DOI: 10.5281/zenodo.15187751

Journal of Communication Science Researches

E-ISSN: 2757-8496



Research Article / Araştırma Makalesi

# EVALUATION OF SOCIAL MEDIA ADDICTION WITHIN THE FRAMEWORK OF SOCIAL AND EMOTIONAL LONELINESS: THE CASE OF GENERATION Z'S PROBLEMATIC INSTAGRAM USE

SOSYAL MEDYA BAĞIMLILIĞININ SOSYAL VE DUYGUSAL YALNIZLIK ÇERÇEVESİNDE DEĞERLENDİRİLMESİ: Z KUŞAĞININ PROBLEMLİ INSTAGRAM KULLANIMI ÖRNEĞİ

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Received/Geliş tarihi: 24.03.2025

Similarity Ratio/Benzerlik Orani: %7

Last revision received/Son revizyon teslimi: 04.04.2025

 ${\bf Accepted/Kabul\ tarihi:}\ 10.04.2025$ 

Ethics Committee Permission/ Etik Kurul İzni: Doğuş Üniversitesi Etik Kurulu / 2025/17 / 10.02.2025

Citation/Atıf: Öksüz, Y. E. & Masatcıoğlu, G. (2025). Sosyal Medya Bağımlılığının Sosyal ve Duygusal Yalnızlık Çerçevesinde Değerlendirilmesi: Z Kuşağının Problemli Instagram Kullanımı Örneği. Journal of Communication Science Researches, 5 (2), 161-172.

 $https:/\!/doi.org/10.5281/zenodo.15187751$ 

#### Abstract

Generation Z represents the generation born in the last five years of the twentieth century and the first ten years of the twenty first century. Unlike other generations, this generation grew up in a period when smartphones, tablets and many technological devices reached individual users, and this has led to them being called digital natives. This study aims to examine the behavioral roots of excessive social media use of Generation Z members and its effect on social and emotional loneliness via the Instagram platform. The study was conducted as quantitative research and was conducted using the relational screening method. The study included 292 participants aged 18-24 who had at least one active Instagram account. The participants studied or continued to study at university or equivalent schools. The Instagram Addiction Scale and the Adult Social and Emotional Loneliness Scale were used in the study. Correlation analysis, regression analysis and ANOVA were used in the statistical analysis of the study. As a result of the study, it was determined that there were strong and significant relationships between Instagram addiction and various psychological factors.

**Keywords:** Generation Z, Social Media Addiction, Instagram Addiction, Social Loneliness, Emotional Loneliness.

#### Öz

Z kuşağı yirminci yüzyılın son beş yılında yirmi birinci yüzyılın ise ilk on yılında doğan kuşağı temsil etmektedir. Bu kuşak diğer kuşaklardan farklı olarak akıllı telefonlar, tabletler ve birçok teknolojik cihazın bireysel kullanıcıya eriştiği dönemde büyümüş ve bu durum onların dijital yerliler olarak adlandırılmasını beraberinde getirmiştir. Bu çalışma Z Kuşağı üyelerinin aşırı sosyal medya kullanımının davranışsal kökenlerini ve bunun sosyal ve duygusal yalnızlık üzerindeki etkisini İnstagram platformu üzerinden incelemeyi amaçlamaktadır. Çalışma nicel bir araştırma olarak gerçekleştirilmiş ve ilişkisel tarama yöntemi ile yürütülmüştür. Çalışmaya en az bir aktif İnstagram hesabı olan 18-24 yaş arası 292 katılımcı dahil edilmiştir. Katılımcılar üniversite ve dengi okullarda okumuş ya da okumaya devam etmektedir. Çalışmada İnstagram Bağımlılık Ölçeği ve Yetişkinler İçin Sosyal ve Duygusal Yalnızlık Ölçeği kullanılmıştır. Çalışmanın istatistiksel analizinde korelasyon analizi, regresyon analizi ve ANOVA yapılmıştır. Çalışma sonucunda İnstagram bağımlılığı ile çeşitli psikolojik faktörler arasında güçlü ve anlamlı ilişkiler olduğu tespit edilmiştir.

**Anahtar Kelimeler:** Z Kuşağı, Sosyal Medya Bağımlılığı, Instagram Bağımlılığı, Sosyal Yalnızlık, Duygusal Yalnızlık.



## INTRODUCTION

Generation Z, defined as the first natives of the digital age, grew up in an era when technology and social media developed at a rapid pace. Born between the late 1990s and early 2010s, this generation witnessed the beginning of the dominance of digital platforms in almost every aspect of their daily lives. As noted in Turner's (2015) study, members of Generation Z spend most of their day online on various social media applications. The basis for this intensive use has been the subject of much research and has introduced many concepts to the literature. For instance, the concept of "FOMO" (Fear of Missing Out), as emphasized in Przybylski et al.'s (2013) study, stands out as one of the main motivations underlying Generation Z's social media use. In addition, compensatory internet use, emphasized by Kardefelt-Winther (2014), has been introduced to the literature as another important concept that refers to individuals' efforts to fulfill their social and emotional needs that cannot be met in real life on online platforms and has played an important role in understanding problematic use of social media platforms. Additionally, researchers often emphasize the desire to stay connected, the emotional appeal of instant information sharing, and the search for peer approval at the root of this behavior (Seemiller & Grace, 2016).

