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Boredom Mediates the Relationship between Depression Symptoms and Compulsive Buying Behavior among Female Adolescents

Salman Zarei[1] (PhD), Khadijeh Fooladvand[1] (PhD)

1. Department of Psychology, Lorestan University, Khorramabad, Iran

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Corresponding Author:
Salman Zarei,
Department of Psychology,
Lorestan University,
Khorramabad, Iran
E-mail: zarei.s@lu.ac.ir

Abstract

Introduction: Research has found that psychopathology is positively associated with abnormal buying behavior. Nevertheless, it is required to further investigate internal mechanisms underlying this relationship. The current study aimed to examine the mediating role of boredom in the relationship between depression symptoms and compulsive buying behavior.

Method: The research design was descriptive – correlational. From the female high school students' population of Nourabad in the academic year of 2019, a total of 239 participants were selected using multistage cluster sampling and were tested by the Multidimensional State Boredom Scale, Richmond Compulsive Buying Scale, and Beck Depression Inventory- II .To analyze the data, path analysis were conducted.

Results: The results showed that direct effect of depression symptoms on compulsive buying behavior were significantly positive. Also, results showed that the mediating role of boredom in the relationship between depression symptoms and compulsive buying behavior was significant.

Conclusion: Based on the findings, it can be concluded that depression and boredom are two important factors affecting female students' compulsive buying behavior. So, these findings highlighted the critical role of early intervention for compulsive buying behavior with a focus on those with depression symptoms and boredom.

Keywords: Adolescent, Boredom, Compulsive Buying, Depression

Introduction

Shopping is a normal activity in daily life. However, for some people and in certain situations, shopping may be unplanned, sudden, and accompanied by a strong urge to feel pleasure or excitement [1]. This type of repetitive, chronic and extreme buying behavior is known as compulsive buying behavior [2]. Consistent with the biological theory of addiction, compulsive buying behavior can have the main and important features of addictive behavior [3]. In this regard, Weinstein et al. [4] have argued that the process of addiction is caused by a defective interaction in three functional systems including motivation- reward, emotion regulation and behavioral inhibition, which can apply to individuals who acknowledge uncontrolled buying behavior. Although compulsive buying behavior is not explicitly described in the Diagnostic and Statistical Manual of Mental Disorders, diagnostic criteria include frequent mental engagement with shopping, failure to control the urge to shop, frequent purchases of unnecessary items, and buying more than one can afford have been proposed [5]. A review of the research literature shows that compulsive buyers experience adverse consequences such as feelings of guilt and remorse, academic dysfunction, financial problems, family conflicts, negative parenting, eating and sleeping disorders, and even suicide attempts [6, 7].

Self-medication hypothesis is a relevant perspective accounting for compulsive buying behavior [8]. Based on mentioned hypothesis, compulsive buyers usually make repetitive

purchases as a result of internal variables like making attempt to enhance bad moods or escaping [9]. Compulsive buyers suffering from negative emotions attempt to cope with these emotions through seeking self-soothing strategies, including repeated and excessive buying as a temporary remedy [10]. A relevant, more comprehensive theoretical model of compulsive buying behavior is the Interaction of Person-Affect-Cognition-Execution [I-PACE] model of compulsive buying [11]. I-PACE proposes several factors that influence compulsive buying behavior. Personal factors include psychopathology that may influence compulsive buying. Resilience or risk factors for uncontrolled purchases are considered responses to these personal factors [12]. These response variables are able to elevate or mitigate the role of personal factors in making compulsive purchases. As a result, the attempt is to conceptualize response variables included in I-PACE so that relationships between compulsive purchase and personal factors can be mediated [11].

