



The Effect of Social Media Addiction on Psychological Stress: The Indirect Role of Doomscrolling

Sosyal Medya Bağımlılığının Psikolojik Strese Etkisi: Felaket Kaydırmasının Dolaylı Rolü

Özge CANOĞULLARI* 

Received: 15 November 2024

Research Article

Accepted: 25 June 2025

ABSTRACT: The literature indicates that there is a relationship between social media addiction and psychological stress. However, there is still limited understanding of the specific ways in which social media addiction leads to psychological distress. This study examines the mediating role of doomscrolling in the relationship between social media addiction and psychological stress. In the 2022-2023 academic year, a sample of 460 university students (358 women, 78%, and 102 men, 22%) aged between 18 and 30 was analyzed using snowball sampling. The study utilized the Bergen Social Media Addiction Scale, the Doomscrolling Scale, and the Depression, Anxiety, and Stress Scale (DASS-21) with a structural equation model. Findings indicated a positive association between social media addiction, psychological distress, and doomscrolling. Moreover, doomscrolling was also associated with increased psychological distress. Importantly, the connection between SMA and psychological distress was mediated by doomscrolling, underscoring its role as an intermediary factor. These findings suggest that social media addiction contributes to psychological distress, with doomscrolling further intensifying this effect. The study highlights the need for interventions to reduce both social media addiction and doomscrolling behaviors. Raising awareness and encouraging healthier social media habits through educational programs and media campaigns are crucial to safeguarding mental health.

Keywords: Doomscrolling, social media addiction, psychological distress.

ÖZ: Sosyal medya bağımlılığı ile psikolojik stres arasında ilişki olduğu alan yazında belirtilmektedir. Bununla birlikte, sosyal medya bağımlılığının psikolojik strese tam olarak nasıl katkıda bulunduğunu anlama konusunda bir boşluk bulunmaktadır. Bu çalışma, sosyal medya bağımlılığı ile psikolojik stres arasındaki ilişkide felaket kaydırmasının aracılık rolünün incelemektedir. 2022-2023 eğitim- öğretim yılında kartopu örnekleme yoluyla yaşları 18 ila 30 arasında değişen 460 üniversite öğrencisinden (358 kadın-%78, 102 erkek- %22) oluşan bir örneklem analiz edilmiştir. Çalışmada Bergen Sosyal Medya Bağımlılığı Ölçeği, Doomscrolling Ölçeği, Depresyon, Kaygı, Stres Ölçeği (DASS-21) ile yapısal eşitlik modeli kullanılmıştır. Sonuçlar, sosyal medya bağımlılığının hem psikolojik stres hem de felaket kaydırması ile pozitif bağlantılı olduğunu göstermiştir. Ayrıca, felaket kaydırması da artan psikolojik stres ile ilişkilendirilmiştir. Daha da önemlisi, sosyal medya bağımlılığı ile psikolojik stres arasındaki bağlantıya felaket kaydırması aracılık etmiş ve sosyal medya bağımlılığının aracı bir faktör olarak rolünün altını çizmiştir. Bu bulgular, sosyal medya bağımlılığının psikolojik strese katkıda bulunduğunu ve felaket kaydırmasının bu etkiyi daha da yoğunlaştırdığını göstermektedir. Bu çalışma hem sosyal medya bağımlılığı hem de felaket kaydırması davranışlarını azaltmaya yönelik müdahalelere duyulan ihtiyacı vurgulamaktadır. Eğitim programları ve medya kampanyaları yoluyla farkındalığın artırılması ve daha sağlıklı sosyal medya alışkanlıklarının teşvik edilmesi, ruh sağlığının korunması için çok önemlidir.

Anahtar kelimeler: Felaket kaydırması, sosyal medya bağımlılığı, psikolojik stres.

* Dr., Artvin Coruh University, Artvin, Türkiye, ozgecanogullari@artvin.edu.tr, <https://orcid.org/0000-0003-2867-7948>

Citation Information

Canoğulları, Ö. (2025). The effect of social media addiction on psychological stress: The indirect role of doomscrolling. *Kuramsal Eğitim Bilim Dergisi [Journal of Theoretical Educational Sciences]*, 18(3), 491-508.