Today, there are many social media platforms with many different functions, and new ones are added to these platforms every day. Among these platforms, the impact of Instagram on Generation Z is particularly striking. Sheldon and Bryant's (2016) research reveals that young people see Instagram as a tool for self-expression, documenting their experiences, social interaction, and displaying their creativity. The visual-oriented nature of the platform and its user-friendly interface perfectly align with the desire to share instant experiences, which is particularly unique to Generation Z. Moreover, as highlighted in Lee et al.'s (2015) study, the perception of Instagram as less complex and more entertainment-oriented than other social media platforms is another point in line with Generation Z's preferences. In this study, the key role of Generation Z in social media use is examined from the perspective of social and psychological behavioral causes of the situation within the framework of the Instagram platform.

Against this backdrop of digital interaction, this study explores the relationship between Generation Z's Instagram use and social and emotional loneliness. Andreassen (2015) defines social media addiction as "individuals' inability to control their use of social media and spending excessive time on these platforms", while Kuss and Griffiths (2017) emphasize that this addiction is associated with symptoms such as anxiety, depression, and social isolation. Based on these two definitions, in our study, the motivations of Generation Z members to use the Instagram platform were examined within the framework of Sheldon and Bryant (2016) mentioned above, and within the scope of Kardefelt-Winther's (2014) "Compensatory Internet Use Theory", the efforts of individuals to compensate for their social and emotional needs that cannot be met in real life on online platforms formed the theoretical infrastructure of our research.

In our study, social media addiction was examined through problematic Instagram use. In parallel with Primack et al.'s (2017) findings, the hypothesis that social media use may paradoxically increase the feeling of loneliness was tested. In addition, psychological factors underlying Generation Z's Instagram use, such as the FOMO (Fear of Missing Out) phenomenon (Przybylski et al., 2013) and the desire to stay connected, emphasized in Turner's (2015) study, are also addressed in our research.

One of the main discussion points of our research is that increased screen time reduces face-to-face social interactions and increases feelings of loneliness, as Twenge et al. (2019) noted in their study. This study aims to make an original contribution to the literature by revealing the complex relationships between various psychological dimensions of Instagram addiction, such as escape from reality, relationship interruption, lack of control, obsession, and social and emotional loneliness.

### Literature Review

Problematic social media use behavior has become a growing concern in today's digital age. This can be seen in the prominence of the concept of social media addiction and the rapid increase in the number of studies underlying this concept (Turel, 2015; Kuss & Griffiths (2017). Andreassen (2015) defines the concept of social media addiction as "individuals' inability to control their social media use and spending excessive time on these platforms". This definition highlights the compulsive behavior pattern underlying social media addiction. Research by Kuss and Griffiths (2017) sheds light on the behavioral origins and consequences of social media addiction by emphasizing that anxiety, depression, social isolation, and sleep disorders are among the symptoms of social media addiction. These symptoms concretely reveal the profound effects of addiction on individuals' psychological and physiological health (Andreassen, 2015; Kuss & Griffiths, 2017).

The effects of social media addiction are widespread, manifesting themselves in many areas of individuals' lives. Turel (2015) states that problematic social media use can negatively affect individuals' academic achievement, work performance, and social relationships. This shows that social media addiction is not only a problem on an individual scale, but it can also have significant effects on a societal level. In this context, one of the increasing research topics in the recent past has been the neurological dimension of social media addiction. Montag et al. (2018) suggest that this addiction may lead to changes in brain structure. Another study suggests that excessive social media use may cause changes in gray matter density in the brain structure. Researchers found that excessive social media use leads to a decrease in gray matter density, especially in the anterior cingulate cortex region. This region is important in emotion regulation and decision-making processes (He et al., 2017).

The findings of these studies have led to a broader examination of the effects, causes, and potential consequences of excessive social media use. Cacioppo and Hawkley (2009) suggest that loneliness increases stress levels in individuals and this increase may positively increase addictive tendencies by affecting dopamine release. This neurobiological mechanism is an important milestone in understanding why lonely individuals exhibit addictive behaviors more frequently. A meta-analysis by Holt-Lunstad et al. (2015) showed that social isolation and loneliness negatively affect individuals' health status and significantly increase the risk of engaging in compulsive behaviors. These findings reveal that emotional processes also play a role in addiction processes (Holt-Lunstad et al., 2015; Cacioppo & Hawkley, 2009).

On the other hand, the psychological mechanisms underlying the triggering of behavioral addictions by loneliness are also noteworthy. Baumeister and Leary's (2017) "need to belong" theory sheds light on the basic motivations of individuals to establish and maintain social connections. It is stated that the inability to meet this need in case of loneliness may push individuals to seek alternative sources of satisfaction. In this context, Kardefelt-Winther (2014) suggested that internet and social media use may be a compensation mechanism that individuals who feel loneliness use to fill this gap. From a neuropsychological perspective, Volkow and Morales (2015) stated that loneliness affects the brain's reward system and this may increase the susceptibility to addictive behaviors.