As a psychopathology personal factor, depression may be conceptualized in I-PACE to affect compulsive buying. Numerous studies have examined the correlation between depressive symptoms and compulsive buying finding which are directly related [13, 14]. Similarly, clinical depression is significantly correlated with compulsive buying behavior [15]. Compulsive buying is a highly frequent behavior among patients with depression and obsessive-compulsive disorder [16]. A study in the United States (US) examined affective variables in a group of compulsive purchasers and reported that sad, depressed feelings increased and decreased before and after the purchasing act, respectively [17]. Another study showed that depression was meaningfully different among three groups with low, moderate, and high compulsive buying tendency from a general population [18]. In addition, an empirical study indicates that compulsive buyers had lifetime mood and current elevated levels of self-reported depression compared with healthy control participants [19].

Studies have recently shown that several additional psychopathology-related variables mediated the relationship between symptoms of depression and issues of behaviors such as compulsive purchase [20, 21]. These variables in I-PACE reflect responses to the framework's personal factors, and thus, they can cause an intermediary risk or have a resilience role between personal factors and compulsive purchase. For instance, depression symptoms can lead to excessive purchase, although it particularly occurs in individuals struggling by regulating their state of boredom [11]. Boredom is a prominent I-PACE response to personal factors [22]. Boredom is usually described as a transient unpleasant affective state, associated with a lack of challenge and stimulation by the task or environment [23]. Empirical studies indicate that boredom is a prevalent experience among students at school [24]. For example, Harris [25] found that among students 90% sometimes experience boredom, with a median of one time per day. Boredom positively correlates with negative affectivity, including depression [26]. As an aversive condition, boredom may undergo conceptualization in an attempt to relieve via buying, as buying provides positive reinforcement [27]. Accordingly, Bozaci [28] found that boredom associated with impulsive buying behavior. Furthermore, other studies revealed boredom as a significant mediator and accounts for relationships between compulsive buying and depression symptoms [29, 30].

Compulsive buying behavior may pose a number of deleterious outcomes for adolescents. Empirical studies show that the age of onset of compulsive buying behavior is in late adolescence and before the age of 20, and girls have reported more compulsive buying behavior than boys [2, 7]. So, focus on adolescence especially female adolescent when examining compulsive buying behavior is highly pertinent. Also, the prevalence rate of compulsive buying behavior reported in the literature among normal female adolescent population shows that the prevalence in the US is 5.8%, in Germany 8%, in Spain 7.1%, in Italy 11.3% and in China 19%, of which 70 to 90% were female [31]. Therefore, due to the prevalence of compulsive buying behavior in female adolescents and the priority of preventing disorders in this group, it is necessary to do more research on this problematic behavior.

Despite the fact that a great number of studies confirm that high boredom can estimate compulsive buying behavior in female students, only few studies have directly investigated the mediating role of boredom in the relationship between depression symptoms and compulsive buying. This study expects to provide in-depth understanding of depression symptoms and compulsive buying behavior among female students and help to develop effective mental health interventions. To investigate the relationship among depression symptoms and compulsive buying behavior, depression symptoms was considered as an independent variable and compulsive buying behavior was considered as a dependent variable to establish Path Analysis Model. So, investigating the mediating role of boredom in the relationship between depression symptoms and compulsive buying behavior in order to figure out the inner deep structure of the three variables is possible. Above all, the current study aimed to examine depression symptoms and its association with compulsive buying behavior in female students. Furthermore, how boredom mediates this association is investigated.

Method

This cross-sectional and correlational study was conducted on female high school students of Nourabad, Lorestan in the academic year of 2019-2020. A total of 250 subjects from four high schools were selected using multistage cluster sampling method. There is no consensus on the sample size for path analysis. However, many researchers recommended 200 cases as the minimum sample [32]. The inclusion criteria included being in the age range of 14 to 17 years old and willingness to participate in the research. The only exclusion criterion was having a psychological problem background (based on a preliminary interview and

participants' self- report). About the demographic characteristics of participants, it is noted that the average age was 16.27 years (SD = 2.49). Before completing the survey, all participants gave their written informed consent, noting that they were aware that the investigation was anonymous and confidential and that participants had the right to withdraw at any time without explanation. The following three paper-and-pencil questionnaires were distributed by the researchers and collected in the regular classrooms. The tools used in this study were as follows:

