# 'Impaired Autonomy and Performance' Predicts Instagram Addiction Among Instagram Users: A Cross-Sectional Study

'Bozulmuş Özerklik ve Performans' Instagram Kullanıcıları Arasında Instagram Bağımlılığını Öngörüyor: Kesitsel Bir Çalışma

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## ABSTRACT

**Objective:** This study aims to investigate the effects of early maladaptive schemas on Instagram addiction, as a more specific, controversial, and new field, in terms of the four-factor model developed by Bach et al.

**Methods:** Participants over the age of 18 who have Instagram accounts were evaluated with the sociodemographic data form, Instagram Addiction Scale (IAS), Young Schema Scale - Short Form 3. Participants were divided into two groups according to their addiction scale scores; socio-demographic characteristics and early maladaptive schemas (according to the latest four-factor model) were compared. A multiple linear regression model was created to determine the factors predicting Instagram addiction.

**Results:** The group with a high score on the Instagram Addiction Scale consisted of statistically significantly younger participants (t:4.44, p<.001) than the other group, the rate of being single was higher (X2=6.703, p=.010), Disconnection Rejection (t:-5.36, p<.001), Impaired Autonomy and Performance (t:-6.22, p<.001), Excessive Responsibility and Standards (t:-4.96, p <.001) and Impaired Limits (t:-5.30, p<.001) scales were found to have statistically significantly higher scores. In addition, age (β=-0.27, p=.004) and scores from Impaired Autonomy and Performance (β=0.39, p<.001) were found to have a statistically significant predictive effect on IAS scores in the linear regression model.

**Conclusion:** Instagram addiction has been shown to be associated with early maladaptive schemas. Thus, evaluation and understanding of the clients' schemas and interventions for this are/become important in psychotherapy programs for individuals with Instagram addiction. Prospective studies with more participants are needed on Instagram addiction and other social network addictions.

**Keywords:** Social media, addiction medicine

## ÖZET

**Amaç:** Bu çalışma, erken dönem uyumsuz şemaların, spesifik, tartışmalı ve yeni bir alan olan Instagram bağımlılığı üzerindeki etkilerini Bach ve ark. tarafından geliştirilen dört faktörlü model açısından araştırmayı amaçlamaktadır.

**Yöntem:** 18 yaşından büyük, Instagram üyeliği olan katılımcılar Sosyodemografik veri formu, Instagram Bağımlılık Ölçeği (IAS), Young Şema Ölçeği-Kısa Form 3 ile değerlendirilmiştir. IAS puanlarına göre katılımcılar iki gruba ayrılmış; sosyodemografik özellikler ve erken dönem uyumsuz şemalar (dörtlü şema modeline göre) yönünden karşılaştırılmıştır. Instagram bağımlılığını yordayan etkenleri saptamak için çoklu doğrusal regresyon modeli oluşturulmuştur.

**Bulgular:** Instagram Bağımlılık Ölçeği puanı yüksek olan grup, diğer gruba göre istatistiksel olarak anlamlı derecede genç katılımcılardan oluşmaktaydı (t:4,44, p<,001) ve bekar olma oranı daha yüksekti (X2=6,703, p=,010). Ayrılma ve Dışlanma (t:-5,36, p<,001), Bozulmuş Özerklik ve Performans (t:-6,22, p<,001), Aşırı Sorumluluk ve Standartlar (t: -4,96, p <,001) ile Bozulmuş Limitler (t:-5,30, p<,001) şema alanlarından alınan puanlarının istatistiksel olarak anlamlı düzeyde yüksek olduğu bulundu. Ayrıca çoklu doğrusal regresyon modelinde yaş (β=-0,27, p=,004) ve Bozulmuş Özerklik ve Performans puanlarının (β=0,39, p<,001) IAS puanları üzerinde istatistiksel olarak anlamlı bir yordayıcı etkisi olduğu bulundu.

**Sonuç:** Instagram bağımlılığının erken dönem uyumsuz şemalarla ilişkili olduğu gösterilmiştir. Bu nedenle Instagram bağımlılığı olan bireylere yönelik psikoterapi programlarında danışanların şemaları ile buna yönelik müdahalelerin değerlendirilmesi ve anlaşılması önem kazanmaktadır. Instagram bağımlılığı ve diğer sosyal ağ bağımlılıkları konusunda daha fazla katılımcı ile ileriye dönük çalışmalara ihtiyaç vardır.