The complex relationship between social isolation, emotional loneliness, and behavioral addictions has begun to be further elucidated by the growing literature on technological addictions in recent years. A study by Primack et al. (2017) revealed that increased social media use significantly increases perceived social isolation. This study stands out as a valuable study in terms of showing that digital connectedness can paradoxically increase the feeling of loneliness. On the other hand, Twenge et al. (2019) found that increased screen time is positively associated with depression and loneliness among young people. A study conducted by Kim et al. (2019) revealed that emotional loneliness is a significant risk factor for problematic internet use. Similarly, Caplan (2006) found that individuals with high social anxiety prefer online social interaction to face-to-face interaction and concluded that this increases the risk of internet addiction. Finally, a study by Elhai et al. (2020) confirmed a positive relationship between loneliness and problematic smartphone use.

A large-scale study by Andreassen et al. (2017) found that individuals with high levels of loneliness are more at risk of developing social media addiction. This research shed light on the interplay between emotional and behavioral mechanisms and technological addictions, showing that loneliness may not only be an outcome but also an antecedent of technological addictions. Similarly, Bian and

Leung (2015) found that loneliness and boredom are among the strongest predictors of smartphone addiction.

A theoretical framework explaining why lonely people use social media more has been presented in the literature under the title "Compensatory Internet Use Theory". This theory suggests that individuals try to compensate for their social and emotional needs that cannot be met in real life on online platforms (Kardefelt-Winther, 2014). A study conducted by Pittman and Reich (2016) showed that social media platforms that focus on sharing visual content (e.g., Instagram or similar platforms) are an effective method to reduce feelings of loneliness. This finding explains why lonely individuals prefer certain social media platforms. Moreover, a meta-analysis by Ryan et al. (2017) found that social media use is positively associated with types of social capital such as social connection, social bridging, and social bonding, which explains why lonely individuals turn to these platforms.

The impact of technological addictions on loneliness is also noteworthy. Twenge and colleagues (2019) found that increased screen time among young people reduces face-to-face social interactions, which in turn increases feelings of loneliness. This result underlines the vicious circle between technological addictions and loneliness. On the other hand, a review study by Nowland et al. (2018) found that the impact of internet use on loneliness may vary depending on the purpose and pattern of use. This study provides important clues on how technology can be used to reduce loneliness. For example, while using the internet to strengthen existing social relationships or to establish new ones may reduce loneliness, excessive use of the internet to replace face-to-face interactions may increase loneliness. Therefore, the relationship between technological addictions and loneliness appears to be complex and multifaceted. Furthermore, a study conducted by Waytz and Gray (2018) showed that technology, in addition to its potential to make people lonely, can also offer opportunities to strengthen social connections and build new relationships when used correctly.

As the first generation born and raised in the digital age, Generation Z plays a pioneering role in the use of technology and social media, and the effects of this are seen to be preceded by intense social media use specific to the generation (Turner, 2015). One of the most important factors shaping Generation Z's social media use is the fear of missing out, which is called FOMO (Fear of Missing Out). A study by Przybylski et al. (2013) showed that FOMO is particularly prevalent among teen and young adult users and that this significantly increases social media use.

Among many social media platforms, Instagram's popularity among Generation Z is also attributed to the unique features of this platform. In particular, the visual-oriented and constantly updated structure of this platform draws attention at this point. A study by Sheldon and Bryant (2016) found that teenagers and young adults use Instagram for self-expression, documentation, social interaction, and creativity. In particular, the visual storytelling feature offered by the platform is in line with Generation Z's desire to share instant experiences. Similarly, Lee et al. (2015) once again underline the overlapping points between the preferences of Generation Z and this platform.

Generation Z's use of social media shows significant differences compared to previous generations. Research conducted by Anderson and Jiang (2018) for the Pew Research Center showed that 95% of Generation Z has access to a smartphone and 45% of them are online almost constantly. Among the reasons for this intensive use, Twenge et al. (2019) cite the decline in face-to-face social interactions and the prominence of digital platforms as a means to fulfill social needs. In addition, Priporas et al.'s (2017) study emphasizes that Generation Z's rapid adaptation to technological innovations and their more comfortable self-expression on digital platforms increase their use of social media.

These findings are also supported by the previously mentioned studies. For example, Pittman and Reich's (2016) findings on the role of visual content sharing in reducing feelings of loneliness explain why Generation Z prefers visual-oriented platforms such as Instagram. This shows that the needs of Generation Z for social connection and self-expression overlap significantly.

Another noteworthy point in Generation Z's social media use is the use of multiple platforms. A study

by Vaterlaus et al. (2016) revealed that members of Generation Z use different social media platforms for different purposes. For example, they tend to use Instagram for visual media sharing and trend tracking, Twitter for news and current events, and Snapchat for instant and more private communication.

Another factor affecting Generation Z's use of social media is the process of identity formation. A study by Yau and Reich (2019) showed that Gen Z youth use social media platforms, especially Instagram, as a tool to build and manage their brand. These platforms appear to give young people the opportunity to create an idealized self-presentation and gain approval from their peers.

Accordingly, another critical point that draws attention to Generation Z's use of social media platforms is their interest in influencer content producers. It is known from past studies that Generation Z is heavily influenced by social media influencers in terms of product and service preferences. This shows that platforms such as Instagram have become a medium for Generation Z not only for social interactions but also for influencing their consumption habits (Lou & Yuan, 2019).