Multidimensional State Boredom Scale (MSBS): The MSBS is a 29-item instrument that assesses the individual's experience of boredom in the moment [33]. It consists of five factors: Disengagement, High Arousal Negative Affect, Low Arousal Negative Affect, Inattention, and Time Perception that load onto a single, higher-order factor. A Likert-type response format was used, which ranged from 1 (strongly disagree) to 7 (strongly agree). Overall score for the scale ranges from 29 to 203, wherein higher scores shows greater level of boredom. In Fahlman et al.'s [33] study, the Cronbach's alpha of the scale was 0.94 and the subscales' Cronbach's alphas ranged from 0.80 to 0.88. In the present study, the Persian version of the MSBS demonstrated good internal consistency with Cronbach's alpha coefficient 0.88.

Richmond Compulsive Buying Scale (RCBS): The RCBS is a 6-item questionnaire that conceptualizes compulsive buying as a disorder with the elements of both impulsivity and compulsivity [34]. Items are scored on a 7-point Likert-type scale (from 1= strongly disagree to 7= strongly agree), with the total scale score calculated as a sum of the items. Scoring 25 or higher is considered compulsive buying. Previous studies indicated that the RCBS is a reliable and sensitive measure that can be applied to the general population, including individuals who have not been diagnosed as compulsive buyers [34]. Maraz et al. [2] showed that the RCBS exhibited a good reliability (α = 0.78) (2). In the present study, the Persian translation of the RCBS demonstrated good internal consistency with Cronbach's alpha coefficient 0.83.

Beck Depression Inventory- II (BDI-II): The BDI-II, second edition of BDI, is a 21-item measure that is widely used to assess cognitive, affective, somatic, and behavioral symptoms of depression [35]. Each answer is scored on a scale value of 0 to 3. Scores are ranged from 0 (no symptoms) to 63 (very severe symptoms). Higher total scores indicate more severe depressive symptoms. The psychometric properties of the scale are supported. In this respect, the BDI-II is positively correlated with the Hamilton Depression Rating Scale with r = 0.71, showing good agreement. The test was also shown to have a high one-week test–retest reliability (r =0.93) [36]. In a research carried out on 354 subjects in Iran, the Cronbach's alpha was reported to be 0.91 for 21 items [37]. In the present study, the BDI-II demonstrated good internal consistency with Cronbach's alpha coefficient 0.85.

Means, standard deviations, and Pearson correlations for the levels of depression, boredom and compulsive buying behavior, together were conducted using SPSS 25.0. Path analysis was conducted to examine the mediating role of boredom using AMOS 21.0. In addition, 11 participants missed more than 50% of items on a given scale and were excluded from subsequent analyses.

Results

Descriptive statistics such as mean, standard deviation, and correlation coefficients are presented in Table 1. The result of Kolmogorov-Smirnov test showed that the distributions of study variables are normal (P>0.05). Also, the results in Table 1 showed that all relationships were significantly positive at P<0.01. Therefore, based on the significance relationship between the variables, the necessary condition for investigating the mediating role of boredom in the relationship between depression symptoms and CBB is fulfilled.

Prior to conducting path analysis, it was ensured that its basic assumptions, such as adequacy of the sample size, data distribution normality, and multi-collinearity, were established. The research model of the relationship between depression symptoms and CBB mediated via boredom is shown in Table 1 based on standardized coefficients (β). As shown in Table 2, the proposed model had a good fit based on fitness indices. The most commonly used fitness index in model analysis is CMIN/DF, that with a value lesser than 3 in the current research model shows a good fit. The Goodness of Fit Index (GFI), the Normalized Fit Index (NFI), and the Comparative Fit Index (CFI) with values higher than 0.90 indicates an acceptable fit to the current data. Also, the root mean square error of approximation (RMSEA) with a value between 0.05 and 0.10 shows an acceptable fit of the model.

