behaviour. Materialism is encouraged through advertising determining people to evaluate themselves in terms of what they have and how they look instead of their own abilities and values. For Belk (1988) it is what we possess that contributes and reflects our identity up to the point that what we own becomes an extension of oneself.

DeSarbo and Edwards (1996) have identified the following factors as predisposing compulsive buying behaviour: anxiousness, perfectionism, low self-esteem, imagination, impulsivity, search for strong sensations, indecision, dependence of others and their opinions directly related to search for approval, maintaining control. As circumstantial factors, the two professors identified:

- Avoidance coping- avoiding confronting own issues and escape from difficult situations.
- Negation- characteristic to all dependent persons, compulsive buyers tend to deny they have a problem, as a form of defence against stress and anxiousness.
- Isolation
- Materialism- which was dealt above. It seems that those who suffer from CBD are more materialists than the rest of the population.

### 2.4. E-commerce and compulsive shopping

The European Commission defines e-commerce as “any form of business transaction in which the parties interact electronically rather than by physical exchanges or direct physical contact” and “all business transactions that are carried out electronically with a view to improving the efficiency and effectiveness of market and business processes.”

In Romania, there are already between 3000-4000 online stores for 8 million Internet users and over 330000 online transactions take place monthly in the retail sector plus utilities payment through the 3D secure system ( for cards).

In the first trimester of 2012 over 7, 3 million clicks were registered out of which 35000 sales were performed (valued at 5, 2 million lei) with 16500 leads and no less than 405000 lei received from bonuses through 2Parale system.

Other data shows that Tuesday, Wednesday and Thursday are the days in which the sales are higher and the preferred hour for shopping are between 10 and 11 am and 8 and 11 pm while the most expensive purchase are done around 3 and 5 pm.

Although e-commerce industry is relatively new on the Romania market and some companies just now discover its benefits, online shopping is on the rise among Romanian internet users and their behaviour is poorly researched.

Additionally, more and more people around the world purchase products and services online determining researchers to try and comprehend their consumer patterns in this non-traditional channel of the Internet. Moreover, the companies that have entered the field of e-commerce – and are constantly growing in number- are interested in understanding the ways in which their sales volume may be increased, the ways in which their websites may be more appealing and marketing campaigns more effective.

For the Romanian case, no in-depth research was done regarding this phenomenon of compulsive buying among consumers. The issue was dealt more on the theoretical part. In her paper, “Consuming behaviour- perspectives in

the Internet era” Flavia Topan briefly mentions that this “extreme” behaviour coming from the emotions and desires of the individual taken to the extreme is newly discovered and the studies are still in the incipient stage. Therefore, my research on this field will bring empirical data to support or contradict the theory and provide valuable information to those in charge of creating and implementing marketing strategies and online publicity.

From the research conducted by Garcia and Donthu (1999) it can be concluded that **online consumers are more impulsive compared to those “offline”**. Moreover, it seems that compulsive buyers, putting aside the fact that they are more sensible at marketing stimuli, are also more predisposed at using a credit card for their online purchases. In addition, ADTECH (ad serving company) identified in a research that four out of five Internet users are impulsive shoppers.

With this ratio in mind, we may infer that compulsive shoppers of all ages have found in the online world an environment in which they can shop without being disturbed, far away from the criticising and disapproving eyes of family or friends.

### 3. Data and Methodology

#### 3.1. Research problem

Nowadays, the purchase of goods is not necessarily linked to necessity and more than often we buy and consume products without having a real need to. This research proposes to identify whether among the young population of Romanian students this compulsive buying behavior is present.

#### 3.2. Research objectives

**We hope to shed light on the following questions through my research:**

- 1) What is the average number of years since the respondents have been using internet?
  - 2) What products are more frequently purchased and what is the average number of product/ services purchased monthly and annually?
  - 3) What is the payment plan used by the respondents and how much income is assigned only to shopping?
- All of these secondary objectives help to accomplish my primary objective, which is to analyse **the online shopping behaviour and construct a profile of the Romanian student as an online compulsive/non compulsive shopper**.

Consumer population of interest is composed of Internet student users that make purchases online. They are the first generation to have been brought up with technology and are the most accustomed to it, therefore, they are at the highest risk to develop a compulsive buying disorder. Moreover, since young age they are accustomed to having their own disposable income or a credit card and therefore have at their disposal money to be spent the way they see fit.

#### 3.3. Research design

The approach I chose for this research is an inferential one. That is, after gathering sufficient information (quantitative) in a data base from the sample population, I will be able to infer the characteristics of the population. **Consequently, my research is rather exploratory than explanatory although I will mix the two methods in the data analysis.**

Due to the lack of secondary data regarding students' online buying behavior, I resumed to conduct a primary data collection research.

