# INVESTIGATION OF THE RELATIONSHIP BETWEEN ONLINE SHOPPING ADDICTION AND SOCIAL MEDIA ADDICTION IN UNIVERSITY STUDENTS: AS SOCIAL MEDIA USE INCREASES, SHOPPING DESIRE INCREASES

**Gözde Masatcıoğlu[1], Yunus Emre Öksüz[2]**

[1] *Doguş University, Vocational School, Autopsy Assistant Program, Türkiye • Orcid: 0000-0003-3457-3539*
[1] *Istinye University, Graduate Education Institute, Neuroscience Department, Türkiye • Orcid: 0000-0002-2952-3759*
**Yazışma Adresi/Correspondence:** *Yunus Emre ÖKSÜZ*
*Çamlıbahçe Mah. Uluç sok. No.9 D.1. Beykoz/Istanbul*
*e-posta: yunusemreksz@msn.com*

**Investigation Of the Relationship Between Online Shopping Addiction And Social Media Addiction In University Students: As Social Media Use Increases, Shopping Desire Increases**

**Üniversite Öğrencilerinde Çevrimiçi Alışveriş Bağımlılığı ve Sosyal Medya Bağımlılığı Arasındaki İlişkinin İncelenmesi: Sosyal Medya Kullanımı Arttıkça Alışveriş İsteği Artar**

## ABSTRACT

Online shopping is more attractive to consumers than physical shopping due to the convenience and variety of products it offers. This situation has introduced the concept of online shopping addiction, a concept that is increasingly used in literature. The increasing commercial potential of social media platforms and the advertising strategies of shopping websites on social media show that social media platforms encourage shopping. This study aims to examine the online shopping habits of individuals who spend significant time on social media and to investigate the potential influence of social media use on online shopping behaviors. The study was conducted with 254 participants through an online survey method. The relational survey method was used in the study. The study was conducted through the Online Shopping Addiction Scale and the Social Media Addiction Scale-Adult Form. As a result of the correlation analysis, a significant relationship was found between social media use and online shopping ($p < .01$). The regression analysis showed that a one-unit increase in social media addiction caused a 0.762-unit increase in online shopping behavior ($B = .762$, $SE = .041$). These findings support the hypothesis of this study that as social media addiction increases, online shopping addiction increases.

**Keywords:** Online Shopping, Social Media, Social Media Addiction, Online Shopping Addiction.

## ÖZET

Çevrimiçi alışveriş, sunduğu kolaylık ve geniş ürün yelpazesi sayesinde, tüketiciler için fiziksel alışverişe göre birçok cezbedici özelliği bünyesinde barındırmaktadır. Bu durum günümüz toplumunu, literatürde giderek daha sık kullanılan bir kavram olan çevrimiçi alışveriş bağımlılığı kavramıyla tanıştırmıştır. Sosyal medya platformlarının giderek artan ticari potansiyeli ve alışveriş sitelerinin sosyal medya üzerinden yürüttüğü reklamcılık stratejileri sosyal medya platformlarının alışverişi teşvik ettiğini göstermektedir. Bu durum sosyal medya kullanımı ile çevrimiçi alışveriş arasındaki ilişkilerin sorgulanmasını beraberinde getirmiştir. Bu çalışma, sosyal medyada önemli ölçüde zaman harcayan bireylerin çevrimiçi alışveriş alışkanlıklarını incelemeyi ve sosyal medya kullanımının çevrimiçi alışveriş davranışları üzerindeki olası etkisini araştırmayı amaçlamaktadır. Çalışma 254 katılımcı ile çevrimiçi anket yöntemiyle gerçekleştirilmiştir. Çalışmada ilişkisel tarama metodu kullanılmıştır. Çalışma Çevrimiçi Alışveriş Bağımlılığı Ölçeği ve Sosyal Medya Bağımlılığı Ölçeği-Yetişkin Formu aracılığıyla gerçekleştirilmiştir. Çalışmanın sonucunda gerçekleştirilen korelasyon analizinde sosyal medya kullanımı ve çevrimiçi alışveriş arasında anlamlı bir ilişki bulunmuştur ($p < .01$). Yapılan regresyon analizinde sosyal medya bağımlılığındaki bir birimlik artışın, çevrimiçi alışveriş davranışında 0.762 birimlik bir artışa neden olduğu görülmüştür ($B = .762$, $SE = .041$). Bu bulgular, bu çalışmanın hipotezi olan, sosyal medya bağımlılığı arttıkça çevrimiçi alışveriş bağımlılığı artar hipotezini desteklemektedir.