The Internet, which has become an essential tool in modern life due to advancements in communication technology and digital platforms, is now crucial for people of all age groups. With the user-friendly nature of the Internet, the global and national rates of Internet usage continue to rise annually. According to data from TUIK (2024), the Internet usage rate in Turkey increased from 87.1% in 2023 to 88.8% in 2024. Social media is one of the most popular platforms for Internet use (Schivinski et al., 2020). Social media is defined as web-based services that enable individuals to create public or semi-public profiles within large networks, allowing them to view and interact with their own connections as well as others within the system (Boyd & Ellison, 2007). Commonly used social media platforms include Facebook, Instagram, YouTube, Twitter, WhatsApp, and LinkedIn. These platforms offer users opportunities to communicate, form friendships, socialize, access information easily, and stay updated with news (Heo et al., 2015; Schivinski et al., 2020; Tifferet, 2020; Wang et al., 2019).

Social media is most commonly used by young adults, particularly university students aged 18 to 29 (Perrin, 2015). While these platforms offer benefits to young people, excessive use can also lead to negative consequences. In particular, the tendency to make social comparisons can increase feelings of inadequacy, body image issues, and depressive symptoms in individuals (Appel et al., 2016). Furthermore, the constant stream of notifications can lead to distractions and decreased productivity, while the replacement of offline social interactions with digital interactions can intensify feelings of social isolation (Twenge et al., 2018). At the forefront of these negative effects is addiction. Prolonged and uncontrolled use of social media can result in addiction, neglect of real-life relationships, and difficulties in managing time. This phenomenon is referred to as Social Media Addiction (SMA) in the literature (Kuss & Griffiths, 2017). SMA is classified as a behavioral addiction and is characterized by several symptoms. Individuals affected by SMA tend to spend more time on social media than initially intended, with their usage gradually increasing. Additionally, social media is often used as a means of escaping negative emotions or personal issues. When unable to access social media, individuals may feel sad, anxious, or irritable. Excessive social media use can lead to both mental and physical health problems, as well as strained relationships with others. Furthermore, people often spend excessive time on social media or are mentally consumed by the content on these platforms (Griffiths, 2005; Griffiths, 2013; Twenge et al., 2018).

Social media addiction (SMA) may lead young people to develop a constant desire to keep up with ever-changing content. As social media platforms provide fast communication and continuously updated information, users tend to spend increasing amounts of time on these apps. This is especially true during extraordinary events such as disasters, crises, terrorism, and pandemics, when individuals tend to stay more connected and follow news updates more frequently (Price et al., 2022). During the recent Covid-19 pandemic and the earthquake in Kahramanmaraş, Turkey on February 6, 2023, it was observed that people spent significantly more time on social media, continuously tracking the news. This behavior is known as "doomscrolling" in the literature (Anlı, 2023; Satici et al., 2023), which refers to the compulsive habit of endlessly scrolling through negative news content on social media (Jennings, 2020; Sharma et al., 2022). It is noteworthy that recent studies on doomscrolling are mostly conducted during the pandemic period (Covid-19) (Ytre-Arne & Moe, 2021). During

the pandemic, people's living conditions changed due to the closure of schools and workplaces, and they became dependent on staying at home (Galea et al., 2020). During this period, news feeds on social media further increased the need to be informed and made it easier to stick to negative news more than usual (Sharma et al. 2022).

Individuals may also need to follow social media more frequently during natural disasters or crises such as storms, floods, and earthquakes (Spence et al., 2007). Misleading, inaccurate, or exaggerated information and erroneous news about disasters on social media may also come to the agenda and cause the event to be perceived more negatively. For young people who are involved in SMA, such events may increase their disaster-swiping behavior. Existing studies on doomscrolling have also indicated a relationship between SMA and doomscrolling (Fergen et al., 2021; Price et al., 2022; Satici et al., 2023). These studies stated that social media is used more frequently during doomscrolling and that doomscrolling may increase due to SMA.