**Anahtar Sözcükler:** Sosyal medya, bağımlılık tıbbı

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## INTRODUCTION

Social media has become a central tool in personal lifestyles and organizational activities with the rapid growth of communication technologies (1). With the use of social networking services, interpersonal communication and interaction with others have become easier (1). This is because the social network focuses on initiating and building relationships, thus connecting people in an almost effortless but effective way (2). Instagram was published for members to share images and photos (1). Members also use Instagram to showcase their own lives, to search for information about other people, to demonstrate others their creativity and share their interests with others (3).

According to a research conducted in 2020, it was determined that more than 500 million daily and one billion monthly active users worldwide use Instagram. It is reported that this number is approximately 46 million in Turkey. In this respect, Turkey is one of the countries where the use of Instagram is highly common (4).

The reasons for individuals to use the Internet have become increasingly diverse and specific over time. Problematic use of different Internet-based applications has led to the investigation of many different Internet-related behavioral addictions (5). Due to the different design and usability features of Instagram compared to other popular social networking sites such as Twitter and Facebook, the factors of addictive behavior towards Instagram may differ from those of Twitter and Facebook (6). In one of several Instagram studies, it was stated that compared to other social media sites, Instagram relies more on one's personal identity than on relational identity (3).

Specifically, there is growing apprehension about the addictive use of social network sites, and many articles have been published recently to investigate the causes and consequences of such addiction (6).

There are studies on the addictive use of Facebook (7-9) and Twitter (10, 11). The concept of Instagram addiction has been demonstrated in several studies. These studies focused on the relationship between Instagram addiction and personality traits and self-liking (5), its relationship with "psychological well-being (6) and factors related to body satisfaction (12). According to a survey conducted by the United Kingdom's Royal Society for Public Health, investigating the negative aspects of uncontrolled Instagram use, Instagram is more likely to cause the most decrease in sleep quality, an increase in bullying, FoMo(fear of missing out) as well as anxiety and depression compared to other social networks (13). In summary, the concept of instagram addiction appears to be a new concept in the literature.

Early maladaptive schemas (EMS) are defined as broad themes regarding one's self and relationships with others, developed in childhood and elaborated throughout a person's life, and are significantly dysfunctional (14). Schemas consist of emotions, cognitions, behaviors, and bodily sensations. Schemas develop through interactions between early childhood experiences and temperament and reveal long-term personality-like patterns (15). Every person has schemas, their severity may be variable, and the severity of the schemas may vary according to the circumstances (16). Social network addiction is also considered a vulnerability or complication, as early maladaptive schemas may be a predictor of addiction (17).

Current studies conceptualize 18 EMS in 4 key areas: disconnection and rejection (DR), impaired autonomy and performance (IAP), excessive responsibility and standards (ERS), and impaired limits (IL) (18). Each of these four domains reflects unmet needs, and thus, is claimed to contribute to the development of sub-schemas (15). The 4 basic schema areas revealed by Bach et al. and the schemas that make up these areas are shown in Table 1.

**Table 1.** Four schema domains by Bach et. al

| Schema domains | YSQ-S3 scales |
|---|---|
| Disconnection & Rejection | Emotional Deprivation, Social Isolation, Emotional Inhibition, Defectiveness, Mistrust/Abused, Pessimism |
| Impaired autonomy & Performance | Dependence, Failure, Subjugation, Abandonment, Enmeshment, Vulnerability to Harm |
| Excessive Responsibility & Standards | Self-Sacrifice, Unrelenting Standards, Self-Punitiveness |
| Impaired Limits | Entitlement, Approval/Admiration-Seeking, Insufficient Self-Control |

There are few recent papers examining the relationship between behavioral addictions associated with social networking sites and early maladaptive schemas. Aloi et al. investigated the potential role of the EMS in behavioral addictions (19). Arpaci studied the relations between EMS and smartphone addiction and found that the participants with food addiction and internet addiction showed significantly higher scores on all four-schema domains (20). Cudo et al. investigated the relationship between PFU(problematic facebook use) and the EMS. The findings of the research showed PFU was negatively associated with EMSs (self-sacrifice schemas and social isolation/alienation) (21). Shajari et al and Beheshtian(22, 23) examined the relationship between the EMS and internet addiction. Kahouei and Paknazar (17) investigated the relationship with EMS and social network addciction in students. Also, Kim et al (24) investigated the relationship between EMS, Emotional Dysregulation and SNS(Social Network Sites) Addiction in students. However, no study has been found that examines the relationship between the concept of Instagram addiction and the EMS according the four-schema model by Bach et al.