**Anahtar Kelimeler:** Çevrimiçi Alışveriş, Sosyal Medya, Sosyal Medya Bağımlılığı, Çevrimiçi Alışveriş Bağımlılığı.

## INTRODUCTION

Online shopping has met with large consumer masses with the widespread use of the internet and user-friendly shopping applications. Thanks to its convenience and wide range of products, online shopping has many attractive features for consumers compared to physical shopping. This situation has introduced today's society to the concept of online shopping addiction, a concept that is used more and more frequently. It is seen that studies on this addiction, in which the potential risks brought by the convenience offered by online shopping are at the forefront, continue to increase (1).

It is observed that the concept of online shopping addiction was first introduced to the literature in the early 2000s when individual internet use also increased. In a study examining online compulsive buying behavior, Dittmar, Long and Bond (2007) suggested that this concept has different characteristics from traditional compulsive buying behavior and that the internet environment can trigger this addiction (2). There are different views on online shopping addiction in the literature. For example, according to one view, this addiction is considered a subtype of obsessive-compulsive disorder (3). Another view considers online shopping addiction under the title of impulse control disorder (4).

In light of this, it is seen that there are many definitions of online shopping addiction in the literature. However, this concept, which is generally examined under the title of online shopping addiction, behavioral addictions, is defined as individuals' difficulty in controlling their impulses to shop online and excessive repetition of this activity (1). In addition, recent studies show that the prevalence of online shopping addiction has increased. For example, a recent study based on a multinational sample suggests that online shopping addiction is especially prevalent among teenagers and young adults (5).

Experts point out that many factors contribute to online shopping addiction. For example, Kuss et al. suggested that feelings of social isolation and loneliness may trigger this addiction (6). Brand et al. emphasized the easy accessibility of internet use and considered this as an important risk factor in addiction (7). In addition, Trotzke et al. emphasized the psychological factors underlying this addiction and stated that low self-esteem and depressive symptoms may be associated with online shopping addiction (8).

Studies on the neurobiological background of online shopping addiction suggest that this behavioral addiction shares similar neural mechanisms with other behavioral addictions. For example, Raab and colleagues, using functional magnetic resonance imaging (fMRI), a neuroimaging method to understand neurobiological processes, found that compulsive shoppers showed increased activation in the reward system of the brain, especially in the nucleus accumbens and ventral tegmental area (9). These findings draw attention to the dopaminergic reward system in online shopping addiction and suggest that it may play a role in potential addictions (10).

Previous studies on online shopping addiction have examined various aspects of this addiction. For example, Rose and Dhandayudham investigated the predictors of online shopping addiction and found that materialism, anxiety, and impulsivity were important factors (11). In another study, Zhao et al. examined the prevalence and risk factors of online shopping addiction among university students in China and found that approximately 17% of students were at risk of this addiction (12). In addition, the Compulsive Online Shopping Scale (COSS) developed by Manchiraju et al. made a significant contribution to the international literature and laid the foundation as an important tool for further studies. Thanks to these studies, the complex nature and underlying causes of online shopping addiction have been examined in different populations (1).

Social media addiction, which first entered the literature in the early 2000s, is defined as the individual's difficulty in controlling the use of social media, disruption of functioning in daily life due to excessive use, and showing withdrawal symptoms when its use is prevented (13).

