Research Article

IMPACT OF ONLINE SHOPPING ADDICTION ON COMPULSIVE BUYING BEHAVIOUR AND LIFE SATISFACTION AMONG UNIVERSITY STUDENTS

*Anum Durrani[*], Misbah Rehman[**#], Rabia Hanif[**], Ayesha Malik[**], Maria rafique[**], Arooj Fatima Mazhar[**]*

[*]**Department of Applied Psychology Riphah International University, Islamabad, Pakistan;** [**]**Faculty at department of applied psychology Riphah International University, Islamabad, Pakistan**

Abstract

This study investigated the impact of online shopping addiction on compulsive buying behaviour and life satisfaction write among students which include both male and females from different cities of Pakistan. The purpose of the study was to find scientifically that whether online shopping addiction has impact on compulsive buying behaviour and life satisfaction or not. Research participants were 300 individuals, 150 males and 150 females with age range of 20 to 30 years. The study is quantitative in nature. Purposive sampling technique has been used. The online shopping addiction scale. Compulsive buying behaviour screening tool by maccarrone-eaglen and schofield in 2017 and the satisfaction with life scale by diener, emmons, larsen and griffin in 1985 were administered on the participants. To test the hypothesis, descriptive statistics, linear regression, Pearson bivariate correlation and t test, were used. The findings of present study highlights that online shopping addiction is strong predictor of compulsive buying behaviour and life satisfaction. It also indicated that online shopping addiction and compulsive buying behaviour are having significant positive correlation between them while online shopping addiction and compulsive buying behaviour have significant negative correlation with life satisfaction. The results also show that female students have higher score on online shopping addiction and compulsive buying behaviour while male students have higher score on life satisfaction. Hypothetical and actual results are closely related.

Keywords: Online Shopping Addiction, Compulsive Buying Behaviour, Life Satisfaction

Introduction

In this modern world individuals are making more use of online shopping and due to its excessive use it has become an addiction, and can cause compulsive buying behaviour and may affect life satisfaction. As we know that world is advancing and many people are being addicted to internet, even due to covid-19 when lockdown took place all shops used to be closed due to which people started online shopping more as compare to past. Many people due to daily use of online shopping are addicted to it they spend hours on scrolling online products, and can shop easily and compare prices of products on different websites.

Online shopping addiction

Things which one gets through money exchange are considered as shopping. As world is advancing so does the shopping, because internet has made shopping very easy by providing us with many online stores, which has helped us in buying things easily at home, as one can compare prices of different products, and can purchase the product of their own choice [1]. Individuals who are addicted to online shopping spend more time on it, and ignore their social circle, which can make them lonely and they can have lack of love which can have negative affect on their life satisfaction, and such individuals can have low life satisfaction [2]. Individuals who are always thinking about online shopping are actually addicted to online shopping, these individuals waste their precious time, and money on online shopping, and this addiction and also cause social problems in their life [3].
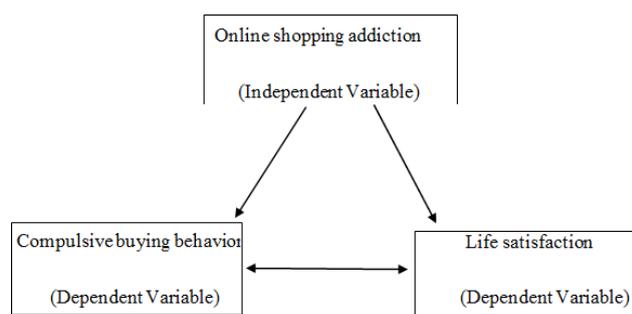
Compulsive Buying Behaviour

In compulsive buying individual cannot control his desires and is unable to stop it. Individual's uncontrollable urge towards shopping and buying when becomes an addiction it causes negative outcomes [4]. Compulsive buying term can be best classified as an addiction and can be considered as obsessive compulsive disorder [5]. Compulsive buying behaviour is an addiction which is basically under clinical disorder and this buying behaviour can lead individual towards

Many problems, stresses and many financial losses. The study also shows that youngsters have more compulsive buying tendencies than people of older age [6]. Online shopping builds compulsive buying behaviour in individuals as study confirmed by comparing online buyers and offline buyers and results highlighted that online buyers have more compulsive buying behaviour than offline buyers [7].

