

# Exploratory Study on Online Shopping Addiction Among Students

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Abstract— Information and communication technologies (ICT) have significantly changed the way we live and have become an inseparable part of human lives, with youth using these technologies on a daily basis and for various purposes. This paper provides an exploratory study of online shopping addiction (OSA) among youths, mainly students of the institutes of higher learning. A total of 351 students in Malaysia answered the distributed questionnaire survey. The results conclude that online shopping addiction is not too dangerous to people, and the shopaholics are mostly female teenagers and women.

Keywords—online shopping addiction; internet addiction; questionnaire

#### I. INTRODUCTION

Information and communication technologies (ICT) have significantly changed the way we live and have become an inseparable part of our lives. Many people, especially the youth, use these technologies on a daily basis and for various purposes [1]. In this current century, which we call as the Digital age, electronic device such as computers and internet have gained an enormous importance in the life of humans.

In this report, we have provided questions for internet addiction, but focusing on Online Shopping Addiction only. Online shopping is anything that customer purchases affects environment by means of delivery, whether they have the product shipped at home or drive to a brick and mortar store(supermarket). Nowadays, people used to go to different shops before purchasing as they didn't have a great deal of easy access to information on products. Due to the development of World Wide Web it has now become easy to access the products available worldwide without wasting time, money and other resources apart from helping environment.

Online Shopping Addiction which is the one of the serious matters nowadays. Online Shopping Addiction (OSA) comes in the form of many kinds. There is the person who is addicted to buying items from the many online shops.

Compulsive and addictive forms of consumption and buying behavior have been researched in both business and medical literature. Shopping enabled via the Internet now introduces new features to the shopping experience that translate to positive benefits for the shopper. Evidence now suggests that this new shopping experience may lead to problematic online shopping behavior. This paper provides a theoretical review of the literature relevant to OSA. Based on this selective review, a conceptual model of OSA is presented.

The major objectives of this research study are: to examine the role of social influences associated with student's compulsive buying behavior; to examine the role of psychological influences associated with student's compulsive buying behavior; and to investigate and analyze compulsive buying behavior based on gender differences.

These objectives will show the differences of OSA based on gender, either men or women. This objective also will show us what are different kind of reason in SOA based on gender.

#### II. BACKGROUND OF RESEARCH

Based on the research, it can be defined that an online shopping eases consumers' decision-making process by offering them such advantages as the ability to search and compare prices as well as the ability to attain the lowest price possible for a desired product. International literature has shown internet users to prefer online shopping over real life shopping for such reasons as good product selection, competitive prices, and ease of use, and it is for these reasons that online shopping continues to increase in popularity [2].

This literature review is intended to some provide empirical and conceptual insight into the emerging phenomenon of addiction to Social Networking Sites (SNSs) such as outlining SNS usage patterns, examining motivations for SNS usage, examining personalities of SNS users and others. The findings indicate that SNSs are predominantly used for social purposes, mostly related to the maintenance of established offline networks [3].

Current Internet-based shopping experiences may trigger problematic behaviours which can be classified on a spectrum which at the extreme end incorporates OSA. The development of a conceptual model provides a basis for the future measurement and testing of proposed predictor variables and the outcome variable OSA.

## A. Shopping online addiction on social influences

Social influence is the first issue pertaining to the manner it motivates the people buying behavior. Individual's perceptions about proper and improper behavior are based on social values and norms and these social factors have the potential to influence or even, to regulate behavior.



Moreover, if the social environment is favorable to compulsive behaviors, the individual's values and norms are reinforced. It's also caused by socio-cultural environment or society and it could be the outcome of an abnormal socialization process [4].

Social environment also contains information sources which directly affect the individuals in purchase decisions and buying behaviors. These information sources, comprising of peers, family and reference groups; are strong social influences that are significant in psychological makeup of an individual.

On the other side, this also necessitates understanding the course by which the individuals process the social comparison information obtained from their social environment, how this information interacts with the consumer's psychological influences and ultimately, what is the impact of these influences on peoples.

## B. Gender influences on online shopping addiction

Based on Peter, Olson and Grunert [5] examined male and female's buying behaviors and found variation on numerous grounds. This is because not only their decision process varies but they value the material possessions differently and buy different products for totally different reasons examined impact of gender on purchase process and reasons behind it.