This type of addiction has become a growing concern in societies integrated with a life based on individual internet use. In research, it is frequently emphasized that it negatively affects individuals' psychological, social, academic, or professional functioning. In addition, the constantly updated structure of social media platforms and their design to increase user interaction play an important role in the spread of this addiction. As a matter of fact, in a study conducted by Kuss and Griffiths in the period when social media applications reached relatively limited audiences, the addictive potential of social media applications was underlined (14)

The relationship between social media addiction and online shopping addiction draws attention through similar neurobiological and behavioral patterns. On the other hand, both addictions reflect the behavioral patterns of today's digital societies. The potential relationship between these two behavioral patterns is especially strong with the increasing commercial potential of social media platforms and the advertising strategies of shopping websites through social media. For example, a study by Sharma et al. concluded that social media use has a direct impact on online shopping behavior. This interaction is attributed by some to the fact that users are exposed to more product advertisements in parallel with the increase in time spent on social media platforms (15).

It is known that social media addiction is especially common among young people. In a study conducted by Kuss and Griffiths, it was emphasized that individuals

between the ages of 16-29 constitute the highest-risk group for social media addiction. Considering that this age group is also more prone to online shopping, it is thought that the relationship between the two types of addiction may be more pronounced in this demographic group (16). Indeed, a study by Xiao et al. showed that there is a positive correlation between the intensity of social media use and compulsive online shopping behaviors in young adults (17).

Accordingly, the advertising strategies employed by shopping websites on social media platforms have been extensively discussed in the literature. This shows that social media users are exposed to the advertisements of shopping websites during the time they spend on social media applications. Therefore, it stands out as an important factor that strengthens the relationship between the two addiction types. A recent study by Chen et al. found that social media addiction have a strong influence on users' purchase intentions (18). These ads influence consumer behavior by providing personalized content based on user's interests and online behavior. Moreover, another study has shown that social media influencers' product promotions have a significant impact on the purchase decisions of young users (19).

The studies shed light on the existence of a relationship between social media addiction and online shopping addiction. In addition, the share of modern digital marketing strategies in this relationship is frequently emphasized. In particular, it is stated that advertisements created by social media platforms using user data can trigger individuals' shopping impulses and potentially trigger purchase behavior (20).

Considering the increasing commercial potential of social media platforms, this research is designed to examine the online shopping behavior of users who spend a long time on social media and to understand the relationship between intensive social media use and intensive online shopping. The main hypothesis of the research is "as social media addiction increases, online shopping addiction increases".

## METHOD

### Research Design

This study was designed in the relational survey model to examine the relationship between social media addiction and online shopping addiction. The correlational survey model is a research approach that aims to determine the existence and/or degree of relationships between two or more variables (21). This model is used to identify relationships between variables and reveal potential cause-and-effect relationships but does not include an experimental intervention (22). In our study, this model was preferred to determine the direction and strength of the relationship between social media addiction and online shopping addiction.

### Research sample

The study sample consisted of associate and undergraduate students between the ages of 18 and 30. The sample was selected using a purposive sampling method. Participation was limited to individuals who reported shopping online at least twice a week over the previous six months, in order to ensure sufficient exposure to online shopping behavior (11).

The sample size was calculated using the G*Power 3.1.9.7 program, taking into account the effect sizes in similar studies (17). The minimum sample size was determined as 220 for a 95% confidence interval and a statistical power of .80. The questionnaires were delivered to 254 volunteer participants (163 women, 91 men), taking into account possible data losses

### Tools and Instruments

An informed consent form, demographic information form, and two scales were used in the study.

*The Online Shopping Addiction Scale.* **The Online Shopping Addiction Scale (OSA) is the Turkish version of the Online Shopping Addiction Scale (OSA) developed by Zhao et al. (12). The Turkish adaptation, validity, and reliability studies of the scale were conducted by Yılmaz et all. While the original scale had a six-factor structure, a five-factor structure was obtained by combining the first two factors (salience and tolerance) in the Turkish adaptation. It is stated that the internal consistency coefficient of the Online Shopping Addiction Scale is .92 and the test-retest reliability is .79. The internal consistency coefficients of the five sub-factors of the scale vary between .40 and .88. The scale does not contain reverse items** (23).

*Social Media Addiction Scale-Adult Form.* Social Media Addiction Scale-Adult Form is a five-point Likert-type scale developed to determine the social media addiction of adults in the 18-60 age group and has 20 items. The validity and reliability studies of the scale were conducted with a total of 1047 adult participants, 527 women, and 520 men. As a result of the exploratory and confirmatory factor analyses, the two-factor structure of the scale was confirmed. The Cronbach Alpha internal consistency coefficient for the overall scale was found to be .94. Test-retest reliability coefficients were calculated as .93 for the overall scale. There are 2 reverse items in the scale (24).