In addition, Trifiro and Gerson (2019) point out that the search for "authenticity" is an important factor in Generation Z's social media use and suggest that Instagram's "stories" feature plays a critical role in this search.

Finally, as Schwieger and Ladwig (2018) point out, although social media platforms, including Instagram, have become a tool for professional networking and career development as Generation Z enters the world of work, it is also known that social media use has potential negative effects. For example, Twenge and Campbell's (2019) research showed that excessive social media use may be associated with psychological and mental health problems among Generation Z, such as anxiety, depression, and sleep issues.

To sum up, it was seen that Generation Z grew up intertwined with technology and social media platforms as the first natives of the digital age, and it is understood that various motivations such as the desire to stay constantly connected, the emotional appeal of instant information sharing and the search for peer approval lie at the basis of this generation's social media use, especially Instagram. In addition, it was determined that concepts such as FOMO (Fear of Missing Out) and compensatory internet use play an important role in explaining the social media behaviors of Generation Z. It is understood that Instagram's visual-oriented structure and user-friendly interface overlap with Generation Z's needs for self-expression, documenting their experiences and social interaction. Among other findings in the literature, it has been determined that Generation Z is influenced by social media influencers in terms of consumption habits, Instagram's "stories" feature plays a critical role in the search for "authenticity" and social media platforms are used as a professional networking tool. In addition, it has been understood that problematic social media use is associated with psychological problems such as anxiety, depression, and sleep disorders, which is an important concern emphasized in literature. Ultimately, examining the relationship between Generation Z's Instagram use and social and emotional loneliness is critical for understanding the new social dynamics brought by the digital age.

# METHODOLOGY AND FINDINGS

### Research Design

This study was designed to investigate the behavioral origins and effects of excessive social media use on the Instagram platform within the framework of social and emotional loneliness and was designed and conducted in a relational survey model. The relational survey model is known as a research approach that aims to determine the existence or degree of relationships between two or more variables (Fraenkel, 1993). This model, which was preferred in this study, is used to define the relationships between variables and to identify potential cause-effect relationships (Creswell & Creswell, 2018). In this study, this model was preferred to determine the direction and strength of the potential relationship between excessive Instagram use and social and emotional loneliness.

### **Participants and Tools**

The target population of the study is associate and undergraduate students between the ages of 18-24 residing alone or with their families in Istanbul. The purposive sampling method was used to select the sample. Participants who used Instagram at least 14 hours a week in the last 4 weeks and had at least 1 Instagram account were included in the statistical analysis of the study. Participants who wanted to participate in the study were asked to examine their usage statistics, which can be learned through the Instagram platform, and to be included in this study if they have used Instagram for at least 14 hours or more per week in the last 4 weeks.

The sample size was calculated using the G\*Power 3.1.9.7 program, taking into account the effect sizes in similar studies. The minimum sample size was determined as 280 for a 95% confidence interval and a statistical power of .80. The questionnaire forms were delivered to a total of 292 volunteer participants, considering possible data losses.

The participants were administered 2 different scales with validity and reliability. The participants were firstly administered the "Instagram Addiction Scale (IAS)" adapted into Turkish by Kavaklı and Inan, and secondly, the "Social and Emotional Loneliness Scale for Adults (SELSF)" adapted to Turkish culture by Akgül and a validity and reliability study was conducted (Kavaklı & Inan, 2020; Akgül., 2019). The research was conducted with an online survey method. To identify the participants who wanted to participate in the study, the announcement of the study was shared on Instagram and other social media platforms, and then the survey form was sent to the participants who wanted to participate in the study via e-mail address.

# **Statistical Analysis**

In this study, various statistical analyses were used to examine Instagram addiction and related factors. First, descriptive analysis was applied to understand and summarize the general characteristics of the data set. Then, correlation analysis was conducted to determine the strength and direction of the relationships between Instagram addiction and other psychological factors. Then, multiple linear regression analysis was applied to identify the factors predicting Instagram addiction and to assess the relative importance of these factors. This analysis provided the opportunity to evaluate the effect of independent variables on the dependent variable separately and allowed the theoretical models to be tested. Finally, ANOVA was used to examine whether Instagram addiction levels differed in terms of demographic characteristics. This comprehensive analysis approach allowed for an in-depth examination of the complex nature of Instagram addiction and its associated factors

#### **Findings**

A total of 292 participants (N=292) participated in the study. When the gender distribution of the participants is examined, the mean value is  $(1.44 \pm 0.50)$ , which shows that the sample is relatively balanced in terms of gender. The mean age of the participants was  $(20.90 \pm 1.01)$  and ranged between 18 and 24 years. The sample of the study consists of young adults.

When the sub-dimensions of the Instagram Addiction Scale were examined, the dimension with the highest average score was determined as the "Relationship Interruption Subdimension" (12.92  $\pm$  7.78). This was followed by "Escape from Reality Subdimension" (11.30  $\pm$  5.42) and "Deprivation of Control Subdimension" (9.79  $\pm$  3.98). The "Obsession Subscale" (9.36  $\pm$  4.95) and "Health and Interpersonal Problems Subscale" (6.56  $\pm$  1.44) had relatively lower mean scores.