Several authors found that gender has significant influence on both the products purchased, and/or the causes of purchase. Conclusively, gender is a substantial predictor of compulsivity and female have more tendency to become compulsive as compared to male. The discussion till now reasonably implies that gender moderates the whole cognitive decision process of shopping online addiction.

## C. Psychological influences of online shopping addiction

Consumer's psychological influence is another significant concern with reference to its impact on SOA. The first factor is hedonic motive (HM), a well-known driver of emotion based buying behavior that play encouraging role in influencing the attitude based on strong desires.

Then, Materialistic Attitude (MAT) is second important factor of individual's psychology that we intend to study. It can be defined by materialism as an orientation considering material goods and money extreme important for social progress and personal happiness. The materialistic consumers have a tendency to engage in purchasing as a means to attain most important life tasks, for instance satisfaction and happiness.

On the other side, Purchase Decision Involvement (PDI) is the one of factor of people's psychology and it refers to the degree to which the buyer views an item purchased as an engaging and meaningful activity and decisions about purchase as a dominant part of their life. The purchase decision involvement conveys and revolves around a people's mind-set about buying and the goals associated to it.

Therefore, PDI is an important construct to influence attitudes and behavior related to object purchase. It's investigated about relationship between product involvement and compulsive buying behavior and found it positive.

This report also shows the relationship of PDI with consumer buyer behavior that had never been studied before. Moreover, this gap needs to be investigated. Then, the impulsive buying intention is yet another factor of consumer's psychology as purchase intention helps in predicting subsequent purchases which reflect the attitude toward the act rather than the object. In addition, it's have investigated role of impulsive buying intention in persuasion of consumer buyer behaviors. Hence, the above argument necessitates studying the influence of IBI on consumer's compulsive buying.

#### III. LITERATURE REVIEW

# A. Issues of Online Shopping Addiction

In this literature review, it is important to first define the following concepts of online shopping in several type, that is Online Shopping Addiction (OSA), Compulsive Buying (CB), and hedonic shopping. Compulsive Buying Disorder (CBD) is an important concept related to OSA, but CB in real life affects every individual. Over time, online shopping has led increasingly more internet users not only to do their shopping on online retail sites, but also to spend their money on the internet. It is, however, not yet possible to state that online shopping has become a problem, or even excessive, in every society. When online shopping starts to become a problem in various societies however, data related to its effects will begin to appear. The number of studies that have aimed at revealing the effects of such online activities, in other words the potential negative effects of CB behaviors, are considerably few in number. Yet, it is predicted that just as OSA will have economic effects as it becomes increasingly common in a society, so too will it entail negative effects for individuals and their families. As such, unlike game and internet addictions, OSA's negative economic effects will find themselves at the forefront of the discussion on

Since there is currently an insignificant amount of research on the symptoms, causes, and effects of OSA and since online shopping is becoming an increasingly common phenomenon, this study aims to identify and describe the relation between OSA and hedonic shopping.

# B. Analysis of Online Shopping Addiction

The psychometric approach is used to measure the problem use of internet. In combination with various statistical methods, the psychometric approach provides a good foundation for assessing the differences between the young people's self-evaluation of their internet use and its influence upon different aspects of their lives.

The study follows a mixed method design in which both qualitative and quantitative research paradigms will be applied to collect data. In this study, the reasons for which participants shop online will be examined using qualitative research techniques whereas hedonic shopping, including a number of its variables, will be examined using quantitative research techniques. Both the qualitative and quantitative research techniques employed in this study will be used in an attempt to describe the reasons for which participants shop online and to offer a better definition of SOA.



The mass appeal of social networks on the Internet could potentially be a cause for concern, particularly when attending to the gradually increasing amounts of time people spend online. On the Internet, people engage in a variety of activities some of which may be potentially to be addictive. Rather than becoming addicted to the medium per se, some users may develop an addiction to specific activities they carry out online. Specifically, Young argues that there are five different types of internet addiction, namely computer addiction (i.e., computer game addiction), information overload (i.e., web surfing addiction), net compulsions (i.e., online gambling or online shopping addiction), cybersexual addiction (i.e., online pornography or online sex addiction), and cyber-relationship addiction (i.e., an addiction to online relationships). An extensive literature search was conducted using the academic database Web of Knowledge as well as Google Scholar.