### Data Collection Process

The data collection process was carried out between 01.02.2023 and 31.10.2023 following ethics committee approval. To collect data, announcement texts were shared on three different social media platforms (Twitter, Instagram, and Facebook), and individuals who volunteered to participate in the study were contacted. Data were collected only from participants who met the inclusion criteria defined for the study.

## Analysis of Data

The statistical analysis of the study was carried out with IBM SPSS 21 program. Correlation analysis, ANOVA, regression analysis were used in the statistical analysis of the study.

Pearson correlation analysis was used to determine the strength and direction of the relationship between social media addiction and online shopping addiction. This analysis was preferred to measure the linear relationship between the two variables and to reveal the potential link between the variables.

Simple linear regression analysis was applied to examine the predictive effect of social media addiction on online shopping addiction. This analysis was used to determine the magnitude and direction of the effect of the independent variable (social media addiction) on the dependent variable (online shopping addiction).

In addition to correlation analysis, hierarchical multiple regression analysis was conducted to examine the predictive effect of social media addiction on online shopping addiction. In the first step of the regression model, sociodemographic variables (gender, age, and education level) were entered as control variables. In the second step, social media addiction was included in the model to assess its predictive contribution beyond sociodemographic factors.

One-way ANOVA was used to examine whether there are significant differences in the levels of social media addiction and online shopping addiction in terms of other variables determined in the study (how many social media platforms the respondents are a member of and how many online shopping sites they are a member of).

## Ethical Permissions

This study was ethically approved by the Doğuş University Ethics Committee with the decision dated 17.01.2023 and numbered 2023/01. Informed consent was obtained from all participants and it was stated that participation was voluntary and that they could withdraw from the study at any time. The confidentiality of the participants' personal information and the security of the research data were ensured. Necessary permissions were obtained from the researchers who developed or adapted the scales for the use of the scales used in the study.

## RESULTS

The study sample consisted of a total of 254 participants. Of the participants, 163 were female (64.2%) and 91 were male (35.8%). The mean age of female participants was 22.8 years (SD = 3.1), while the mean age of male participants was 24.6 years (SD = 3.8). The overall mean age of the sample was 23.7 years (SD = 3.5). Regarding educational status, 179 participants (70.5%) were associate degree students, and 75 participants (29.5%) were undergraduate students.

**Table 1: Correlation Table**

| Variable | Online Shopping Addiction | Social Media Addiction |
|---|---|---|
| **Social Media Addiction** | .760** | 1 |

*Note.* $**p < .01$, N = 254

Pearson earson correlation analysis revealed a strong and statistically significant positive relationship between social media addiction and online shopping addiction (r = .760, p < .01; Table 1).

**Table 2: Hierarchical Multiple Regression Analysis**

| Model | Predictor | B | SE | β | t | p |
|---|---|---|---|---|---|---|
| **Model 1** | Gender (0 = Male, 1 = Female) | 1.12 | 0.68 | .08 | 1.65 | .100 |
| | Age | 0.21 | 0.09 | .11 | 2.33 | .021 |
| | Education Level (0=Associate, 1=Undergraduate) | -0.94 | 0.72 | -.06 | -1.31 | .192 |

*$R^2$= .07, F(3,250) = 6.27, p < .01*

| Model | Predictor | B | SE | β | t | p |
|---|---|---|---|---|---|---|
| **Model 2** | Gender | 0.48 | 0.51 | .03 | 0.94 | .349 |
| | Age | 0.09 | 0.07 | .05 | 1.29 | .199 |
| | Education Level | -0.41 | 0.54 | -.03 | -0.76 | .449 |
| | Social Media Addiction | 0.74 | 0.04 | .75 | 18.12 | <.001 |

*$R^2$ = .58, $\Delta R^2$ = .51, F(4, 249) = 86.94, p < .01*

*Note. Model 1 includes sociodemographic control variables (gender, age, and education level). Model 2 includes social media addiction. B represents unstandardized coefficients, and β represents standardized coefficients.*