**The research strategy of my choosing was an online survey.** Surveys are a popular method since they allow the collection of a large amount of data from a sizeable population and since the study is about online behavior an online survey seemed the most suitable way of interrogating the consumer population of interest.

### 3.4. Data collection method

The data collection technique that I used was an online questionnaire designed using Google documents form tool. The form was posted afterwards on Facebook groups of the population of interest from which the sample was chosen. The questionnaire remained online for 1 month, from 5th December 2012 to 4th January 2013 during which it was available for completion.

The questionnaire was “borrowed”, adapted and translated into Romanian and English from the research of Angela Ojetti, “Ilcomportamento del consumatore online: un’analisi statisticadello shopping compulsivonell’e-commerce” a research conducted on Italian students in 2012.

The questionnaire, which can be found in appendixes both in Romanian and in English, was posted in the Romanian language since not all students are proficient in English and some questions may have been subject to interpretation and “lost in translation”.

At the end of the data collection stage, we obtained 100 valid questionnaires responded. During the analysis all the questionnaires were taken into consideration.

### 3.5. Questionnaire design

The questionnaire has 17 questions out of which seven are open questions designed to get numerical data out of which an average for the sample may be calculated, four are with preset answers. For example, question number 2 asks whether the respondent shops online and there are only 2 possible answers Yes and No. This type of questions delimits very well the respondents and does not leave room for interpretation or researcher’s bias.

Three questions are lists out of which the respondents must choose from 1 to 3 answers and are aimed at identifying consumer preferences for a certain type of product/ payment plan and identify income bracket.

Last, but not least, the rest of the questions are designed using Likert type items that measure agreement and frequency with answers of the following type: Agree- Disagree; Very rarely/Never- Always. These questions are important in determining whether the respondents do present characteristics of compulsive buyers and impulsive characteristics.

### 3.6. Sample

Characteristics of the sample: The population for the research is composed by all students attending daily classes at University of Alexandru Ioan Cuza, Faculty of Economics and Business Administration.

The sampling was based on a quota sampling method: the questionnaire was addressed only to FEAA students present in the online and members of the Faculty Facebook groups, such as the main FEAA Facebook group, Third year, Second year, First year students groups etc.

This method was chosen because the students’ presence on this type of groups shows their interest on being constantly informed and Facebook has proved, in the researcher’s experience, to be one of the most used ways of delivering information to students beside FEAA portal.

From the total of 55557 students in Iasi, at the Faculty of Economics and Business Administration are attending 9355 students. Therefore, with a population size of 9355, 95% level of confidence and 9, 75% confidence interval a sample of 100 students should be questioned so as the findings to be representative for the population.

## 4. Results

As mentioned previously in the methodology part of this research, 100 valid questionnaires were obtained and all were taken into consideration. All 100 respondents have purchased online at least once.

#### 4.1. General profile of the respondent:

At this study, 81% of the respondents are attending an undergraduate program at FEAA, while the rest of 19% are master students. The average age of the respondents is 21 years old, 66% female respondents and 34% male.

The student- online consumer profile:

The FEAA student has been utilizing the Internet for approximately 8 years, since the age of 13 years -if we take into consideration average age of respondent- proving that today's student has indeed been raised up with technology. As for his online purchasing habits, he/she buys online 2 products per month and 19 products per year, on average.

The payment plans more often used are payment at delivery used by 39%, debit card 25% and bank transfer 12% closely to PayPal 11 % showing maybe a certain distrust in the security of online transactions Despite the newly introduced 3D secure system, FEAA students still prefer "traditional" ways of payment.

With regards to the items most purchased online, the most frequently chosen items were clothes (picked by 57 respondents), a result that may be explained by the fact that two thirds of the respondents were women, electronics or home ware (60/100), tickets (bus, train, airplane; 49/100).

Another variable that was measured was subscription to the newsletter of online shops, such as Groupon, Amazon, E-mag, thought to have an influence on the buying behavior of those subscribed through attractive e-mails, offers etc.

Out of the 100 respondents, only 78 % has such subscription, and on 5 sites on average, spending up to 1h/ day browsing the offers available.

The data regarding the number of yearly purchased and number of subscriptions for all 78 respondents was introduced in SPSS to test whether there is a correlation between the two variables. The result can be seen in Table 1.

Table 1. Pearson Correlation between No of subscriptions and Items bought per year

An example of a column heading		No of subscriptions	Items bought per year
No of subscriptions	Pearson Correlation	1	,360**
	Sig. (2-tailed)		,001
	N	78	78
Items bought per year	Pearson Correlation	,360**	1
	Sig. (2-tailed)	,001	
	N	78	78

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

The result confirmed that there is indeed a correlation, **Sig= 0,001**, a value less than 0, 05 showing that the correlation between the two variables is significant. Moreover, there is a positive relationship between the two as **R=0, 36** and consequently we can affirm with a 95% confidence level that there is a moderate positive relationship between the number of newsletters and the number of items purchased per year. Although correlated, this does not necessarily mean that increasing the number of subscriptions would increase the number of items purchased. However, marketers can find this information useful and research in more depth.