The following search terms as well as their derivatives were entered such as social network, online network, addiction, compulsive, excessive, use, abuse, motivation, personality, and comorbidity. Besides, the studies were included if they: (i) included empirical data, (ii) made reference to usage patterns, (iii) motivations for usage, (iv) personality traits of users, (v) negative consequences of use, (vi) addiction, (vii) and/or comorbidity and specificity. A total of 43 empirical studies were identified from the literature, five of which specifically assessed SNS addiction. Of all Internet users, approximately one-third participate in SNSs and ten percent of the total time spent online is spent on SNSs. In terms of usage, the results of the Parents and Teens 2006 Survey with a random sample of 935 participants in America revealed that 55% of youths used SNSs in that year. The main reasons reported for this usage were staying in touch with friends (endorsed by 91%), and using them to make new friends (49%). This was more common among boys than girls. In addition to this, the findings of the presented studies indicate that compared to the general population, teenagers and students make most use of SNSs by utilizing the inherent Web 2.0 features. Additionally, there appear to be gender differences in usage, the specifics of which are only vaguely defined and thus require further empirical investigation.

Pertaining to the demographic information of online shoppers included in the sample, a large majority of participants (87.6%) were found to have earned either an undergraduate and/or graduate degree. The majority of participants (73%) stated to do their own shopping online. Regarding income, it was found that both high- and low-income earning individuals shopped online. Regardless of how frequently (or infrequently) participants shopped online, when they actually did do so, they were found to spend an average of 1 to 2 hours online.

Now, we are focusing attention on the problems connected with the use of internet is influenced by two foundational tendencies whereas on Internet has become an inseparable part of people's daily lives. Previous researchers have proven that it is an actual problem and has a harmful influence on people's lives, especially the under-aged. The article uses the concept "problem use of internet". It means when condition, which lead to damaging use of internet (extended time on the internet; withdrawing from other activities connected to the life of an individual such as work, educational, social or family

responsibilities; focusing on internet based activities), which on their part lead to negative personal consequences [6]. The current research is a part of a research project, financed by the Program of the Ministry of Education for supporting research in higher education institutions. This research is its empirical phase. The aim of this article is to identify models of internet use of school age children through an empirical way and through a system of assessment and judgment indicators of online behavior in order to discover internal structures and dependencies.

The subject of the study is school age children. The focus on school age children has been dictated by the personal understanding of the authors that the future behavior of children as active members of society and in social groups is of great importance. The object of the research is the understanding and judgments of the students associated with their daily behavior when using internet.

From certain research on articles, which has using a t-Test, hedonic shopping scores were compared with the variables experiencing problems with one's environment and lying, in which it was found that as participants' hedonic shopping scores increased, not only did the amount of problems experienced with their environment increase, so did the amount of lies they told. Participants were also asked about what changes in emotions they felt after shopping, and their responses were compared with their hedonic scores. Participants reported feelings of relaxation and happiness as well as no change in emotions after shopping online.

It is necessary to track other groups of students through other quantitative research projects in order to determine the real size of the group of people with "problem use of internet". An index of problematic behavior (PBI) is calculated. It reflects a ratio between the proportion of individuals with problematic behavior and the proportion of individuals without problematic behavior in the respective indicator. The values of the PBI are calculated in the following dimensions: (1) time, involvement, and attachment, (2) neglecting activities and refusal to take part in other activities and readiness to decrease use of the internet, (3) school performance and (4) social comfort.

## C. Solutions Among Shopping Online Addiction

Generality of our findings may be affected by a number of factors. The number of products and brands we used was limited and determined by the particular hypotheses we wished to test. We did not take account of participants' real-life income though income of compulsive shoppers falls largely within the low to medium range.

To recruit more compulsive shoppers from the general population, a large sample study would need to be conducted. But for this project, we just go away with student in several universities in Malaysia. Our interpretation of our findings suggests some future lines of research.

On other side, there is a correlation between addiction to online shopping and Internet addiction. The correlation coefficient and the coefficient of determination indicate a moderate correlation between the dependent variable and the



independent variable such as addiction to online shopping. The power of the independent and dependent variables is moderate.