## Predicting Online Shopping Addiction

Hierarchical multiple regression analysis was conducted to examine whether social media addiction predicts online shopping addiction after controlling for sociodemographic variables. In the first model, gender, age, and education level were entered as control variables and explained a small but significant proportion of variance in online shopping addiction. In the second model, social media addiction was added to the analysis and emerged as a strong and significant predictor of online shopping addiction (β = .75, p < .001). The inclusion of social media addiction substantially increased the explained variance of the model ($\Delta R^2$ = .51), indicating that social media addiction contributes significantly to online shopping addiction beyond sociodemographic factors (Table 2).

**Table 3: Model Summary Table**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .760 | .577 | .575 | 7.31701 |

The R-value of the model was found to be R = .51 and R2 = .575. The standard error value was found as (MS= 53.54, SD= 7.332 ). This result shows that the model explains 57.7% of the total variance in the dependent variable and that the independent variable has a strong effect (Table 3).

**Table 4: ANOVA**

| Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|
| 18394.108 | 1 | 18394.108 | 343.567 | <.001 |
| 13491.754 | 252 | 53.539 | | |
| 31885.862 | 253 | | | |

ANOVA results show that the model is statistically significant. F(1,252)=343.57, p<.001. This confirms that the model is suitable to explain the relationship between Social Media Addiction (independent variable) and Online Shopping Addiction (dependent variable) in a statistically significant way. The model explains a significant portion of the total variance(Table 4).

To sum up, the analysis showed that the effect of the independent variable on the dependent variable was statistically significant, B=.762B SE=.041, β=.760 t(252)=18.54,p<.001The constant term was also significant, B=7.97B = 7.97, SE=t(252)=2.91, p<.05p < These results show that a one unit increase in the independent variable causes an increase of 0.762 units in the dependent variable(Table 2; Table 3).

## DISCUSSION

Our study found a strong and positive significant relationship between social media addiction and online shopping addiction (r = .760, p < .01; Table 1). This finding largely aligns with previous studies showing that increased social media use tends to be accompanied by an increase in online shopping behavior (15, 17, 18, 25). For example, Pahlevan Sharif and Yeoh (2018), in a study conducted with young adults using a sample similar to ours, reported a significant relationship between excessive social network use and compulsive online purchasing behaviors. Moreover, they revealed that this relationship is particularly strengthened through attitudes toward money (26). Similarly, Xiao et al. (2019) reported that the intensity of social media use is positively related to online compulsive shopping behaviors, emphasizing that time spent in digital environments can reinforce purchasing tendencies. Additionally, Sharma et al. (2018) showed that social media interaction in the context of social commerce directly influences users' purchase intentions and behaviors. Alotaibi et al. also conducted a similar study focusing on the Instagram platform and reported findings consistent with those of the present study (27).

On the one hand, some studies suggest that the relationship between social media use and online shopping behavior is shaped not directly, but through various mediating and contextual factors. For example, Chen et al. (2016) stated that personalized advertisements offered on social media platforms indirectly affect users' purchase intentions, and that this effect occurs through perceived relevance and interest levels. A similar pattern was observed in the study conducted by Kwahk and Kim (2017), which indicated that the effect of social media use on purchasing decisions may vary depending on variables such as trust in the platform and perceived risk. In this context, the strong correlation obtained in the current study (Table 1) indicates a meaningful association between social media addiction and online shopping addiction, while also highlighting the importance of examining the underlying psychological and technological mechanisms in greater detail (18, 20).

The hierarchical multiple regression analysis revealed that social media addiction is a strong and significant predictor of online shopping addiction even when sociodemographic variables such as gender, age, and education level are controlled for (β = .75, p < .001; Table 2). This finding indicates that social media use is associated with online consumption behaviors to a degree that cannot be explained solely by demographic characteristics. The results are consistent with previous studies reporting that intensive social media use is linked to increased online shopping tendencies. Specifically, Pahlevan Sharif and Yeoh (2018) reported that excessive use of social networking sites directly predicts online compulsive buying behavior and that this relationship persists independently of demographic variables (26). Similarly, Yoon et al. (2022) demonstrated that the redirection effect of social media applications toward shopping applications is primarily related to the interaction and incentive mechanisms offered by the platforms rather than to individual user characteristics. In this context, the present findings suggest that social media addiction may play a specific and independent role in online shopping behaviors (25).