The main goal of psychotherapy is to identify the implicit causes of a psychological problem and then to modify and change the causes (24). The aim of this study is to contribute to the development of a social media addiction intervention program by discovering the possible causes of Instagram addiction, which has recently become a social problem. In this study, we have two research goals based on the above-mentioned literature. The first one is to evaluate the differences of sociodemographic characteristics and early maladaptive schemas in terms of Bach's quadruple schema model, according to the scores of Instagram users from the Instagram addicted scale. The second is to examine the possible predictive effects of these features on Instagram addiction in individuals who use Instagram.

## METHODS

### Participants and Procedure

This study is a quantitative and cross-sectional study. EMS and Instagram usage characteristics of the participants were evaluated. The inclusion criteria are being older than 18 and younger than 65, having an Instagram account, being literate and agreeing to participate in the study. Exclusion criteria were defined as the presence of any psychiatric illness or psychiatric treatment (pharmacotherapy or psychotherapy).

After their consent having been taken, the participants were asked to fill out the self-report socio-demographic data form, Instagram Addiction Scale, Young Schema Scale - Short Form 3.

### Population and Sample

Sample selection was made by snowball sampling method. In addition to the personal circles of the authors, the survey link was shared in many social media groups. All participants were informed about the study. A total of 385 people participated in the study. 81 people who still had a psychiatric diagnosis, who received psychotherapy, or who received psychiatric treatment were not included in the study because it could change their schema scoring. In addition, due to unreasonable survey completion times (under 25 minutes), being under the age of 18, or incomplete filling in the forms, the results of 142 people were not taken into consideration and analyzes were made with answers provided by a total of 162 people in this way. The G*Power23 was used to compute the sample size. In the calculation, which is made for the linear regression analysis, the minimum sample size was calculated as 74 for 0.15 effect size, 5% margin of error, 95% confidence interval, and 6 dependent (schema domains, age, and marital status) and 1 (Instagram addiction scale) independent variables.

**Measures**

*Socio-demographic data form*

It was prepared as a data form that includes the socio-demographic data of the volunteers participating in the study, such as age, gender, educational status, etc., as well as psychiatric and medical disease histories.

*Young Schema Inventory- YSQSF3*

The third version of the short form of the Young Schema Scale was used to assess the early maladaptive schemas. The scale includes 18 schema dimensions and consists of 90 items. In the directive of the self-report scale, the participants were asked to read the items containing the expressions they used to describe themselves and to rate each item on a 6-point Likert-type scale (1 = Completely wrong for me, 6 = Describes me perfectly). Higher scores indicate the presence of more and more severe early maladaptive schemas. The validity and reliability study of the scale developed by Young and Brown (25) in Turkey was performed by Soygüt, Karaosmanoğlu, and Çakır (26). The data obtained from the YSQSF3 scale were calculated according to the 4-schema model of Bach et al (18). The newest schema therapy model includes 18 ems clustered in four domains, most consistent with preliminary experimental findings and ST(Schema Theory): (1) Disconnection and Rejection(DR), (2) Impaired Autonomy and Performance(IAP), (3) Excessive Responsibility and Standards(ERS), and (4) Impaired Limits(IL) (18) The data in our study was evaluated through the model of Bach et al.

**Instagram Addiction Scale**

The "Internet addiction scale", developed by Young (1996) and standardized into Turkish by Bayraktar (2001), was used by Kırcaburun (2018) to measure Instagram addiction by writing "Instagram" instead of "Internet" in the questions of the form. Due to this change, Kırcaburun (2018) conducted validity and reliability analyzes of the scale(27). The results of the reliability analysis revealed that the Cronbach's alpha internal consistency coefficients of the scale were .90 for the entire scale. As a result of the validity and reliability analysis, it can be said that the scale is a scale with validity and reliability in terms of measuring the Instagram addiction of students studying at university (27). Although the Instagram addiction scale consists of 15 items, it is in a 6-point likert style; (1) Never, (2) Rarely, (3) Occasionally, (4) Often (5) Very often, and (6) Always. The minimum score that can be obtained from the scale is 15, and the maximum score is 90. The cut-off point for addiction is 38 (27).

*Ethical Approval*

Ethics committee approval was obtained from Ok Meydanı Training and Research Hospital Ethics Committee with the decision numbered 411 on 03.11.2020.