After that, online shopping has led increasingly more internet users not only to do their shopping on online retail sites, but also to spend their money on the internet. It is, however, not yet possible to state that online shopping has become a problem, or even excessive, in every society. When online shopping starts to become a problem in various societies however, data related to its effects will begin to appear. Yet, it is predicted that just as OSA will have economic effects as it becomes increasingly common in a society, so too will it entail negative effects for individuals and their families. As such, unlike game and internet addictions, OSA's negative economic effects will find themselves at the forefront of the discussion on it.

#### IV. METHODOLOGY

In this section, we will discuss the research methodology that is involved in this research study. This includes the research design, the area of study, population, sampling technique, sample of the population, data collection instrument, questionnaire validation, administration of the instrument and data analysis method.

#### A. Data Collection

In data collection, our target is student from, whole Malaysia, but the most university we get from UiTM. Mostly that from degree student in female gender.

First of all, we have influence our questionnaire at social site, such "WhatApps", "Tweeter", and "Facebook". after few days, we get a good feedback from respondent, that is more than 300 respondents. So we decide to takes only 340 respondents. The questionnaires have spread by online method, that is through online Google Form.

In data collection, we have use sampling technique. For the sampling technique, we have decided to choose the selective sampling. This type of sampling occurs where the researcher decides to sample in a particular locale or seek particular types of people. In this case, we decide to sample from university students. Besides, this is driven by rational thought rather than convenience or bias.

For this research, we decided to take samples from 340 students. We assume that the number of students here in Malaysia is around 1.27 million people. With the confidence level of 99% and the average error margin of 7%, we calculated and the sample size we got is 340.

### B. Data Analysis

The main method in analyzing the data collected is through Microsoft Excel and the in-built analysis system in Google Form. Google Form provides us all the answers that the respondents have answered into one single spreadsheet. We then have to analyze each single statement and question and relate to the problem statement, which is that university students are mostly addicted to the internet.

The instrument that we used to collect our data is the questionnaire. The questionnaire titled "Internet Addiction

Questionnaire" is used in the study. The content of the instrument was based on the information from all the literature reviewed.

There have seven kind of question, but for SOA we only use on the opinions and views regarding online shopping and its addiction. For this section, we prepared five statements. The questions are rating-scale questions in the form of Likert-type scales.

The research instrument was structured, with the majority questions used Likert-scale, on a 5-point scale, ranging from "strongly agree", through "agree", "neutral", "disagree" to "strongly disagree". Respondents were then instructed to respond to their degree of agreement with the statements contained in the instrument.

The data collected from the questionnaire were analysed. Statistically weighted mean was used in answering the research questions. The response options in the research instrument are weighted as: 1 for strongly disagree; 2 for disagree; 3 for neutral; 4 for agree; and 5 for strong agree.

The acceptance point for the items was 3.00 and any mean below 3.00 was regarded as rejected, not prevalent and as unpopular view.

# V. PRELIMINARY FINDINGS

The main method in analyzing the data collected is through Microsoft Excel and the in-built analysis system in Google Form. Google Form provides us all the answers that the respondents have answered into one single spreadsheet. We then have to analyze each single statement and question and relate to the problem statement, which is that university students are mostly addicted to the internet.

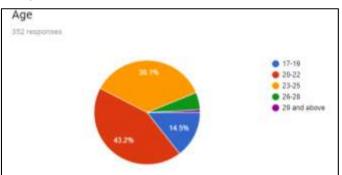


Fig. 1. Demographic data of respondents.

From the graph shown in Figure 1, it shows that the range of age with the highest number of respondents are those who are between the age of 20 to 22 with a percentage of 43.2 percent that is 152 people. With 36.1 percent and as high as 127 people, those who have the age of 23 to 25 are the second highest age range that had answered the questionnaire. It is followed up with 14.5 percent or 51 people by respondents from the age of 17 to 19. 19 people are those from the age of 26 to 28 and 3 people are 29 and above with a percentage of 5.4 percent and 0.9 percent respectively. This are the expected outcome for the demographic of our study.