Lastly, to test whether the respondents do present compulsive behavior characteristics, I have used the Faber and O'Guinn Compulsive Buying Scale (Questions 7 and 8 and sub questions) adapted, of course, to online shopping.

The second scale used was Barratt Impulsiveness Scale (Question 9 and sub questions), out of the 30 questions 13 questions, regarding motor, non-planning and motor impulsivity, were included in the questionnaire to test the level of impulsiveness of the respondents (I included only 13 questions because the rest of the questions were repetitions of these 13 and some other could not be applied to the Romanian consumer). As stated previously, the persons who suffer from CBD tend to have higher levels of impulsiveness.



The responses were rated and for each person a score was calculated. For the Faber and O'Guinn scale the respondents with a score lower than -1, 34 were considered compulsive buyers. On the other hand, for Barratt Scale, people that scored 32, or above, were considered to have high levels of impulsiveness (that may lead to an impulsive-control disorder).

#### 4.2. Compulsive buyers at FEAA:

A percentage of 13% of the respondents proved to have a score consistent to Compulsive Buying Disorder. Out of these, 84, 6% were women and the rest of 15, 4 % men confirming Guerreschi's (2012) research results that the majority of compulsive buyers are women.

The CBD student is therefore mostly women, purchasing online an average of 20 items per year and having a monthly disposable income available for shopping between 200 and 500 RON.

In addition, at the Barratt test, 18 % of the respondents proved to have high levels of impulsiveness, 38% being also compulsive. Notwithstanding, not all impulsive respondents were also compulsive and not all compulsive ones were impulsive proving that these two conditions, while similar and complementary sometimes, are not the same. Interestingly enough, at this test men proved to have the lead with 55, 55% of them high on impulsiveness. It may be a good subject for a further research.

## 5. Conclusions

This research was aimed at studying the compulsive buying syndrome in the "internet world", an addiction that is present among 2% of the global population, either online or offline.

Notwithstanding the relevance of this "disorder" and the increasing number of people purchasing online, there are few if none researches to study this phenomenon. That is why, through this research, I tried to bring empirical data to test the existence of CBD among Romanian online shoppers.

The most relevant results are those given by the Faber and O'Guinn's scale and regard the percentage of students that suffer from compulsive buying behavior in the online. Out of the 100 respondents, 13 present this addiction and the number is quite high considering the economic and social consequences associated with this type of behavior.

The profile of the online compulsive consumer is similar to the one found in the literature written on this addiction and confirming previous studies. The shopaholic is the woman (84,6% of CBD students) with an average age of 20 years old when usually the first signs of the pathology appear.

On the other hand, the "regular" navigating student is still stuck in the traditional way of purchasing demonstrating distrust for online methods of payment. He/she prefers the payment at delivery that, somehow, reduces the risk of compulsive buying since the order can be cancelled as opposed to card payments were it is more difficult. Nevertheless, he/she purchases online 19 products per year be it clothes, electronics or tickets etc.

On the whole, these results may be useful in understanding better the behavior of people, and especially of students, and the factors that may determine them to purchase from online stores. For example, companies may use this information to influence the frequency and quantity of sales.

Last, but not least, the results of this research may represent a starting point for further research on this phenomenon among Romanian students, and why not, Romanian "online", population. A line of research may be the effects that online promotions have on students, compulsive or not.

## 6. Research limitations

### 6.1. General limitations:

1. The results are limited as they provide a numerical description rather than a detailed one and provide a less elaborate account of human perception; and, while it gives an objective view, not everything can be quantified;
2. Also, preset questions will not necessarily tell how people really feel about a subject and in some cases might be just the closest match;

3. Moreover, the emotions, feelings, insights, motives, intentions and opinions –internal factors-of the subject are not taken into account but rather the external manifestation of these feelings-the behaviour-which may not always be consistent with one's true beliefs;

4. The researcher might miss out phenomena occurring due to the focus on hypothesis testing rather than on hypothesis generation (theory)- confirmation bias;

5. The information gathered might be too abstract and general for direct application to specific situations, contexts and individuals;

6. There is no way of telling how truthful a respondent is being;

7. We cannot determine how much thought a respondent has put in completing the questionnaire and he/she may be forgetful or not thinking within the full context of the situation;

## 6.2. *Particular limitations:*

The place where the research has been conducted ( on the internet) provides also certain limitations:

1. Unclear who is responding;

2. No assurance of honesty;

3. Limited questionnaire length;

4. Limitations determined by the self-selected sample.

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