The exposure to negative content during doomscrolling significantly impacts the psychological well-being of young individuals. The constant exposure to disaster-related news on social media platforms results in a decline in the mood and emotional well-being of users (Baker & Algorta, 2016). Consequently, heightened levels of depression and anxiety are likely to accompany the experience of psychological distress. Psychological distress, as described by Ridner (2003), refers to an intensely uncomfortable emotional state triggered by specific stressors or demands, resulting in temporary or lasting harm to oneself. This condition is frequently associated with symptoms commonly seen in depression, such as a loss of interest, sadness, and feelings of hopelessness, as well as anxiety-related symptoms like restlessness and tension (Mirowsky & Ross, 2002). A study by Wathelet et al. (2020) suggests that individuals who spend excessive time-consuming news on social media experience higher levels of psychological stress, including symptoms of distress, anxiety, and depression. These symptoms manifest in various ways, such as difficulty initiating sleep, poor sleep quality, decreased appetite, diminished interest in activities, and reduced motivation to perform daily tasks (Watercutter, 2020). Shabahang et al. (2024) examined the "doomscrolling" habits of a total of 800 university students from the US and Iran in terms of existential anxiety, pessimism about human nature, and distrust of people. A significant relationship was found between high levels of doomscrolling and existential anxiety among participants. Taskin et al. (2024) used structural equation modeling on 400 Turkish adults to evaluate the relationship between doomscrolling and mental well-being. According to the results, excessive consumption of negative content has negative effects on an individual's mental health by reducing mindfulness and triggering secondary traumatic stress. In essence, engaging in doomscrolling through social media platforms not only induces psychological distress but also undermines both the psychological and physiological health of individuals.

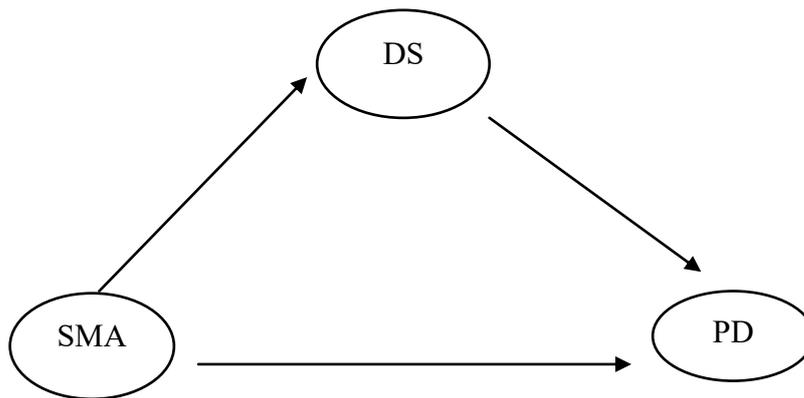
The interconnection among SMA, doomscrolling, and psychological distress is evident. It can be argued that doomscrolling acts as a mediator between SMA and psychological distress. As young individuals frequently engage with social media to stay updated on news, they encounter numerous pessimistic news stories that amplify feelings of anxiety, worry, depression, uncertainty, and panic. In this case, the time spent on social media causes both individuals to experience negative emotions and to try to cope with stress (Park et al., 2020). In essence, doomscrolling serves as a factor

influencing both SMA and psychological distress. University students are important architects of education and the future. When they graduate, they will touch the lives of many people in the institutions where they will work. Recent studies also indicate that social media addiction among young people has increased significantly (Ayaz & Barış, 2024; Kolhar, 2021). For this reason, it is one of the duties of university educators to encourage young people to use social media consciously and to protect their mental health. Studies show that university students suffer from mental disorders such as depression and anxiety (Koç & Polat, 2006; Polat Olca, 2023). However, there are limitations in studies on the factors that trigger these disorders. For this reason, investigating the triggering factors will also guide university educators.

While existing studies have individually examined the concepts of social media addiction, doomscrolling, and psychological distress, few have explored how these variables interact within a single model, particularly among university students. This study distinguishes itself from prior research by investigating the mediating role of doomscrolling in the relationship between SMA and psychological distress. Unlike previous studies that often focused on the effects of doomscrolling during the COVID-19 pandemic (e.g., Ytre-Arne & Moe, 2021; Sharma et al., 2022), this research expands the scope by addressing post-pandemic patterns and including recent sociocultural events (e.g., natural disasters) as contextual factors. Moreover, by targeting university students—a population increasingly vulnerable to digital stressors and psychological challenges—the study provides timely insights for both academic and mental health interventions. Therefore, this research contributes a comprehensive and current understanding of how digital behaviors impact young adults' psychological well-being.