Out of 351 respondents, the number of female who answered the questionnaire are way higher compared to those who are male. 75.8 percent which is 266 are female while the other 24.2 percent which is 85 people are male. One person did not mention his/her gender.

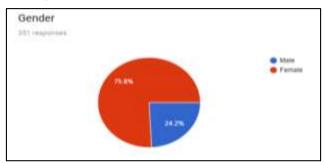


Fig. 2. Data of respondents by gender.

Half of the respondent or 178 people (50.6 percent) to be exact who had answered the questionnaire are those who have or currently taking a degree. 139 people (39.5 percent) have the level of study of diploma. 7.7 percent which is 27 people are from foundation, 2 percent or 7 people have the level of study of masters and 0.2 percent which is one person are from PhD.

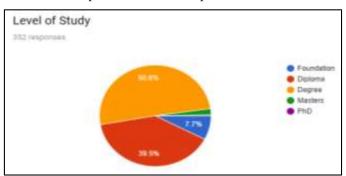


Fig. 3. Data of respondents by level of study.

From the 352 respondents who take part in this questionnaire, there are approximately 70 institutions involved or attended by them. The highest number of students are those who are from Universiti Teknologi Mara (UiTM) with 93 respondents. The second highest are students who are from University Kuala Lumpur (UniKL) which is 36 people. Next are those who are from Universiti Putra Malaysia with 21 people. 19 are from Politeknik and 15 are from KPJ Healthcare University. The other 168 respondents are from other institution including two schools for Form 6 students.

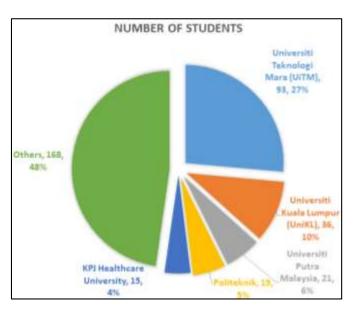


Fig. 4. Data of respondents by affiliation.

#### VI. RESULTS AND DATA ANALYSIS

For the online shopping addiction section, the diagram in Figure 5 shows answers in the questionnaire that tend to be neutral to strongly disagree responses. Since there are more female respondents, it is clearly stated that people quite addicted to online shopping but there is some response that show good value despite their addiction. For example, in the statement stated that "I have ignored love partner, family and friends because of shopping" produced the strongly disagree response. This indicates that the online shopping addiction among society is not too serious. This section shows good data that supports the research question of online shopping addiction.

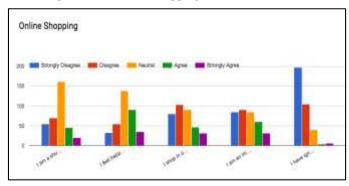


Fig. 5. Online shopping addiction.

According to Figure 6, for the questionnaire, the question of "I am shopaholic", respondents mostly choose neutral at 45.61 percent (%), and the lowest percent is strongly agree at 5.67 percent (%). This is because, many students not preferred to be shopaholic while study either online or go to shopping complex. They are not often purchase things them don't need or did not plan to buy, besides from here it can be estimated that the respondents are not easily tempted by items that they can do without. They feel neutral either anxious on the days you don't shop. In my opion, our respondents are student, so they need to keep save them money for their daily life which far from family.



If they waste, it will make it difficult for students to live in university.

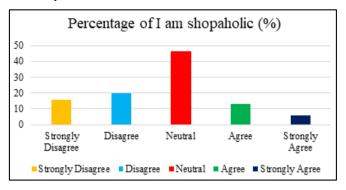


Fig. 6. Shopaholic.

According to the Figure 7, respondent more feel neutral when they go for shopping. This statement can be proof by the percentage at 39.01 percent (%) and the lowest vote are strongly agree at 9.92 percent (%). Based on this situation, we can assume mostly student will go shopping when their need. But in the same time, they will go shopping if there have any promotion or a discount. For example, student prices in cinema, place that can use the student card, or shop mall that has a promotion, clearances or discount. Student are not be often to online shopping, this is because online shopping are not being them satisfied to buy a cheap and quality item.

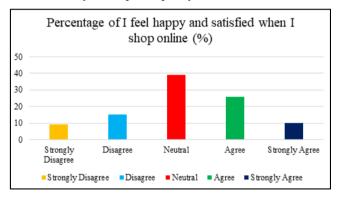


Fig. 7. Satisfaction of online shopping.