However, some studies in the literature indicate that the relationship between social media use and online shopping behavior is not always this strong. For instance, Dittmar, Long and Bond (2007) argued that online purchasing behaviors are shaped more strongly by individual psychological characteristics, such as materialism and self-perception, while social media use plays a more indirect role (2). Similarly, Trotzke, Starcke, Müller and Brand (2015) emphasized that compulsive online purchasing behaviors are more closely associated with impulsivity and difficulties in emotional regulation than with the frequency of social media use itself (8). These findings suggest that the relationship between social media addiction and online shopping addiction may be weaker or more indirect in certain samples (2, 8).

The findings presented in Table 2 further suggest that specific psychological mechanisms may underlie the association between social media addiction and online shopping addiction when sociodemographic variables are taken into account. One such mechanism frequently highlighted in the literature is fear of missing out (FoMO). FoMO increases individuals' motivation to remain constantly up to date in social media environments, avoid missing opportunities, and keep pace with social comparisons. It has been suggested that FoMO may trigger online shopping behaviors, particularly through limited-time campaigns, countdown-based discounts, and content that makes others' purchasing behaviors visible. Indeed, Przybylski, Murayama, DeHaan and Gladwell (2013) showed that individuals with high levels of FoMO exhibit more frequent and impulsive behaviors in online environments (28). In line with this view, other studies have also reported a relationship between social network use and online compulsive buying behaviors (26, 29). Considering the sample characteristics of the present study, these findings raise important questions regarding the psychological mechanisms that may contribute to the strong predictive relationship observed in Table 2.

Furthermore, several studies have demonstrated that social cues and interaction-based content in online shopping environments reinforce impulse buying tendencies (30, 31). Given that the sample in the present study consists of young adults, this finding is particularly noteworthy, as this age group is known to show a stronger preference for websites and mobile applications rich in social cues (32). When considered together with these studies, the strong predictive effect of social media addiction on online shopping addiction observed in the current research suggests that the social and emotional cues embedded in digital environments may play a decisive role in shaping purchasing behaviors (30, 31).

The findings in Table 3 explain 57.7% of the variance in online shopping addiction ($R^2$ = .577). This ratio shows that social media addiction has a strong effect on online shopping addiction. In addition, ANOVA results also confirmed that the model was statistically significant ($F_{(1,252)}$ = 343.57, p < .001) (Table 4). Considering previous studies, both findings are in line with a study showing a positive correlation between social media use intensity and compulsive online shopping behaviors in young adults (17)(25).

When the regression coefficients are analyzed, it is seen that a one-unit increase in social media addiction causes a 0.762-unit increase in online shopping addiction (B = .762, SE = .041) (Table 1). This explains that online shopping tendency increases with the increase in social media use. This finding is in line with Chen et al.'s (2016) study that reveals the strong effect of social media advertisements on users' purchase intentions (18).

In general, our study reveals that there is a strong and significant relationship between social media addiction and online shopping addiction. The findings indicate that the risk of online shopping addiction increases with the increase in social media use. These results are significantly consistent with previous studies that emphasize the impact of digital marketing strategies and social media platforms on user behavior (27).

In light of the analysis conducted at the end of the study, it is seen that social media applications stand out as powerful tools that shape and influence consumption behaviors. This result is in line with the impact of social media influencers on consumer behavior highlighted in Leong et al.'s (2020) study. Leong et al. reported that influencers' product promotions or lifestyle posts influence the purchasing decisions of social media users, especially teenagers and young adults (19). In the same study, it is underlined that this situation may trigger compulsive online shopping behaviors. At this point, social media platforms and e-commerce sites need to develop ethical marketing strategies that take into account the health and well-being of users.