Life Satisfaction

Individuals can have negative relation with their life satisfaction, happiness, and their quality of life if they are addicted to internet or are addicted to shopping through internet [8]. individuals who are between age 18 to 24 years are more compulsive buyers a study was conducted in US which pointed out that about 3.5% to 9% of students in US are facing this behavioral problem and it can have many negative consequences which can affect them financially, psychologically such as it can build anxiety and depression in an individual which can low their level of satisfaction towards there life [9]. online shopping addicts may have absence of emotional needs in their life, and mostly women go through this as for women it is not very easy to create acceptance and affection with others very easily, as its very challenging for them to keep relationship (Figure 1) with others and hence they are often lonely and frustrated and have low sense of life satisfaction [10].

Figure 1. Conceptual framework of study

Hypotheses

1. Online shopping addiction is strong predictor of compulsive buying behavior and life satisfaction.
2. There is a significant negative relation between compulsive buying behavior and life satisfaction.
3. There is a significant negative relation between online shopping addiction and life satisfaction.
4. There is a significant positive relation between online shopping addiction and compulsive buying behavior.
5. Female students will score high on online shopping addiction and compulsive buying behavior as compare to male students

6. Male students will score high on life satisfaction as compare to female students.

Sample

There were 300 people in the sample 150 males and 150 females. Sample was collected from each of Pakistan's three major cities (Peshawar, Islamabad, and Rawalpindi). Participants were university students between the ages 20 to 30 years old. The sample for this study was collected by using purposive sampling technique. The goal of the study was explained to the participants, which is to study the impact of online shopping addiction on compulsive buying behavior and life satisfaction among university students. The duration of the study was 6 months.

Instruments

Online shopping addiction scale was developed. The preliminary version of the measure had 27 items, each of which was scored on a five-point Likert scale (1=strongly disagree, 2=disagree, 3=neither disagree nor agree, 4=agree, and 5=strongly agree). The final version had 18 items, as can be seen in the results section. Internal consistency (Cronbach's alpha) for the confirmatory and validation samples was 0.90 and 0.95, respectively. If the score is higher it will indicate addiction towards online shopping [11].

The Compulsive buying behavior screening tool was developed by Maccarrone-Eaglen and Schofield in 2017. This scale comprised of seven items. The items were scored on five-point likert scale from 5 strongly disagree to 1 strongly agree. The score that is 22 to 28 is considered as low level of compulsive buying behaviour while the score that is 29 to 35 is considered as high level of compulsivity. The seven-item construct has high levels of both internal consistency and construct validity. The composite reliability of the scale is 0.85 [12].

The Satisfaction with Life Scale was developed by Diener, Emmons, Larsen and Griffin in 1985. The SWLS is a well-established and reliable measure that consists of five statements that represent a favorable assessment of life quality. On a seven-point ordinal scale ranging from 7 strongly agree to 1 strongly disagree, respondents evaluate their agreement with each. The SWLS's alpha coefficients ranged from .79 to 89. The cut-offs score to be used as benchmarks are 31-35 is extremely satisfied, 26-30 is satisfied, 21-25 is slightly satisfied, 20 is neutral, 15-19 is slightly dissatisfied, 10-14 is dissatisfied and 5-9 is extremely dissatisfied [13].

Procedure

The study includes three variables and each of them has their own scale. The questionnaire of online shopping addiction which is used in the present study had open access [14], while the compulsive buying behaviour scale questionnaire which is used in the present study was not open to use so the scale was achieved by mailing it's author and he allowed us to use his scale in our study [15], while the satisfaction of life scale questionnaire which is also used in the present study had open access [16]. The data is gathered from 300 people of different universities of three major cities of Pakistan (Islamabad, Rawalpindi and Peshawar).The data was collected physically. There were both male and female of age 20 to 30 in the sample while below age 20 and above age 30 were not included in the present study.

The importance and goal of the study was explained to the participants. The data was collected from participants by giving them a questionnaire containing the English version of the selected scales (OSA, CBBST, and SWLS). They were led through instructions to carefully read each item and select only one option that best matches their scenario [17]. Participants were assured that their responses will be kept private. The gathered data is prepared before being analyzed after it has been collected. Missing data was checked in the datasets. After then, the data was analyzed using statistical software SPSS [18].

Results

Table 1 symbolizes the descriptive statistics, *i.e.,* frequencies and categories concerning the variables that were employed in the study. A sample of 300 university students were taken from Pakistan's three major cities *i.e.,* Peshawar, Islamabad and Rawalpindi where 150 students were males and 150 students were females. The age limit for the present study were those students who were between age 20 to 30 years old and others were not included in the study. The descriptive statistics revealed that 40% of students were between ages 20-22, 27.3% students were between age 23-25, 15.7% students were between age 26-28 whereas 7.0% students were between age 29-30. It also

revealed that 75.3% were undergraduate students while 24.7% were postgraduate students. It also revealed that the data was equally divided between males and females as 50% participants were males while 50% participants were females.