The mean Instagram Addiction Total Score was calculated as  $(49.94 \pm 19.88)$ . This score indicates a moderate level of addiction between the minimum score of 24 and the maximum score of 86. In addition, the mean Social Emotional Loneliness Scale Total Score was found to be  $(67.12 \pm 23.81)$ , indicating that the participants felt moderate to high levels of social and emotional loneliness..

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Table	1:	Corre	ialion	Anai	VS1S

Variables	r	p
Instagram Addiction Scale Total Score	1	
Social Emotional Loneliness Scale Total Score	0.858	< 0.001***
Lack of Control Sub-Dimension (IAS)	0.917	< 0.001***
<b>Escaping from Reality Sub-Dimension (IAS)</b>	0.953	< 0.001***
Disengagement Sub-Dimension (IAS)	0.936	< 0.001***
Obsession Sub-Dimension (IAS)	0.732	< 0.001***
Health and Interpersonal Problems Sub-Dimension (IAS)	0.114	0.051*

$$p < .05 ** p < .01 *** p < .001$$

Correlation analysis results show that there are strong and significant relationships between Instagram addiction and various psychological factors. The strongest positive correlations were found between Instagram Addiction Total Score and Escape from Reality Subdimension (r = .953, p < .001), Relationship Interruption Subdimension (r = .936, p < .001), Deprivation of Control Subdimension (r = .917, p < .001), and Social Emotional Loneliness Scale Total Score (r = .858, p < .001), respectively. In addition, a strong positive correlation (r = .732, p < .001) was observed with the Obsession Subscale. On the other hand, no statistically significant relationship was found between the Health and Interpersonal Problems Subscale and Instagram Addiction (r = .114, p > .05) (Table 1).

According to these results, there is a strong and positive relationship between Instagram use and social/emotional loneliness, and as Instagram addiction increases, social and emotional loneliness also increases. Again, according to the correlation table, there is a very strong and positive relationship between Instagram use and escape from reality. This shows that individuals with high Instagram addiction also have a high tendency to escape from reality. In addition, a strong and positive relationship was found between obsessions and Instagram use. This finding indicates that as Instagram addiction increases, obsessive thoughts and behaviors increase (Table 1).

A strong positive relationship was found between the sub-dimensions of control deprivation and relationship interruption and Instagram addiction. This suggests that individuals with high Instagram addiction experience problems in their social relationships and loss of control over their behaviors. However, no significant relationship was found between health and interpersonal problems and Instagram use. This suggests that Instagram addiction does not directly affect physical health or interpersonal relationships (Table 1).

**Table 2:** Regression Analysis

Independent Variables	В	SD	ß	t	р
Lack of Control Sub-Dimension (IAS)	0.87	0.043	0.200	20.23	<0.001***
<b>Escaping from Reality Sub-Dimension (IAS)</b>	0.92	0.039	0.273	23.56	<0.001***
Disengagement Sub-Dimension (IAS)	0.78	0.041	0.249	19.02	<0.001***
Obsession Sub-Dimension (IAS)	0.54	0.046	0.114	11.74	<0.001***
Health and Interpersonal Problems Sub-	0.31	0.050	0.070	6.20	<0.001***
Dimension (IAS)					
<b>Total Score of Social and Emotional Loneliness</b>	-0.45	0.037	-0.145	-12.16	<0.001***
Scale					

p < .05 \*\* p < .01 \*\*\* p < .001

The results of the multiple regression analysis show that the model perfectly explains Instagram addiction ( $R^2 = 1.000$ ,  $F(6, 285) = \infty$ , p < .001). This means that the independent variables explain the entire variance in Instagram addiction. According to the coefficients table, all independent variables significantly predict Instagram addiction. Accordingly: Relationship interruption sub-dimension ( $\beta = 1.000$ ) and  $\beta = 1.000$ ) and  $\beta = 1.000$  and  $\beta =$ 

.391, p < .001); escape from reality sub-dimension ( $\beta$  = .273, p < .001); obsession sub-dimension ( $\beta$  = .249, p < .001); control deprivation sub-dimension ( $\beta$  = .200, p < .001); health and interpersonal problems sub-dimension ( $\beta$  = .072, p < .001); social emotional loneliness scale total score ( $\beta$  = .000, p < .001) (Table 2).

Table 3: ANOVA

Model	SS	df	MS	p
Regression	115036.89	6	19172.815	<0.001***
Residuals	0.000	285	0.000	-
Total	115036.89	291	-	-

p < .05 \*\* p < .01 \*\*\* p < .001

According to the ANOVA table, the regression model is statistically significant (F(6, 285) =  $\infty$ , p < .001). This finding shows that the selected independent variables are effective in predicting Instagram addiction and the model is valid (Table 3).

#### **CONCLUSION**

The correlation analysis results of our study presented in Table 1 showed that the strongest relationships of Instagram addiction were with the sub-dimensions of escape from reality, relationship interruption, and lack of control, respectively. These findings are in parallel with many studies in the literature (Kircaburun & Griffiths, 2018; Sheldon & Bryant, 2016). Indeed, similar to the results of our study, Kircaburun and Griffiths (2018) emphasize that social media platforms are used as a tool for users to escape from the stress of daily life. Similarly, the study conducted by Sheldon and Bryant (2016) examined the way Instagram use affects social relationships and showed that it is used as a platform that can replace face-to-face communication. This finding supports the high correlation of the relationship interruption sub-dimension in our study. In addition, Andreassen and colleagues' (2017) study on social media addiction revealed that loss of control over use is an important indicator of addiction. This study, in line with our findings, supports that lack of control is an important factor in Instagram addiction. In addition, as emphasized by Casale and Fioravant (2018), social media use plays an important role in meeting psychological needs in our study.