Another important implication of our study is to emphasize the importance of digital literacy and conscious consumption training. As stated by Vithayathil et al., it is important for social media users to acquire the necessary skills to make more informed decisions in online shopping processes (33). Therefore, based on these results, educational institutions and non-governmental organizations are recommended to develop digital literacy programs for young people. In addition, as stated by Xiao et al., financial literacy training is thought to play an important role in reducing the negative effects of these results (17).

In light of these findings, raising awareness of individuals about social media use and online shopping behaviors may be an important step. This situation, which is especially prevalent among youth and young adults, once again shows the importance of developing training programs on digital literacy and conscious consumption.

## SOURCES

1. Manchiraju, S., Sadachar, A., & Ridgway, J. L. (2017). The compulsive online shopping scale (COSS): Development and validation using panel data. International Journal of Mental Health and Addiction, 15(1), 209-223. https://doi.org/10.1007/s11469-016-9662-6

2. 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. https://doi.org/10.1521/jscp.2007.26.3.334

3. Weinstein, A., Maraz, A., Griffiths, M. D., Lejoyeux, M., & Demetrovics, Z. (2016). Compulsive buying—features and characteristics of addiction. In Neuropathology of Drug Addictions and Substance Misuse (pp. 993-1007). Academic Press. https://doi.org/10.1016/B978-0-12-800634-4.00098-6

4. Müller, A., Mitchell, J. E., & de Zwaan, M. (2015). Compulsive buying. The American Journal on Addictions, 24(2), 132-137. https://doi.org/10.1111/ajad.12111

5. Lam, L. T., & Lam, M. K. (2017). The association between financial literacy and problematic Internet shopping in a multinational sample. Addictive Behaviors Reports, 6, 123-127. https://doi.org/10.1016/j.abrep.2017.10.002

6. Kuss, D. J., & Griffiths, M. D. (2013). Internet addiction in students: Prevalence and risk factors. Computers in Human Behavior, 29(3), 959-966. https://doi.org/10.1016/j.chb.2012.12.024

7. Brand, M., Young, K. S., Laier, C., Wölfling, K., & Potenza, M. N. (2016). Integrating psychological and neurobiological considerations regarding the development and maintenance of specific Internet-use disorders: An Interaction of Person-Affect-Cognition-Execution (I-PACE) model. Neuroscience & Biobehavioral Reviews, 71, 252-266. https://doi.org/10.1016/j.neubiorev.2016.08.033

8. Trotzke, P., Starcke, K., Müller, A., & Brand, M. (2015). Pathological buying online as a specific form of internet addiction: A model-based experimental investigation. PloS One, 10(10), e0140296. https://doi.org/10.1371/journal.pone.0140296

9. Raab, G., Elger, C. E., Neuner, M., & Weber, B. (2011). A neurological study of compulsive buying behaviour. Journal of Consumer Policy, 34, 401-413. https://doi.org/10.1007/s10603-011-9168-3

10. Merims, D., & Giladi, N. (2008). Dopamine dysregulation syndrome, addiction and behavioral changes in Parkinson's disease. Parkinsonism & Related Disorders, 14(4), 273-280. https://doi.org/10.1016/j.parkreldis.2007.09.007

11. Rose, S., & Dhandayudham, A. (2014). Towards an understanding of Internet-based problem shopping behaviour: The concept of online shopping addiction and its proposed predictors. Journal of Behavioral Addictions, 3(2), 83-89. https://doi.org/10.1556/jba.3.2014.003

12. Zhao, H., Tian, W., & Xin, T. (2017). The development and validation of the online shopping addiction scale. Frontiers in Psychology, 8, 735. https://doi.org/10.3389/fpsyg.2017.00735

13. Schou Andreassen, C. S., & Pallesen, S. (2014). Social network site addiction - an overview. Current Pharmaceutical Design, 20(25), 4053-4061.

14. Kuss, D. J., & Griffiths, M. D. (2011). Online social networking and addiction—a review of the psychological literature. International Journal of Environmental Research and Public Health, 8(9), 3528-3552.