*Statistical Analysis*

Data were evaluated with SPSS version 22.0. The conformity of the variables to the normal distribution was examined with the Kolmogorov-Smirnov test. Descriptive analysis were made. The difference between continuous variables and groups was made with the independent sample t-test in samples with normal distribution. Whether there is a relationship between categorical variables was examined with the Chi-square test and the Continuity Correction test. Pearson Correlation analysis was used for the relationship between continuous variables. Multiple linear regression analysis was used to determine the predictive effect of independent variables on the scores obtained from the Instagram addiction scale, which was determined as the dependent variable. Since marital status is a categorical variable, a dummy variable was used to include it in the multiple linear regression model. p value below 0.05 was accepted as the threshold of statistical significance.

**RESULTS**

The mean age of the participants was 28.99±7.59. The rate of men is 31.5% (51) and the rate of women is 68.5% (111). Other sociodemographic data and data on the scores obtained from the scales are shown in Table 2.

Participants were divided into two groups according to the data obtained from the Instagram addiction scale. According to the results of the Independent T Test, those who scored 38 and above on the IAS consisted of statistically significantly younger participants than those who scored less than 38, and also (t=4.44, p<.001), DR (t=-5.36, p<.001), IAP (t=-6.22, p<.001), ERS(t=-4.96, p<.001) and IL(t=-5.30, p<.001) scales. were found to have higher scores.

There was no statistically significant difference between the groups in terms of gender (X2=0.751, p=.386). There was a significant difference between the groups in terms of marital status (X2=6.703, p=.010) This difference is in the direction of being single in the dependent group (Table 3).

Age and scores from 4 schema domains with IAS were analyzed by Pearson correlation analysis. The scores obtained from the IAS scale and age (r=-0.339, p <.001) showed a statistically significant negative correlation. In the 4 schema areas, IAS scores with DR (r=0.481, p <.001), IAP (r=0.537, p <.001), ERS (r=0.349, p <.001) and IL (r=0.398, p <.001) statistically significant positive correlations were shown between the scores obtained from the schema domains (Table 4).

In order to determine the factors that predict the level of Instagram addiction, a multiple linear regression model was created in which IAS was the dependent variable, age, marital status and 4 schema domains as independent variables. The model was found to be statistically significant. (p<0.001, F change=13.50) According to the model, age (β=-0.27, p=.004) and IAP scores (β=0.39, p<.001) had a statistically significant predictive effect on IAS scores. (Table 5)

**Table 2.** Sociodemographic data and descriptive statistics for variables

|  | Mean± SD | n(%) | Median | Skewness | Kurtosis | Min-max |
|---|---|---|---|---|---|---|
| Age | 28.99±7.59 |  | 27.50 | 0.91 | 0.85 | 18-55 |
| Education Year | 16.14±2.76 |  |  | -.80 | 1.34 | 8-24 |
| Gender |  |  |  |  |  |  |
| Male |  | 51(%31.5) |  |  |  |  |
| Female |  | 111(%68.5) |  |  |  |  |
| Marital Status |  |  |  |  |  |  |
| Singe |  | 82(%51,0) |  |  |  |  |
| Married |  | 80(%49,0) |  |  |  |  |
| IAS | 37.01±11.43 |  | 35.00 | 0.84 | 0.18 | 22-70 |
| Schemas |  |  |  |  |  |  |
| DR | 2.36 |  | 2.30 | 0.62 | -0.08 | 1.07-4.83 |
| IAP | 2.37 |  | 2.28 | 0.65 | 0.46 | 1.07-5.00 |
| ERS | 3.05 |  | 3.13 | -0.07 | -0.49 | 1.20-5.13 |
| IL | 2.89 |  | 2.93 | -0.06 | -0.47 | 1.00-4.93 |

SD, standard deviation; min, minimum; max, maximum; DR, Disconnection and Rejection; IAP, Impaired Autonomy and Performance; ERS, Excessive Responsibility and Standards; IL, Impaired Limits; IAS, Instagram Addiction Scale