Table 1. Descriptive Statistics, Correlation Matrix and Tests of Normality for Study Variables

Variables	Mean	SD	1	2	3	Kolmogorov–Smirnov	
						Statistics	Sig.
Depression symptoms	29.61	4.83	1	-	-	0.089	0.052
Boredom	102.39	9.51	0.63**	1	-	0.061	0.073
Compulsive buying disorder	31.75	6.09	0.39**	0.54**	1	0. 072	0.062

** P < 0.01

Table2. General Fit Assessment Indices of Model

Indices	CMIN/DF	GFI	SRMR	CFI	NFI	RMSEA
Model values	2.015	0.91	0.04	0.93	0.92	0.06
Acceptable values	less than 3	Greater than 0.90	Less than 0.05	Greater than 0.90	Greater than 0.90	less than 0.08
Status	Good	Good	Good	Good	Good	Good

The parameters of the direct relationship measurement in the research model are presented in Table 3. Accordingly, the direct effect of depression symptoms on CBB and the depression symptoms on boredom were significant. Moreover, the direct effect of boredom on CBB was significant.

We examined the mediating effect of boredom on the relationship between depression symptoms and CBB using a bootstrapping method (Table 4). The lower (0.08) and upper (0.17) limits of the confidence interval for indirect effect of depression symptoms on CBB did not include zero, indicating a significant mediating effect.

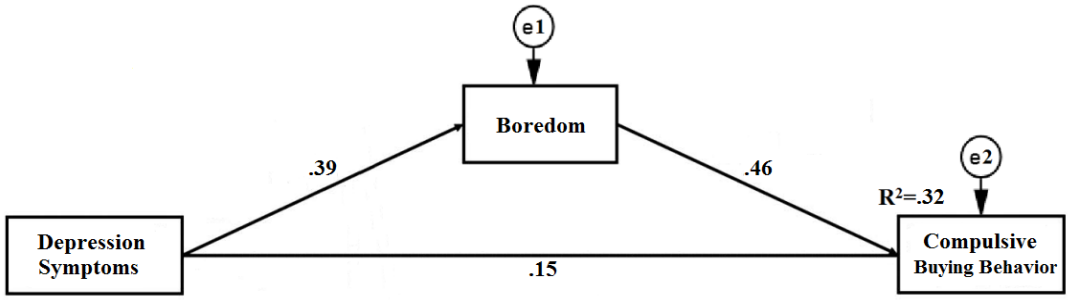

Figure1. Model of the mediating role of boredom

Table3. Summary of Direct Relationship Measurement Parameters in the General Research Model

Direct Pathways	B	SE	Beta	C. R	Sig.
Depression symptoms → CBB	0.51	0.15	0.15	2.01	P<0.01
Depression symptom → Boredom	0.21	0.05	0.39	5.62	P<0.001
Boredom → CBB	0.11	0.02	0.46	7.01	P<0.001

Table 4. Results of the Bootstrap Method of Indirect Pathway in the General Research Model

Model pathway	Beta	SE	t	(95% CI)	
				Lower Bound	Upper Bound
Depression symptoms → Boredom → CBB	0.179	0.103	2.957	0.084	0.176

Discussion

The present study investigated the mediating role of boredom in the relationship between depression symptoms and compulsive buying behavior among female high school students. The results showed that depression symptoms had a significant positive effect on compulsive buying behavior in female adolescents, which is consistent with the results of previous research [13, 16]. Koh et al. [14] reported that depressive symptoms are important risk factors for compulsive buying and the frequency of abnormal buying is significantly high among students who experience boredom. The current finding is also in line with Muller et al.'s [15] study showing that internal distress, such as depressive mood can result in behavioral problems such as compulsive buying among students. In clarifying the results, it can be pointed out that the female students because of some stressors and special circumstances in life may suffer from negative emotions such as depression symptoms and then lose their self-control in challenging situations [17]. In line with this finding, an explorative prospective study reported that compulsive buying behavior worsened with high lack of self- control [16]. Another possible explanation is that according to the self-medication hypothesis, adolescents who suffer from depression symptoms try to cope with their negative mood by excessive buying as a short-term remedy [10]. In case they are relieved from buying, they are more likely to regard the excessive buying a beneficial coping strategy that contributes to potential dependence and automatic activation.