Table 1. Frequencies and percentages of demographic variables (N=300)

Variables Category		f(%)
Age	20-22	120 (40)
	23-25	112 (37.3)
	26-28	47 (15.7)
	29-30	21 (7.0)
Gender	Male	150 (50)
	Female	150 (50)
Education	Undergraduate	226 (75.3)
	Postgraduate	74 (24.7)

Note: f=frequency, %=percentage

Table 2 indicates the psychometric properties of the Online Shopping Addiction Scale (OSAS), Compulsive Buying Behavior (CBB), and Satisfaction with Life (SWL) used in the present study along with mean, standard deviation, range, skewness and kurtosis. The value of mean is 43.99.

Table 2. Psychometric properties of all study scales (N=300)

Scales	Items	M	SD	Range Potential	Actual	Skewness	Kurtosis
OSA	18	43.99	16.8	18-90	18-90	0.6	-0.32
CBB	7	19.04	6.15	Jul-35	Jul-35	0.19	-0.57
SWL	5	23.35	7.05	May-35	5-35	-0.59	-0.4

Note: OSA=Online Shopping Addiction, CBB=Compulsive Buying Behavior, SWL= Satisfaction with Life, SD=Standard Deviation, M=Mean.

19.04 and 23.35 which tells us about the average group of scores whereas 16.80, 6.15 and 7.05 is the value of Standard Deviation which indicates that more of the data is dispersed around the mean. The value of skewness are (.60, .19, -.59) this which came in a respectable range of -1 and +1 while the value of kurtosis are (-.32, -.57, -.40) this which came in a respectable range of -3 and +3 which indicates that the data is normally distributed and appropriate for parametric testing as it is acceptable.

Table 3 shows the cronbach's alpha reliability coefficient of online shopping addiction

questionnaire, compulsive buying behavior questionnaire and satisfaction with life questionnaire. the results shows that all scales have high internal consistency cronbach's alpha reliability=0.96, .86, .86) which indicates they are adequate for conducting further analysis.

Table 3. Cronbach's alpha reliability of all study variables

Scale	No. of items	Alpha reliability
Compulsive buying behavior	18	0.96
online shopping addiction	7	0.86
satisfaction with life	5	0.86

Table 4 indicates that online shopping addiction significantly predict compulsive buying behavior and life satisfaction means online shopping addiction have impact on compulsive buying behavior and life satisfaction. Online shopping addiction causes 53% variance in compulsive buying behavior and standard error is .68 and it causes 13% variance in life satisfaction and standard error is 1.06. The frequency is (346.04, 44.99) and p=0.000, p<0.05 which shows that the results are significant. From the above table it is concluded that the hypothesis 1 (Online Shopping Addiction is strong predictor of compulsive buying behavior and life satisfaction) is proved true.

Table 4. Linear Regression Analysis used to see the impact of online shopping addiction on compulsive buying behaviour and life satisfaction (N=300)

Variables	B	S.E	β	P
Constant	7.22	0.68		0
OSA	0.26	0.01	0.73	0
R	0.73			
R2	0.53			
ΔF	346.04			
Constant	30.04	1		
OSA	-0.152	0.02	-0.36	0
				0
R	-0.362			
R2	0.131			
ΔF	44.99			

Table 5 indicates the correlation between all study variables. There is significant correlation between all the variables. The inception of online shopping addiction (r=0.73[**], p=0.01) has a significant positive correlation between online shopping addiction and compulsive buying behavior and has significant negative correlation with life satisfaction (r=-0.36[**], p=0.01).The inception of compulsive buying behaviour (r=-0.29[**], p=0.01) has a significant negative correlation between compulsive buying behavior and life satisfaction.

Table 5. Bivariate Pearson Correlation between all study variables (N=300)

	Variables	1	2
1	OSA	-	-
2	CBB	.73**	-
3	SWL	-.36**	-.29**

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Note: OSA: Online Shopping Addiction, CBB: Compulsive Buying Behaviour, SWL=Satisfaction with Life.

From the above table it is concluded that hypothesis 2 (There is a significant positive relation between online shopping addiction and compulsive buying behaviour) hypothesis 3 (There is significant negative relation between online shopping addiction and life satisfaction) hypothesis 4 (There is significant negative relation between compulsive buying behaviour and life satisfaction) are proved true.

Table 6 shows the difference between male and female university students on online shopping addiction compulsive buying behaviour and life satisfaction. Results indicates that Female university students have more online shopping addiction (M=49.17, SD=17.63) than male university students (M=38.82, SD=14.19), further results also indicates that female university students have more tendency of compulsive buying behaviour (M=19.89, SD=6.57) than male university students (M=18.21, SD=5.60), while male university male university students are more satisfied with their life (M=25.77, SD=6.30) than female university students (M=20.93, SD=6.94) the p value is (0.000, 0.019, 0.042), p<0.05 which shows that the results are significant.