The investigation into the mediating role of doomscrolling is pivotal not only for grasping a novel concept but also for comprehending its ramifications. Moreover, it is anticipated that the findings will guide the creation of interventions aimed at tackling SMA and doomscrolling. The study is expected to provide educational benefits to students in terms of adding courses that prevent social media addiction to university programs and supporting studies to protect mental health. As such, this study endeavors to scrutinize the correlation among SMA, doomscrolling, and psychological distress among university students. Additionally, the study seeks to delve into the mediating function of doomscrolling in the nexus between SMA and psychological distress. The hypotheses of the study are delineated below, accompanied by a hypothetical model depicted in Figure 1.

Figure 1

Hypothetical Model Regarding the Mediating Role

Note. SMA; Social Media Addiction, DS; Doomscrolling, PD; Psychological Distress.

The hypotheses for the study are as follows:

1. There is a positive relationship between SMA and psychological distress.
2. SMA positively predicts the occurrence of doomscrolling.
3. Doomscrolling is positively associated with psychological distress.
4. Doomscrolling serves as a mediator in the relationship between SMA and psychological distress.

Method

Design

In line with the purpose of the study, a quantitative research design employing a correlational model was used, as it enables the examination of relationships among multiple psychological constructs without manipulating any variables. Structural Equation Modeling (SEM) was applied to test both direct and indirect relationships among variables, offering a comprehensive approach to assess complex mediational pathways. Specifically, SEM was utilized to examine whether doomscrolling mediates the association between SMA and psychological distress. This approach was chosen due to its ability to estimate measurement errors and provide goodness-of-fit indices, thereby strengthening the validity of the hypothesized model. The mediating role of doomscrolling was theoretically grounded in existing literature suggesting that excessive social media use may lead to maladaptive scrolling behaviors, which in turn contribute to increased emotional distress.

Participants

The sample size for this study was calculated using G*Power (Faul et al., 2007). There should be at least 390 participants to exhibit an effect size between small and medium, where there are two estimated variables ($f^2=0.04$, $1-\beta= 0.95$, $\alpha = 0.05$). Snowball sampling was used to select the participants. A web-based survey was utilized to recruit a total of 460 participants, comprising 358 females (78%) and 102 males (22%). These participants were selected from 71 out of 81 cities in Turkey. The participants were university students aged between 18 and 30 years, with a mean age of

21.53 years (SD=2.43). Of the students, 105 (23 %) were studying in 1st grade, 143 (31%) in 2nd grade, 117 (25%) in 3rd grade, and 95 (21%) in 4th grade. Participants stated that 23 (5%) of them used social media for 0-1 hour, 156 (34%) for 2-3 hours, 187 (41%) for 4-5 hours, 61 (13%) for 6-7 hours and 33 (7%) for 8+ hours.

Measures

Bergen SMA Scale (BSMAS)

The BSMAS was originally developed by Andreassen et al. (2017) and later adapted into Turkish by Demir (2019). This scale utilizes a 5-point Likert-type format, where participants rate items from 1 (very rarely) to 5 (very often). It was applied to measure Problematic Social Media Use (PSMU). The scale comprises six items within a single dimension (e.g., "Has using social media too much affected your work/studies negatively?"). No items were reverse-coded. The factor loadings for the scale ranged from 0.43 to 0.90. Demir (2019) reported that the Turkish version of the BSMAS demonstrated a unidimensional structure with satisfactory fit indices: $\chi^2=10.80$, $df=9$, SRMR=0.03; CFI=0.99; TLI=0.99; RMSEA=0.04.

Doomscrolling Scale (DS)

The Doomscrolling Scale (DS) was initially developed by Sharma (2022) and later adapted into Turkish by Satici et al. (2023). The scale employs a 7-point Likert-type format, where participants indicate their level of agreement with statements, ranging from 1 (strongly disagree) to 7 (strongly agree). In this study, the short form of the scale, which consists of a single dimension and does not include reverse-coded items, was used. Psychometric analyses were conducted for both the 15-item long form and the 4-item short form, with the short form selected for use in the study (e.g., "When I read bad news on social media, I don't realize how time flies."). The factor loadings for the short form ranged from 0.63 to 0.84. Satici et al. (2023) reported that the unidimensional structure of the short form of the scale demonstrated acceptable fit indices: $\chi^2=28.78$, CFI=0.95, NFI=0.94, IFI=0.95, and SRMR=0.04.