Next, based on the graph, the result shows respondents prefer to disagree with this statement with percentage 29.46 percent (%) and feel strongly agree in lowest percentage at 8.87 percent (%).

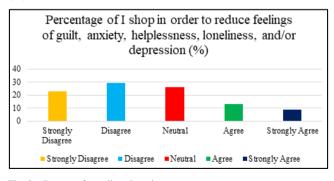


Fig. 8. Reasons for online shopping.

Based on the graph, respondent also strongly disagree with the statement, that vote at 25.49 percent (%) and lowest vote at 8.78 percent (%) in strongly agree. On this result, we know not all student really frustration sparks an urge to shop. They also feel not one of the way to compulsive shopping is an attempt to fill an emotional void, like loneliness, lack of control, or lack of self-confidence. So it can be summarized that students with shopaholics also do not have any tendency to suffer from mood disorders, eating disorders, or substance abuse problems. Students nowadays prefer to do quality things when their being trouble, such as there will spend the time with jogging, exercise at gym or spend time with their friends.

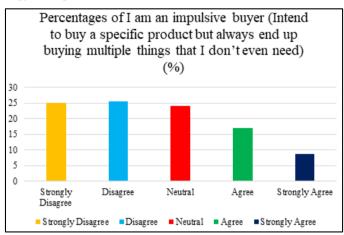


Fig. 9. Impulsive buying.

Next, based on the result, students are still disagree with the statement in percentage 25.49 percent (%) and being lowest in strongly agree at 8.87 percent (%). According to the result, student still have good experience a rush of excitement when you buy. Otherwise, it's not Shopaholics experience in a "high" or an adrenaline rush, not from owning something, but from the act of purchasing it. Moreover, the respondent not a kind like that. They are more to be thrifty about their money. They have learnt how to independent and control their money.

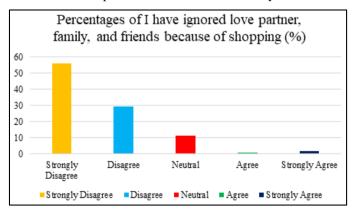


Fig. 10. Ignoring people because of shopping.

The last result on shopping online is I have ignored love partner, family, and friends because of shopping, and the result is 56.09 percent (%) at the higher vote for strongly disagree and 1.13 percent (%) at the lowest. From this situation, absolutely



respondent are not avoid their important person only for shopping. For them, shopping is a place they only can go when their need only but family and love partner are should be preferred. Without them, they will lose a dependable place and a giver.

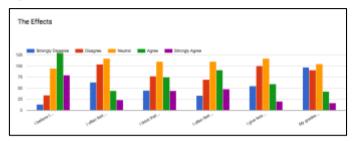


Fig. 11. Effects of internet addiction.

For the effects of internet addiction section, it is about the overall part regarding our study of internet addiction among university students. Based on the results from the diagram above, most of the respondents choose the neutral and agree answers. For instance, in the question stated that "I believe that internet addiction is related to mental health issues such as depression and anxiety" most of the respondents choose the agree answer. Therefore, we can conclude that students actually know the close relationship between mental health and internet addiction.

#### VII. DISCUSSION AND CONCLUSION

To conclude, online shopping addiction is not too dangerous to people. The shopaholics mostly are ladies' teenager and women.

In article reviews literature on compulsive and addictive shopping and the emergent literature in relation to problematic online shopping behavior. The contribution of this review is that it fills a gap in the literature in terms of the identification of potential predictors of online shopping addiction. Seven predictor variables are proposed to influence the likely development of OSA which includes: low self-esteem, low self-regulation; negative emotion, enjoyment, gender, social anonymity and cognitive overload.

The dependent variable of OSA is predicted to have six component features that include: salience, euphoria, tolerance, withdrawal symptoms, conflict and relapse. Development of the model helps both clinicians and retailers to recognize the preconditions for the development of addictive consumer behavior when shopping online. Whilst not all of the proposed predictors of OSA are within the control of e-retailers, the research seeks to shed light on an important aspect of consumer retail behavior. Further research is called for in order to development measurement scales and testing of the proposed conceptual model.

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