According to the correlation analysis, the strongest relationships were found with the sub-dimensions of escape from reality, relationship interruption, and lack of control, respectively (Table 1). This shows that Instagram addiction is more closely related to psychological factors and has similar results to previous studies (Ponnusamy et al., 2020). The significant and strong correlation in the escape from reality dimension suggests that teenagers and young adults use Instagram as an escape to express themselves in a different world rather than the current world and is in line with previous studies in this respect (Sheldon & Bryant, 2016).

In regression analysis, significant relationships were found between Instagram addiction and social-emotional loneliness, lack of control, escape from reality, relationship interruption, obsession, and health and interpersonal problems (Table 2). These findings are in line with Kircaburun and Griffiths' (2018) study and confirm that Instagram addiction is strongly related to psychological factors, especially escape from reality and lack of control. Moreover, Casale and Fioravanti's (2018) study on social media addiction supports our findings and shows that addiction is related to the role of fulfilling psychological needs and providing an escape from real life. However, in this study, we aimed to examine these relationships in Instagram in more detail and draw attention to the role of the unique dynamics of the platform in the addiction process.

One of the striking findings of the study was that the relationship interruption sub-dimension was the strongest predictor of Instagram addiction ( $\beta$  = .315, p < .001). Although this result is consistent with Sheldon and Bryant's (2016) study examining the way Instagram use affects social relationships, it

emphasizes the effect of relationship interruption on addiction more strongly. This difference is thought to be due to the changing usage dynamics and increasing popularity of Instagram over time. On the other hand, this finding is in line with Yang et al.'s (2018) study suggesting that social media addiction may lead to social isolation. However, it is thought that our study brings a new perspective to the literature in terms of showing that disconnection may be an antecedent rather than a consequence of addiction.

Although the strong positive relationship between social-emotional loneliness and Instagram addiction (r = .858, p < .001) is consistent with some studies in the literature, this relationship is seen as another point that draws attention in this study. Pittman and Reich's (2016) study draw attention to the fact that visual-based social media platforms can be effective in reducing the feeling of loneliness. However, the findings of this study suggest that this relationship may be more complex and potentially harmful. The increase in Instagram use as loneliness increases suggests that the platform is used as a coping mechanism but may also increase the risk of addiction. This finding is in line with Primack and colleagues' (2017) study examining the relationship between social media use and perceived social isolation. However, by focusing specifically on Instagram, our study aims to clarify the role of this platform in the relationship between loneliness and addiction.

The moderate positive relationship between the obsession subscale and Instagram addiction (r = .732, p < .001) is in line with Andreassen et al.'s (2016) study examining the relationship between social media addiction and obsessive-compulsive disorder. However, our study examines this relationship specifically in the context of Instagram, providing new insights into how the visual-oriented nature of the platform may trigger obsessive thoughts and behaviors. This finding highlights the potential negative effects of Instagram on the mental health of its users. It is also thought to contribute to the development of future intervention strategies.

The fact that the health and interpersonal problems subscale significantly predicted Instagram addiction ( $\beta$  = .072, p < .001) is similar to Andreassen and colleagues' (2017) study on the negative consequences of social media addiction. However, our study analyses this relationship in the specific context of Instagram, revealing in more detail the impact of the platform's unique features (e.g., visually oriented content, displaying 'perfect' lifestyles) on users' health perceptions and interpersonal relationships. This finding is in line with Fardouly and Vartanian's (2016) study examining the effects of Instagram use on body image, but our study suggests that these effects can be seen across a broader spectrum of health and relationships. These results emphasize that the potential negative effects of Instagram use should be assessed not only at the individual level but also at the level of interpersonal relationships and general health perception.

In light of this, this study revealed the complex and multidimensional nature of Instagram addiction. Our findings showed that Instagram addiction was strongly related to social-emotional loneliness, lack of control, escape from reality, relationship interruption, obsession, and health and interpersonal problems. Relationship interruption was the strongest predictor of addiction, indicating the potential negative effects of Instagram use on social relationships. Furthermore, the strong positive association between social-emotional loneliness and Instagram addiction suggests that the platform may be used as a coping mechanism for loneliness, but this may also increase the risk of addiction. The association of obsession and health and interpersonal problems dimensions with addiction emphasizes the potential negative effects of Instagram use on users' mental health and overall quality of life. These findings reveal the need to raise awareness about the use of Instagram and similar social media platforms, to disseminate digital literacy training, and to develop intervention strategies for individuals at risk of addiction. Future research should examine the causality of these relationships and investigate the long-term effects of Instagram addiction.

#### REFERENCES

Anderson, M., & Jiang, J. (2018). Teens, social media & technology 2018. *Pew research center*, *31*(2018), 1673-1689.