The findings showed that depression symptoms through boredom had a significant effect on compulsive buying behavior which is in line with other studies [11, 23]. To explain the results, based on the I-PACE model, it can be stated that boredom as a core personality and psychopathology characteristics results from depressed mood and over time causes low self-control in adolescents [22]. As a result, adolescents in the face of life and school stressors due to their inability in emotion regulation engage in some impulsive behaviors to cope with their boredom. One of these behaviors is the search for immediate pleasure in the moment instead of greater rewards in the future. Therefore, it seems that adolescents with a high level of depression symptoms in order to moderate boredom and get rid of monotony caused by this negative emotion turn to immediate pleasures such as buying. Also, boredom affects emotional functioning and is accompanied by emotional instability, greater irritability and short-temperedness that may be result in uncontrolled buying [27].

A plausible explanation for the mediation effect of boredom may be that adolescents who have certain depressive symptoms such as apathy, lack of pleasure, and concentration difficulties may not be able to function properly and enjoy their leisure time and experience a high level of boredom, and are most prone to excessive and repeated compulsive buying [30]. Another explanation is that depressed adolescents potentially have twisted perceptions of themselves and the environment. They also have low emotion regulation

capability and poor social skills. Moreover, these adolescents suffer from feelings of frustration and isolation, boredom, and low self-esteem [23]. As a result, they may become involved in compulsive buying as an escaping strategy [14]. Accordingly, purchasing serves as a strategy to manage accumulated negative emotions and psychological pressures and compensate for boredom and isolation feelings [8]. People tend to make positive changes in their negative feelings via purchasing. This often leads to the transitory sense of excitement and comfort.

The study's findings should be interpreted with caution as the study had some limitations. First, the present study only investigated female high school students of Nourabad and therefore, may not represent the total population. Second, the cross-sectional design, which is not the best way to evaluate causal relations, also limits the results. Further experimental and longitudinal studies are required to confirm the relationships between the variables. Third, all the data were obtained through self-reports and thus it potentially affected the study's validity. Future investigation can employ multiple methods such as observation and standardized interview for the data collection purpose. In this way, they can provide more detailed information and reducing potential common method bias. Finally, the literature in this field is not yet rich enough. This study is innovative in exploring boredom as a mediator variable that has not received previous scrutiny. The present study also provided some theoretical and practical implications. The study's findings can contribute to targeted preventions and compulsive buying behavior interventions in female students. Thus, mental health practitioners can educate students about the potential harms of negative emotions and help them set self-encouraging goals to control their purchasing frequency. These methods can help them efficiently overcome their negative emotions and properly regulate themselves and also help them promote healthy purchasing behaviors. Furthermore, this study expands our knowledge on the compulsive buying behaviors associated with high depression symptoms and highlighting the role of boredom in setting undesirable conditions for the female student.

Conclusion

This research evaluated a mediation model to investigate boredom underlying the correlation between depression symptoms and compulsive buying behavior. Briefly, the results demonstrated that depression symptoms were a risk factor of boredom in female students, predicting compulsive buying behavior via measuring boredom. These findings substantially contribute to our understanding of depression symptoms and compulsive buying. This likelihood demonstrated the superposition effects of the risk factors. The findings revealed that the intervention decreased depression symptoms and boredom, and thus, decreased the frequency of compulsive purchasing. Also, female high school students displaying high compulsive buying behavior should be attentively monitored for depression symptoms.