**Table 3.** Comparison of the variables between two groups according to IAS

| | IAS<38 (n=92) Mean±SD | IAS≥38 (n=70) Mean±SD | t | p* |
|---|---|---|---|---|
| Age | 31.10±8.10 | 26.21±5.86 | 4.44 | <0.001 |
| Education year | 16.30±2.75 | 15.91±2.77 | 0.88 | 0.375 |
| Schemas | | | | |
| DR | 2.09±0.69 | 2.72±0.79 | -5.36 | <0.001 |
| IAP | 2.07±0.65 | 2.76±0.74 | -6.22 | <0.001 |
| ERS | 2.80±0.83 | 3.37±0.63 | -4.96 | <0.001 |
| IL | 2.61±0.83 | 3.26±0.72 | -5.30 | <0.001 |
| Gender | n | n | $X^2$ | P** |
| Female | 60 | 60 | 0.751 | 0,386 |
| Male | 32 | 19 | | |
| Marital status | n | n | $X^2$ | p*** |
| Single | 43 | 47 | 6.703 | 0.010 |
| Married | 49 | 23 | | |

DR, Disconnection and Rejection; IAP, Impaired Autonomy and Performance; ERS, Excessive Responsibility and Standards; IL, Impaired Limits; IAS, Instagram Addiction Scale
*independent t-test, **Continuity Correction ***Chi-square test

**Table 4.** Pearson Correlations Between IAS and EMS Domains

| | IAS | Age | DR | IAP | ERS | IL |
|---|---|---|---|---|---|---|
| IAS | 1 | -0.339** | 0.481** | 0.537** | 0.349** | 0.398** |

*$p < .050$; **$p < .001$, DR, Disconnection and Rejection; IAP, Impaired Autonomy and Performance; ERS, Excessive Responsibility and Standards; IL, Impaired Limits; IAS, Instagram Addiction Scale

**Table 5.** Lineer Regression Analysis Between IAS and EMS Domains

| Model | B | SE | β | t | p | $R^2$ | Adjusted $R^2$ |
|---|---|---|---|---|---|---|---|
| Constant | 32.67 | 4.46 | | 5.05 | <0.001 | 0.343 | 0.318 |
| Age | -0.40 | 0.14 | -0.27 | -2.91 | 0.004 | | |
| MS | -2.40 | 2.09 | -0.10 | -1.14 | 0.254 | | |
| DR | 1.75 | 1.71 | 0.12 | 1.02 | 0.309 | | |
| IAP | 5.86 | 1.63 | 0.39 | 3.57 | <0.001 | | |
| ERS | -0.85 | 1.39 | -0.06 | -0.60 | 0.349 | | |
| IL | 0.70 | 1.31 | 0.05 | 0.53 | 0.593 | | |

DR, Disconnection and Rejection; IAP, Impaired Autonomy and Performance; ERS, Excessive Responsibility and Standards; IL, Impaired Limits; IAS, Instagram Addiction Scale; MS, marital status (dummy variable)

## DISCUSSION

According to Young's schema theory, early maladaptive schemas are dysfunctional and persistent themes that develop as a result of negative experiences in childhood (28) and are shaped throughout an individual's life, consisting of memories, emotions, cognitions, and bodily sensations related to one's relationship with oneself and others (29).

Bach et al. grouped 18 early maladaptive schemas into four areas:

(1) Schemas in the field of DR are associated with a lack of trust in interpersonal relationships,

(2) People with schemas belonging to the IAP performance domain perceive themselves as insecure and lack autonomy,

(3) People with schemas in the ERS domain typically place the needs, desires, and wants of others ahead of their own.

(4) IL are related to the absence of internal boundaries, the inability to set long-term goals, and a lack of responsibility towards others (15).

Behavioral addictions is a concept that has not yet been included in the DSM-5. However, according to Petry et al., the problems affecting the assessment of behavioral addictions as a class or as specific forms of mental disorder are similar to those that arise in the context of other mental disorders (30). Behavioral addictions and substance addictions have several common features such as impaired control, continued participation in behavior despite negative consequences, age of onset, which includes adolescence, and clinical course (31). Instagram addiction can be considered in the behavioral addiction category as a new concept.

It can be considered as a defense mechanism characterized by a lack of emotion regulation as a strategy preferred by individuals to cope with negative emotions such as addictions, disappointment, inadequacy and isolation since it gives results in a short time, but becomes dysfunctional in the long run (19, 32). Cross-sectional studies report that internet addiction, a behavioral addiction, has a high comorbidity with psychiatric disorders such as affective disorders, anxiety disorders, sleep disorders, attention deficit/hyperactivity disorder, and substance use disorders (33-35). However, while many studies have mainly focused on the presence/absence of behavioral addictions, the etiological processes of this condition have been investigated in a limited number of studies. In one of the studies on this subject, it was shown that there is a significant relationship between the intense and dysfunctional use of the internet and social media in individuals with insecure attachment during childhood (36) In another study, it was shown that individuals who experienced negative life events during childhood are at risk for internet addiction (37). Considering the etiology, the importance of the relationship between behavioral addictions and early schemas can be better understood. Studies show that early maladaptive schemas play a mediating role between childhood attachment problems/negative experiences and developing psychiatric disorders (38, 39).