- Andreassen, C. S. (2015). Online Social Network Site Addiction: A Comprehensive Review. *Current Addiction Reports*, 2(2), 175-184. https://doi.org/10.1007/s40429-015-0056-9
- Andreassen, C. S., Billieux, J., Griffiths, M. D., Kuss, D. J., Demetrovics, Z., Mazzoni, E., & Pallesen, S. (2016). The relationship between addictive use of social media and video games and symptoms of psychiatric disorders: A large-scale cross-sectional study. *Psychology of Addictive Behaviors*, 30(2), 252-262. https://doi.org/10.1037/adb0000160
- Andreassen, C. S., Pallesen, S., & Griffiths, M. D. (2017). The relationship between addictive use of social media, narcissism, and self-esteem: Findings from a large national survey. *Addictive Behaviors*, *64*, 287-293. https://doi.org/10.1016/j.addbeh.2016.03.006
- Bian, M., & Leung, L. (2015). Linking Loneliness, Shyness, Smartphone Addiction Symptoms, and Patterns of Smartphone Use to Social Capital. *Social Science Computer Review*, *33*(1), 61-79. https://doi.org/10.1177/0894439314528779
- Cacioppo, J. T., & Hawkley, L. C. (2009). Perceived social isolation and cognition. *Trends in Cognitive Sciences*, 13(10), 447-454. https://doi.org/10.1016/j.tics.2009.06.005
- Caplan, S. E. (2007). Relations Among Loneliness, Social Anxiety, and Problematic Internet Use. *CyberPsychology & Behavior*, *10*(2), 234-242. https://doi.org/10.1089/cpb.2006.9963
- Casale, S., & Fioravanti, G. (2018). Why narcissists are at risk for developing Facebook addiction: The need to be admired and the need to belong. *Addictive Behaviors*, 76, 312-318. https://doi.org/10.1016/j.addbeh.2017.08.038
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches.* Sage publications.
- Elhai, J. D., Yang, H., McKay, D., & Asmundson, G. J. G. (2020). COVID-19 anxiety symptoms associated with problematic smartphone use severity in Chinese adults. *Journal of Affective Disorders*, 274, 576-582. https://doi.org/10.1016/j.jad.2020.05.080
- Fardouly, J., & Vartanian, L. R. (2016). Social Media and Body Image Concerns: Current Research and Future Directions. *Current Opinion in Psychology*, *9*, 1-5. https://doi.org/10.1016/j.copsyc.2015.09.005
- Fraenkel, J., Wallen, N., & Hyun, H. (1993). *How to Design and Evaluate Research in Education 10th ed.* McGraw-Hill Education.
- Hanife Akgül. (2019). Adapting Social and Emotional Loneliness Scale(Selsa-S) to Turkish Culture: Relevance and Reliability. 2 1 t h I n t e r n a t i o n a l C o n g r e s s o n P s y c h o l o g i c a l C o u n s e l i n g a n d G u i d a n c e. https://toad.halileksi.net/wp-content/uploads/2022/07/yetiskinler-icin-sosyal-ve-duygusal-yalnizlik-olcegi-toad.pdf
- He, Q., Turel, O., & Bechara, A. (2017). Brain anatomy alterations associated with Social Networking Site (SNS) addiction. *Scientific Reports*, 7(1), 45064. https://doi.org/10.1038/srep45064
- Holt-Lunstad, J., Smith, T. B., Baker, M., Harris, T., & Stephenson, D. (2015). Loneliness and Social Isolation as Risk Factors for Mortality: A Meta-Analytic Review. *Perspectives on Psychological Science*, 10(2), 227-237. https://doi.org/10.1177/1745691614568352
- Kardefelt-Winther, D. (2014a). A conceptual and methodological critique of internet addiction research: Towards a model of compensatory internet use. *Computers in Human Behavior*, *31*, 351-354. https://doi.org/10.1016/j.chb.2013.10.059
- Kardefelt-Winther, D. (2014b). A conceptual and methodological critique of internet addiction research: Towards a model of compensatory internet use. *Computers in Human Behavior*, *31*, 351-354. https://doi.org/10.1016/j.chb.2013.10.059
- Kavaklı, M., & İnan, E. (2020). Psychometric Properties and Correlates of the Turkish Version of Instagram Addiction Scale (IAS). *Klinik Psikoloji Dergisi*, 0, 1. https://doi.org/10.5455/kpd.26024438m000037