Conflict of Interest

The authors declare that they have no conflicts of interest.

Ethical Approval

All ethical principles were considered in this article. The participants were informed about the purpose of the research and its implementation stages. They were also assured about the confidentiality of their information. Moreover, they were allowed to leave the study whenever they wish, and if desired, the results of the research would be available to them.

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References

1. Yuen KF, Wang X, Ma F, Li KX. The psychological causes of panic buying following a health crisis. International Journal of Environmental Research and Public Health. 2020; 17: 3513-3527.
2. Maraz A, Griffiths MD, Demetrovics Z. The prevalence of compulsive buying in nonclinical populations: a systematic review and meta-analysis. Addiction. 2016; 111(3): 408-419.
3. Bigjiu G, Manolica A, Roman T. Compulsive Buying Behavior on the Internet. Procedia Economics and Finance. 2015; 20: 72-79.
4. Weinstein A, Maraz A, Grifffiths MD, Lejoyeux M, Demetrovics Z. Compulsive buying- features and characteristics of addiction. Neuropathology and Drug Addiction Substance Misuse. 2015; 3: 993-1007.
5. Maccarrone-Eaglen A, Schofield P. A Cross-cultural and Cross-gender Analysis of Compulsive Buying Behavior's Core Dimensions. International Journal of Consumer Studies. 2018; 42: 173-85.
6. Pornpitakpan C, Yuan Y, Han JH. The effect of salespersons' retail service quality and consumers' mood on impulse buying. Australian Market Journal. 2017; 25(1): 2–11.
7. Atulkar S, Kesari B. Role of consumer traits and situational factors on impulse buying: Does gender matter. International Jouanal of Retail and Distribution Management. 2018; 46(4): 386–405.
8. Dittmar H, Long K, Bond R. 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. 2007; 26: 334-361.
9. Roberts JA, Manolis C, Pullig C. Contingent self-esteem, self-presentational, concerns, and compulsive buying. Psychology and Marketing. 2014; 31(2): 147–160.
10. Chenshu Zhang Ch, 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.
11. Brand M, Young KS, Laier C, Wolfling K, Potenza MN. Integrating psychological and neurobiological consideration regarding the development and maintenance of specific internet-use disorders: An Interaction of person-affect-cognition-execution (I-PACE) model. Neuroscience and Biobehavioral Reviews. 2016; 71: 252–266.
12. Oberst U, Wegmann E, Stodt B, Brand M, Chamarro A. Negative consequences from heavy social networking in adolescents: The mediating role of fear of missing out. Journal of Adolescence. 2017; 55: 51–60.
13. Sohn SH, Choi YJ. Phases of shopping addiction evidenced by experiences of compulsive buyers. International Journal of Mental Health Addiction. 2013; 12(3):243–254.
14. Koh YW, Tang CS, Gan YQ, Kwon JY. Depressive symptoms and self-efficacy as mediators between life stress and compulsive buying. A cross-cultural comparison. Journal of Addiction and Recovery. 2020; 3(1): 1017.
15. Muller A, Claes L, Georgiadou E, Möllenkamp M, Voth EM, Faber RJ, de Zwaan M. Is compulsive buying related to materialism, depression, or temperament? Findings from a