15. Sharma, S., Menard, P., & Mutchler, L. A. (2019). Who to trust? Applying trust to social commerce. Journal of Computer Information Systems, 58(3), 238-251. https://doi.org/10.1080/08874417.2017.1289356

16. Kuss, D. J., & Griffiths, M. D. (2017). Social networking sites and addiction: Ten lessons learned. International Journal of Environmental Research and Public Health, 14(3), 311. https://doi.org/10.3390/ijerph14030311

17. Xiao, L., Zhang, Y., & Fu, B. (2019). Exploring the moderators and causal process of trust transfer in online-to-offline commerce. Journal of Business Research, 98, 214-226. https://doi.org/10.1016/j.jbusres.2019.01.069

18. Chen, H., Beaudoin, C. E., & Hong, T. (2016). Protecting oneself online: The effects of negative privacy experiences on privacy protective behaviors. Journalism & Mass Communication Quarterly, 93(2), 409-429. https://doi.org/10.1177/1077699016640224

19. Leong, L. Y., Hew, T. S., Ooi, K. B., & Chong, A. Y. L. (2020). Predicting the antecedents of trust in social commerce–A hybrid structural equation modeling with neural network approach. Journal of Business Research, 110, 24-40. https://doi.org/10.1016/j.jbusres.2019.11.056

20. Kwahk, K. Y., & Kim, B. (2017). Effects of social media on consumers' purchase decisions: evidence from Taobao. Service Business, 11, 803-829. https://doi.org/10.1007/s11628-016-0331-4

21. Fraenkel, J., Wallen, N., & Hyun, H. (1993). How to Design and Evaluate Research in Education 10th ed. McGraw-Hill Education.

22. Creswell, J. W. (2018). Qualitative, quantitative, and mixed methods approaches+ a crash course in statistics. Sage publications.

23. Yılmaz, T., İkiz, G., & Avcı, F. M. (2022). Çevrimiçi Alışveriş Bağımlılığı Ölçeği'nin Türkçe psikometrik özelliklerinin incelenmesi. Bağımlılık Dergisi, 23(2), 205-215. https://doi:10.51982/bagimli.985782

24. Şahin, C., & Yağcı, M. (2017). Sosyal medya bağımlılığı ölçeği-yetişkin formu: geçerlilik ve güvenirlik çalişmasi. Ahi Evran Üniversitesi Kırşehir Eğitim Fakültesi Dergisi, 18(1), 523-538.

25. Yoon, J. Y., Lee, C., Choi, J., Chang, S. R., & Kim, J. (2022). The effect of social media apps on shopping apps. Journal of Business Research, 148, 23-32. https://doi.org/10.1016/j.jbusres.2022.04.021

26. Pahlevan Sharif, S., & Yeoh, K. K. (2018). Excessive social networking sites use and online compulsive buying in young adults: The mediating role of money attitude. Young Consumers, 19(3), 310-327. https://doi.org/10.1108/YC-10-2017-00743

27. Alotaibi, T. S., Alkhathlan, A. A., & Alzeer, S. S. (2019). Instagram shopping in Saudi Arabia: What influences consumer trust and purchase decisions? International Journal of Advanced Computer Science and Applications, 10(11). https://doi.org/10.14569/ijacsa.2019.0101181

28. Przybylski AK, Murayama K, DeHaan CR, Gladwell V. Motivational, emotional, and behavioral correlates of fear of missing out. Comput Hum Behav. 2013;29(4):1841-1848.

29. Barbu Kleitsch O, Drămnescu B. The influence of fear of missing out on shopping motivation and compulsive buying in young adults. Journalism Media. 2025;6(3):139.

30. Verhagen T, van Dolen W. The influence of online store beliefs on consumer online impulse buying: A model and empirical application. Inf Manage. 2011;48(8):320-327.

31. Prodanova J, Chopdar PK. The interplay of app characteristics and smartphone addiction in mobile shopping behaviour. Int J Consum Stud. 2024;48(1):e12992.

32. N tarajan T, Balasubramanian SA, Kasilingam DL. The moderating role of device type and age of users on the intention to use mobile shopping applications. Technol Soc. 2018;53:79-90.

33. Vithayathil J, Dadgar M, Osiri JK. Social media use and consumer shopping preferences. Int J Inf Manage. 2020;54:102117.