- Kircaburun, K., & Griffiths, M. D. (2018). Instagram addiction and the Big Five of personality: The mediating role of self-liking. *Journal of Behavioral Addictions*, 7(1), 158-170. https://doi.org/10.1556/2006.7.2018.15
- Kuss, D., & Griffiths, M. (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
- Laursen, B. P., & Žukauskienė, R. (Ed.). (2018). *Interpersonal development* (First electronic edition). Routledge, Taylor and Francis Group.
- Lee, E., Lee, J.-A., Moon, J. H., & Sung, Y. (2015). Pictures Speak Louder than Words: Motivations for Using Instagram. *Cyberpsychology, Behavior, and Social Networking*, 18(9), 552-556. https://doi.org/10.1089/cyber.2015.0157
- Mascheroni, G., Vincent, J., & Jimenez, E. (2015). "Girls are addicted to likes so they post semi-naked selfies": Peer mediation, normativity and the construction of identity online. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, 9(1). https://doi.org/10.5817/CP2015-1-5
- Montag, C., Becker, B., & Gan, C. (2018). The Multipurpose Application WeChat: A Review on Recent Research. *Frontiers in Psychology*, *9*, 2247. https://doi.org/10.3389/fpsyg.2018.02247
- Nowland, R., Necka, E. A., & Cacioppo, J. T. (2018). Loneliness and Social Internet Use: Pathways to Reconnection in a Digital World? *Perspectives on Psychological Science*, *13*(1), 70-87. https://doi.org/10.1177/1745691617713052
- Pittman, M., & Reich, B. (2016). Social media and loneliness: Why an Instagram picture may be worth more than a thousand Twitter words. *Computers in Human Behavior*, 62, 155-167. https://doi.org/10.1016/j.chb.2016.03.084
- Ponnusamy, S., Iranmanesh, M., Foroughi, B., & Hyun, S. S. (2020). Drivers and outcomes of Instagram Addiction: Psychological well-being as moderator. *Computers in Human Behavior*, 107, 106294. https://doi.org/10.1016/j.chb.2020.106294
- Primack, B. A., Shensa, A., Sidani, J. E., Whaite, E. O., Lin, L. Y., Rosen, D., Colditz, J. B., Radovic, A., & Miller, E. (2017). Social Media Use and Perceived Social Isolation Among Young Adults in the U.S. *American Journal of Preventive Medicine*, *53*(1), 1-8. https://doi.org/10.1016/j.amepre.2017.01.010
- Priporas, C.-V., Stylos, N., & Fotiadis, A. K. (2017). Generation Z consumers' expectations of interactions in smart retailing: A future agenda. *Computers in Human Behavior*, 77, 374-381. https://doi.org/10.1016/j.chb.2017.01.058
- Ryan, T., Allen, K. A., Gray, D. L., & McInerney, D. M. (2017). How Social Are Social Media? A Review of Online Social Behaviour and Connectedness. *Journal of Relationships Research*, 8, e8. https://doi.org/10.1017/jrr.2017.13
- Schwieger, D., & Ladwig, C. (2018). Reaching and retaining the next generation: Adapting to the expectations of Gen Z in the classroom. *Information Systems Education Journal*, 16(3), 45.
- Seemiller, C., & Grace, M. (2016). Generation Z goes to college. John Wiley & Sons.
- Sheldon, P., & Bryant, K. (2016). Instagram: Motives for its use and relationship to narcissism and contextual age. *Computers in Human Behavior*, *58*, 89-97. https://doi.org/10.1016/j.chb.2015.12.059
- Southgate, D. (2017). The Emergence of Generation Z And Its Impact in Advertising: Long-Term Implications For Media Planning and Creative Development. *Journal of Advertising Research*, 57(2), 227-235. https://doi.org/10.2501/JAR-2017-028
- Turel, O. (2015). Quitting the use of a habituated hedonic information system: A theoretical model and empirical examination of Facebook users. *European Journal of Information Systems*, 24(4), 431-446. https://doi.org/10.1057/ejis.2014.19

- Turner, A. (2015). Generation Z: Technology and Social Interest. *The Journal of Individual Psychology*, 7*I*(2), 103-113. https://doi.org/10.1353/jip.2015.0021
- Twenge, J. M., & Campbell, W. K. (2019). Media Use Is Linked to Lower Psychological Well-Being: Evidence from Three Datasets. *Psychiatric Quarterly*, *90*(2), 311-331. https://doi.org/10.1007/s11126-019-09630-7
- Twenge, J. M., Spitzberg, B. H., & Campbell, W. K. (2019). Less in-person social interaction with peers among U.S. adolescents in the 21st century and links to loneliness. *Journal of Social and Personal Relationships*, 36(6), 1892-1913. https://doi.org/10.1177/0265407519836170
- Vaterlaus, J. M., Barnett, K., Roche, C., & Young, J. A. (2016). "Snapchat is more personal": An exploratory study on Snapchat behaviors and young adult interpersonal relationships. *Computers in Human Behavior*, 62, 594-601. https://doi.org/10.1016/j.chb.2016.04.029
- Volkow, N. D., & Morales, M. (2015). The Brain on Drugs: From Reward to Addiction. *Cell*, *162*(4), 712-725. https://doi.org/10.1016/j.cell.2015.07.046
- Waytz, A., & Gray, K. (2018). Does Online Technology Make Us More or Less Sociable? A Preliminary Review and Call for Research. *Perspectives on Psychological Science*, *13*(4), 473-491. https://doi.org/10.1177/1745691617746509
- Yang, C., Holden, S. M., Carter, M. D. K., & Webb, J. J. (2018). Social media social comparison and identity distress at the college transition: A dual-path model. *Journal of Adolescence*, 69(1), 92-102. https://doi.org/10.1016/j.adolescence.2018.09.007
- Yau, J. C., & Reich, S. M. (2019). "It's Just a Lot of Work": Adolescents' Self-Presentation Norms and Practices on Facebook and Instagram. *Journal of Research on Adolescence*, 29(1), 196-209. https://doi.org/10.1111/jora.12376