sample of treatment-seeking patients with CB. Psychiatry Research. 2014; 216(1): 103-107.
16. Bani-Rshaid, AM, Alghraibeh AM. Relationship between Compulsive Buying and Depressive Symptoms among Males and Females. Journal of Obsessive-Compulsive and Related Disorders. 2017; 14:47–50.
17. Muller A, Mitchell J, Crosby R, Cao L, and Johnson J. Mood States Preceding and Following Compulsive Buying Episodes: An Ecological Momentary Assessment Study. Psychiatry Research. 2012; 200: 575-80.
18. Otero-López J, Pol J. Compulsive Buying and the Five Factor Model of Personality: A Facet Analysis. Personality and Individual Differences. 2013; 55: 585-90.
19. Black DW, Shaw M, McCormick B, Bayless JD, Allena, J. Neuropsychological performance, impulsivity, ADHD symptoms, and novelty seeking in compulsive buying disorder. Psychiatry Research. 2012; 200(2): 581–587.
20. Biolcati R, Mancini G, Trombini E. Proneness to boredom and risk behaviors during adolescents' free time. Psychological Reports. 2018; 121(2): 303-323.
21. Elhai JD, Vasquez JK, Lustgarten SD, Levine JC, Hal BJ. Proneness to boredom mediates relationships between problematic smartphone use with depression and anxiety severity. Social Science Computer Review. 2018; 36(6): 707-720.
22. Unsalan M. Stimulating factors of impulse buying behavior: A literature review. Gazi University Journal of Faculty and Economics and Administrative Sciences. 2018; 18(2): 572-593.
23. Moynihan AB, Igou ER, van Tilburg WA. Boredom increases impulsiveness. Social Psychology. 2017; 48: 1-56.
24. Van Hooft EAJ, Van Hooft MLM. The state of boredom: Frustrating or depressing? Motivation and Emotion. 2018; 42(6): 931–946.
25. Harris MB. Correlates and characteristics of boredom proneness and boredom. Journal of Applied Social Psychol. 2000; 30:576–598.
26. Struk A. A., Carriereogy, J. S., Cheyne, J. A., & Danckert, J. (2017). A short boredom proneness scale: Development and psychometric properties. Assessment. 24(3), 346-359,
27. Sundstrom M, Hjelm-Lidholm S, Radon A. Clicking the boredom away- Exploring impulse fashion buying behavior online. Journal of Retailing and Consumers Services. 2019; 47: 150-156.
28. Bozaci I. The effect of boredom proneness on smartphone addiction and impulse purchasing: A field study with young consumers in Turkey. The Journal of Asian Finance, Economics and Business. 2020; 7(7): 509 – 517.
29. Aruna S, Santhi P. Impulse purchase behavior among generation-Y. Journal of Marketing Management. 2015; 14(1): 21-38.
30. Dal Mas DE. Wittmann BC. Avoiding boredom: Caudate and insula activity reflects boredom-elicited purchase bias. Cortex. 2017; 92: 57-69,
31. Mrad M, Cui CC. Comorbidity of compulsive buying and brand addiction: An examination of two types of addictive consumption. Journal of Business Research. 2020; 113: 399-408.
32. Rezazadeh Z, Hossein Sabet F, Sohrabi F. Predicting Adolescents' Resiliency Rate Based on Parenting Styles Mediated by the Basic Psychological Needs Satisfaction. International Journal of Behavioral Sciences. 2020; 14(3): 136-142.
33. Fahlman SA, Mercer-Lynn KB, Flora DB, Eastwood JD. Development and validation of the multidimensional state boredom scale. Assessment Journal. 2011; 20(1): 68-85
34. Ridgway NM, Kukar-Kinney M, Monroe KB. An expanded conceptualization and a new measure of compulsive buying. Journal of Consumer Research. 2008; 35(4): 622-639.
35. Beck AT, Steer RA and Brown GK. Manual for the Beck Depression Inventory-II. San Antonio, TX: Psychological Corporation; 1996.
36. Beck AT, Steer RA, Ball R, Ranieri W. Comparison of Beck Depression Inventories -IA and -II in psychiatric outpatients. Journal of Personality Assessment. 1996; 67 (3): 588–597.
37. Dadfarnia S, Hadianfard H, Rahimi C, Aflakseir A. Emotion Regulation Therapy for Social Anxiety Disorder Comorbid with Major Depressive Disorder: A Case Study. International Journal of Behavioral Sciences. 2019; 13(2): 68-72.