Depression Anxiety Stress Scales-21 (DASS-21)

The scale was originally developed by Henry and Crawford (2005) and later adapted into Turkish by Yilmaz et al. (2017). It uses a 4-point Likert-type format, where participants rate their level of agreement with statements on a scale from 0 (not suitable for me at all) to 3 (suitable for me completely). Higher scores reflect higher levels of psychological distress. The scale includes 21 items across three dimensions: depression, anxiety, and stress (e.g., "I had difficulty relaxing"). Yilmaz et al. (2017) reported that the Turkish version of the DASS-21 demonstrated acceptable fit indices, including GFI=0.985, RMR=0.028, AGFI=0.982, and NFI=0.979. The scale contains no reverse coded items, and factor loadings ranged between 0.41 and 0.81.

Procedure

The research data were gathered during the spring semester of the 2022-2023 academic years. A survey was created using Google Forms and shared through various social media platforms, including WhatsApp, Instagram, and Facebook. Participants were invited to complete the survey and encouraged to forward the link to others,

helping to reach individuals from different provinces. The survey ensured the confidentiality of personal data, and informed consent was obtained from all participants, who were also informed that they could withdraw from the study at any time. The online survey was designed so that all questions could be answered to ensure completion. Additionally, this study adhered to the ethical guidelines set forth in the Declaration of Helsinki, and approval was granted by the ethics committee of the university with which the principal investigator was affiliated.

Data Analysis

The multivariate statistical assumptions were tested first. The Mahalanobis distance ranged from 0.01 to 11.42, meeting the criterion set by Leys et al. (2018), indicating that this value is less than 15. Skewness values ranged from 0.08 to 1.52, and kurtosis values ranged from -0.69 to 0.55. These values ensure that the distribution is within the range of +1.5 and -1.5, as recommended by Tabachnick and Fidell (2001), indicating approximate normality.

Additionally, the reliability coefficients for McDonald's omega (ω), Cronbach's alpha (α), and Guttman's lambda (λ_6) for the variables were all above 0.70, indicating strong internal consistency. For convergent and discriminant validity, AVE >0.05 , CR >0.07 , and CR $>$ AVE are required (Hair et al., 2014). In this study, CR is between 0.86 and 0.91, AVE is between 0.51 and 0.72, and CR value was found to be greater than AVE value in all variables (See Table 1). VIF below 10, tolerance above 0.10, multiple linearity problem, and Durbin-Watson between 1 and 3 are required to determine the correlation between residuals (Field, 2016). In this research, VIF is 1.12, tolerance is 0.88 and Durbin-Watson value is 1.81. Herman's single-factor test cutoff score for the absence of a common method bias problem should be less than 50% (Podsakoff et al., 2003). The cut-off score for this test was 43.82%. After all assumptions were met, Structural Equation Modeling (SEM) was performed.

In this study, the Structural Equation Modeling (SEM) analysis was conducted in two stages following the approach outlined by Anderson and Gerbing (1988). The first stage involved establishing the measurement model, while the second stage involved testing the structural model. Age and gender were included in the analysis as control variables. When assessing the fit of the model, Hu and Bentler's (1999) cutoff criteria for fit indexes were employed. The model fit was considered satisfactory if it met the following criteria: $3 < \chi^2/df < 5$, RMSEA < 0.08 , SRMR < 0.08 , TLI > 0.90 , GFI > 0.90 , CFI > 0.90 , and AGFI > 0.90 . Additionally, confidence intervals were tested using bootstrapping with 5000 resampling iterations. A result was considered significant if the confidence interval did not contain zero.

The analyses were conducted using various statistical software packages including SPSS 23, JASP 0.16, SmartPLS 3, and AMOS 23. These packages were utilized to ensure robustness and accuracy in the analysis procedures.

Ethical Procedures

All studies conducted as part of this research adhered to the principles outlined in the Helsinki Declaration of 1975, as revised in 2000. Approval for the studies was obtained from the Artvin Çoruh University Scientific Research and Ethical Review Board (E-18457941-050.99-87334/11.12.2023).

Results

Descriptive Statistics

Pearson correlation analysis was conducted to examine the relationships among SMA, doomscrolling, and psychological distress. The variables in the study exhibited positive correlations with each other, as shown in Table 1. Specifically:

- SMA was positively correlated with both doomscrolling ($r = 0.34$, $p < 0.01$) and psychological distress ($r = 0.40$, $p < 0.01$).
- Doomscrolling was positively correlated with psychological distress ($r = 0.49$, $p < 0.01$).