Table 6. Differences between Male and Female university students on online shopping addiction and compulsive buying behavior (N=300).

Variable	Male (n=150)	Female (n=150)			CI 95%		
	M(SD)	M(SD)	T	P	LL	UL	Cohen's d
Online shopping addiction	38.82(14.19)	49.17(17.63)	-5.6	0	-13.99	-6.71	0.64
Compulsive buying behavior	18.21(5.60)	19.89(6.57)	-2.38	0.01	-3.06	-0.29	0.27
Life satisfaction	25.77(6.30)	20.93(6.94)	6.32	0.04	3.33	6.35	0.73

Note: M=Mean, SD=Standard Deviation, LL=Lower Limit, UL=Upper Limit, CI=Confidence Interval
*p<0.05, **p<0.01

From the above table it is concluded that hypothesis 5 (female students will score high on online shopping addiction and compulsive buying behaviour as compare to male students) and hypothesis 6 (male students will score high on life satisfaction as compare to female students) are proved true.

Discussions

Present study is conducted to study impact of online shopping addiction on compulsive buying behaviour and life satisfaction among university students. The study also highlighted the gender differences on these three variables and highlighted that female students scored high on

online shopping addiction and compulsive buying behaviour as compare to male students and also highlighted that male students scored high on life satisfaction as compare to female students the existing literature also supported this. The existing literature that was reviewed let out the fact that online shopping addictions have impact on compulsive buying behaviour and life satisfaction. In order to conduct present study a sample of 300 students were taken out of which 150 students were male and 150 students were females ranging from age 20 to 30 years from different universities of Pakistan's three major cities (Islamabad, Rawalpindi and Peshawar).

The sample was appropriate by purposive sampling technique. Sample under study was administered with online shopping addiction questionnaire; compulsive buying behaviour questionnaire and satisfaction with life questionnaire, all of these questionnaires have good reliability to gather the required data. After collecting the data the results were analyzed by using IBM SPSS software version 26. According to hypothesis 1 online shopping addiction is strong predictor of compulsive buying behaviour and life satisfaction. Results also revealed that online shopping is strong predictor of compulsive buying behaviour and life satisfaction.

It is consistent with the existing literature as according to Xu and his colleagues (2022) online shopping addiction is strong predictor of compulsive buying behaviour as they both have strong association between them. As according to Rose and Dhandayudham (2014) in their study explored that online shopping addiction is predictor of negative emotions, low self-regulation, low self-esteem and all these factors decreases the life satisfaction of individual they highlighted in their study that online shopping addiction is predictor of life satisfaction.

According to hypothesis 2 there is a significant positive correlation between online shopping addiction and compulsive buying behavior. Results also showed a significant positive correlation between online shopping addiction and compulsive buying behaviour. It is consistent with existing literature as Wang and

Yang (2008) stated that online shopping addiction is positively correlated to compulsive buying behavior.

According to hypothesis 3 there is a significant negative correlation between online shopping addiction and life satisfaction. Results also showed negative correlation between online shopping addiction and life satisfaction. It is consistent with existing literature as a study was conducted by Bani-Rshaid and Alghraiben (2017) revealed that online shopping addiction leads individuals to negative consequences such as they have lack of basic emotional needs, they become lonely and have low life satisfaction. The study concluded that online shopping addiction negatively correlates with individual's life satisfaction.

According to hypothesis 4 there is a significant negative correlation between compulsive buying behaviour and life satisfaction. Results also showed a negative correlation between compulsive buying behaviour and life satisfaction. It is consistent with existing literature as a study was conducted by Otero-Lopez and his colleagues (2011) who found out that there is highly significant negative correlation between compulsive buying behaviour and life satisfaction which was also confirmed by Zhang and his colleagues (2017).

According to hypothesis 5 female students will score high on online shopping addiction and compulsive buying behaviour as compare to male students. Results also revealed that female students scored high on online shopping addiction and compulsive buying behaviour as compare to male students. It is consistent with the existing literature a study was conducted by Neuner and his colleagues (2005) revealed that females have more compulsive buying behaviour as compare to males.

According to hypothesis 6 male students will score high on life satisfaction as compare to female students. Results also revealed that male students scored high on life satisfaction as compare to female students. It is consistent with the existing research as according to a study conducted by Otero Lopez and Vilardefrancos

(2014) in Spain on 2159 participants found out that as females have more compulsive buying behavior which leads them more towards negative symptoms than males as females have more anxiety, depression which lowers their life satisfaction more as compare to males.