The aim of this study is to evaluate the relationship between early maladaptive schemas and Instagram addiction, which has emerged as a new concept. This paper is substantial in that it is the first study in the literature to research the relationship between Instagram addiction and early schemas.

According to the preliminary data of our study, it was found that those who scored high on the Instagram addiction scale were at a significantly younger age than those with low scores and usually single, and they also scored higher in all schema domains. However, in the Multiple Linear Regression Model, where Instagram addiction is a dependent variable, significant predictive effects of impaired autonomy and performance and age were found. The relationship between behavioral addictions and early schemas, which we can include Instagram addiction into, draws attention to the literature. Aloi et al. addressed this relationship and found that participants with behavioral addiction had significantly higher values in all schema-area scores than those without (19). In addition, studies on food addiction, which is a behavioral addiction, have shown that binge eating is positively related to impaired limits and disconnection rejection schema domains (40). In a study by Rinai et al. in obese patients, the IAP schema area was found to have predictive effects on binge eating behavior (41). In a recent study by Ostovar et al., it was shown that the domains of DR and IAP can explain a large part of the variance in internet addiction. (42). According to Shajari et al.,schemas have a direct impact on the probability of internet addiction since their study shows that the stronger the maladaptive schemas are, the higher the probability of addiction to drugs, the internet, or obsessive behaviors (23) The results of studies on behavioral addictions support our results in several ways. The IAP schema domain appears to be associated with Instagram addiction as demonstrated in our study, as well as internet addiction and eating-related behavioral problems Similar to the studies conducted with individuals with behavioral addictions, higher values of all schema domains were found in those with Instagram addiction in our study. This shows the importance of the effects of EMSs on behavioral addictions.

The predictive effects of IAP schema domain on Instagram addiction are shown. The IAP schema domain contains schemas that include a negative view of one's ability to succeed or function independently of others (for example, addiction, harm, and failure schemas). Impaired autonomy and cognitive schemas in performance indicate a discrepancy between one's expectations and abilities in actual performance. The number of studies on Instagram addiction is very few. In one of these studies, recognition and social needs were shown to be central predictors of Instagram addiction (6). As a result of maladaptive coping strategies against the IAP schema domain, individuals may need recognition more than others to compensate for their lack of self-confidence.

In addition, in this study, a negative relationship was found between age and Instagram addiction. Instagram addiction is more common in younger individuals. Youth is a period in which the identity of the individual is shaped. During this period, the search for a relationship is more than ever before (43). They are more responsive to social support through social networks like Instagram. This means that they can expend more time on Instagram for the sake of social relations and therefore they may become addicted to Instagram (44). In a study on Instagram addiction, it is shown that young individuals develop addiction more frequently (45). With supporting evidence, it can be said that being younger comes to the fore in terms of Instagram addiction.

In this study, higher rates of being single were observed in those with an Instagram addiction than in those without. Literature review shows that the data on marital status, specifically in relation to Instagram addiction, are not available in the literature. This may be due to the fact that the studies were conducted with adolescents and young adult participants.

Concerning the present findings, some limitations stand out. Participants were selected only from the Turkish population. Therefore, care should be taken when generalizing the results to other countries and cultures. Accordingly, stronger conclusions cannot be drawn due to the cross-sectional and self-report nature of this study. Prospective studies with more participants are needed to more robustly confirm the results.

As a result, it can be said that our findings are compatible with the literature. It has been reported that there are significant relationships between behavioral addictions and, more narrowly, Internet addiction and early maladaptive schemas. Our study, on the other hand, draws attention to the significant relationships between the 4 schema domains and Instagram addiction, and highlights the predictive effects of the IAP schema domain on Instagram addiction. We also emphasize that Instagram addiction can be seen more frequently in younger population and singles. In conclusion, our findings show that early maladaptive schemas should be systematically evaluated during psychotherapy of individuals who develop Instagram addiction.

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