Table 1

Descriptive Statistics and Correlation Values of the Variables

Variable	Mean(SD)	Skewness	Kurtosis	α	ω	λ_6	CR	AVE	1	2	3
1. SMA	16.63(5.05)	0.08	-0.69	0.81	0.80	0.79	0.86	0.51	-		
2. DS	10.10(6.03)	1.13	0.59	0.87	0.87	0.86	0.96	0.58	0.34**	-	
3. PD	22.35(16.52)	0.52	-0.55	0.96	0.97	0.98	0.91	0.72	0.40**	0.49**	-

Note. ** $p < .001$, SMA; Social Media Addiction, DS; Doomscrolling, PD; Psychological Distress.

Measurement Model

The measurement model in this study comprises three latent variables: SMA (items PSMU1-PSMU6), doomscrolling (items DM1-DM4), and psychological distress (including anxiety, depression, and stress dimensions). The model fit statistics for the measurement model were found to be within the acceptable range, with $\chi^2/df = 2.46$, CFI = 0.97, GFI = 0.95, AGFI = 0.93, TLI = 0.96, RMSEA = 0.05, and SRMR = 0.04. Furthermore, the standardized factor loadings ranged from 0.58 to 0.93, indicating that the items were adequately associated with their respective latent variables.

Structural Model

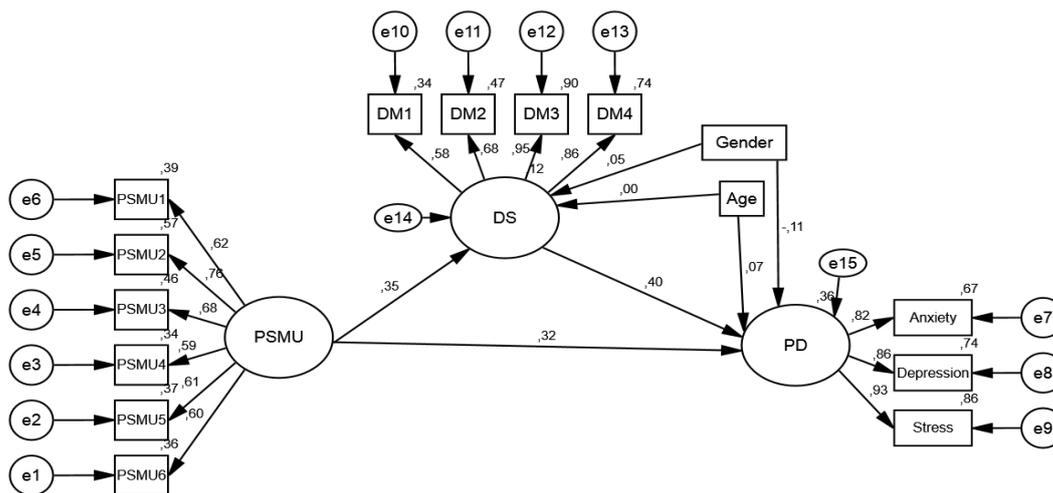
Several alternative models were tested to identify the most suitable structural model. In Model A, the sequence doomscrolling \rightarrow SMA \rightarrow psychological distress was tested, explaining 33% of the dependent variable. Model B, which tested the sequence psychological distress \rightarrow doomscrolling \rightarrow SMA, explained 22% of the dependent variable. Model C, testing psychological distress \rightarrow SMA \rightarrow doomscrolling, explained 26% of the dependent variable. Model D, which examined doomscrolling \rightarrow psychological distress \rightarrow SMA, explained 23% of the dependent variable. In Model E, the sequence SMA \rightarrow doomscrolling \rightarrow psychological distress was tested, explaining 34% of the dependent variable. Lastly, Model F tested SMA \rightarrow psychological distress \rightarrow doomscrolling, explaining 27% of the dependent variable. Of all the alternative models, Model E was selected as the structural model due to its highest explanatory power and theoretical support. While multiple models were explored, Model E was not selected solely based on statistical superiority. Its structure is also supported by prior theoretical and empirical research indicating that SMA leads to increased doomscrolling, which in turn contributes to psychological distress (Fergen et al., 2021;

Sharma et al., 2022). Therefore, the final model reflects both theoretical rationale and empirical fit.