Conclusion

The study investigated that online shopping addiction leads to compulsive buying behaviour and affect life satisfaction in university students and it is observed during the study and finding highlights that online shopping addiction is predictor of compulsive buying behaviour and life satisfaction among university students. The study also concluded by the findings that online shopping addiction is positively correlated to compulsive buying behaviour while online shopping addiction and compulsive buying behaviour is negatively correlated with life satisfaction among university students. It also concluded that female students experience more online shopping addiction and compulsive buying behaviour and they have more negative life satisfaction as compare to male students, while with the help of this study we observed that male students experience less online shopping addiction and compulsive buying behavior as compare to female students and they are more satisfied with their life.

References

1. Adamczyk G. Compulsive and compensative buying among online shoppers: An empirical study. PLOSONE 2021; 16(6): e0252-563.
2. Bani-Rshaid AM, Alghraibeh AM. Relationship between compulsive buying and depressive symptoms among males and females. J Obsessive Compuls Rel Dis 2017; 14: 47–50.
3. Diener E, Emmons RA, Larsen RJ, Griffin S. The Satisfaction with Life Scale. JournalofPersonalityAssessment 1985; 49(1): 71–75.
4. Dittmar H, Long K, Bond R. (2007). When a Better Self is Only a Button Click Away: Associations Between Materialistic Values, Emotional and Identity–Related Buying Motives, and Compulsive Buying Tendency Online. Journal of Social and Clinical Psychology 26(3): 334–361.
5. Faber RJ, Christenson GA, de Zwaan M, Mitchell J. Two Forms of Compulsive Consumption: Comorbidity of Compulsive Buying and Binge Eating. Journal of Consumer Research 1995; 22(3): 296.
6. Kalia S, Kaith, BS, Kaur I. Pretreatments of natural fibers and their application as reinforcing material in polymer composites-A review. Polymer Engineering & Science 2009; 49(7): 1253–1272.
7. Lawrence LM, Ciorciari J, Kyrios M. Relationships that compulsive buying has with addiction, obsessive-compulsiveness, hoarding, and depression. Comprehensive Psychiatry 2014; 55(5): 1137–1145.
8. Maccarrone-Eaglen A, Schofield P. Compulsive buying behavior: Re-evaluating its dimensions and screening. Journal of Consumer Behaviour 2017; 16(5): 463–473.
9. Otero-López JM, Pol EV, Bolaño CC, Mariño MJS. Materialism, life- satisfaction and addictive buying: Examining the causal relationships. Personality and Individual Differences, 2011; 50(6): 772–776.
10. Otero-López JM, Villardefrancos E. Prevalence, sociodemographic factors, psychological distress, and coping strategies related to compulsive buying: cross sectional study in Galicia,Spain. BMC Psychiatry 2014; 14(1).
11. Rose S, Samouel P. Internal psychological versus external market-driven determinants of the amount of consumer information search amongst online shoppers. Journal of Marketing Management 2009; 25(2): 171–190.
12. Rose S, Dhandayudham A. Towards an understanding of Internet-based problem shopping behaviour: The concept of online shopping addiction and its. Journal of Behavioral Addictions 2014; 3(2): 83–89.
13. Sengupta SS, Nicosia FM. Consumer Decision Processes: Marketing and Advertising Implications. Econometrica 1969; 37(1): 166.
14. Villardefrancos E, Otero-López JM. Compulsive buying in university students: its prevalence and relationships with materialism, psychological distress symptoms, and subjective well-being. Comprehensive Psychiatry 2016; 65: 128–135.
15. Wang CC, Yang HW. Passion for online shopping: the influence of personality and compulsive buying. Social Behavior and Personality: An International Journal 2008; 36(5): 693–706.

16. Yang J. An Empirical Analysis of Psychological Factors Based on EEG Characteristics of Online Shopping Addiction in E-Commerce. Journal of Organization a land End User Computing, 2021; 33(6): 1-17.

17. Zhang C, Brook JS, Leukefeld CG, De La Rosa M, Brook DW. Compulsive Buying and Quality of Life: An Estimate of the Monetary Cost of Compulsive Buying among Adults in Early Midlife. Psychiatry Research 2017; 252: 208–214.

18. Zhao H, Tian W, Xin T. The Development and Validation of the Online Shopping Addiction Scale. Frontiers in Psychology 2017; 8: 735.

Corresponding author: *Misbah Rehman, Department of Applied Psychology, Riphah International University, Islamabad, Pakistan.*

E-mail: misbahrehman42@gmail.com