In the structural model analysis (see Figure 2), gender and age were included as control variables. Gender and age were included as control variables to account for their potential confounding effects on the relationships among the main variables. Previous studies have shown that social media usage patterns, addiction levels, and psychological distress may vary by gender and age (e.g., Keles et al., 2020; Twenge et al., 2018). Controlling for these demographic factors helps ensure that the observed associations are not spuriously influenced by differences in gender or age.

The results revealed significant total and direct effects of SMA on psychological distress, with $\beta = 0.45$ ($p < 0.01$) for the total effect and $\beta = 0.32$ ($p < 0.01$) for the direct effect. Additionally, SMA was found to have a direct effect on doomscrolling ($\beta = 0.35$, $p < 0.01$).

Figure 2
Structural Model for the Mediating Role



Note. PSMU/SMA; Social Media Addiction, DS; Doomscrolling, PD; Psychological Distress

Furthermore, the direct effect of doomscrolling on psychological distress was significant ($\beta = 0.40$, $p < 0.01$). Importantly, doomscrolling was identified as mediating the relationship between SMA and psychological distress, with $\beta = 0.14$ and a 95% confidence interval of [0.09, 0.19] (see Table 2). The model fit statistics for the structural model were deemed acceptable, with $\chi^2/df = 2.08$, CFI = 0.97, GFI = 0.95, AGFI = 0.93, TLI = 0.96, RMSEA = 0.05, and SRMR = 0.04.

Table 2

Total, Direct and Indirect Effect of Social Media Addiction on Psychological Distress

Pathway	B	SE	Coefficient	Lower Bound	Upper Bound
SMA→ PD (Total effect)	0.40		0.45	0.36	0.54
Direct effect					
SMA→ PD	0.28	0.05	0.32	0.21	0.42
SMA→ DS	0.46	0.08	0.35	0.24	0.44
Indirect effect					
SMA→ DS→ PD	0.12		0.14	0.09	0.19

Note. SMA; Social Media Addiction, DS; Doomscrolling, PD; Psychological Distress.

Discussion and Conclusion

The primary aim of this study was to examine the mediating role of doomscrolling in the relationship between social media addiction and psychological distress among university students. The findings revealed that excessive and uncontrolled social media use, as seen in SMA, has a detrimental impact on young individuals. Additionally, compulsive engagement with negative news on social media, referred to as doomscrolling, was shown to worsen psychological distress, contributing to mental health problems such as stress, anxiety, and depression. The study provides valuable insights into the complex relationship between SMA, doomscrolling, and psychological distress among university students. Notably, it highlighted doomscrolling's role as a mediator in the connection between SMA and psychological distress. These results align with existing research and emphasize the need to address problematic social media use and doomscrolling to protect young people's mental health. In conclusion, the study enhances our understanding of the negative effects of SMA and doomscrolling on university students' mental health.

The findings of the study confirmed the first hypothesis, indicating that SMA positively predicts psychological distress. SMA refers to a condition where individuals struggle with managing their time on social media platforms and experience negative impacts on various aspects of their lives, including social relationships and academic or occupational environments (Kuss & Griffiths, 2017). Numerous studies support the notion that SMA has detrimental effects on psychological health. For instance, Kircaburun and Griffiths (2018) reported associations between SMA and psychological issues such as depression, anxiety, loneliness, and low self-esteem. Huang (2022) identified a link between SMA and heightened stress levels, which in turn negatively impact psychological well-being. Additionally, Şahin, Türk, and Hamamcı (2022) found a positive association between SMA and stress and anxiety. Additionally, Keles, McCrae, and Grealish (2020) categorized SMA into four distinct areas: time usage, activities, investment, and addiction. Their research revealed that each of these areas was linked to depression, anxiety, and psychological distress, emphasizing the negative impact of SMA on mental well-being.

The findings of Demirci (2019) indicating that SMA positively predicts anxiety and depression are consistent with the results of the current study. Moreover, several other studies have also demonstrated a relationship between SMA and psychological distress, including depression, stress, and anxiety (Balcı & Baloğlu, 2018; Bilge et al., 2020; Karadağ & Akçınar, 2019; Lin et al., 2020; Thorisdottira et al., 2020; Shensa et

al., 2017; Stronge et al., 2019). These findings support the notion that problematic use of social media can have detrimental effects on psychological health, leading to increased levels of stress, anxiety, and depression.

However, there are also studies that present conflicting results. For instance, Asibong et al. (2020) observed high levels of psychological distress among university students, particularly among those less dependent or not dependent on social networks, suggesting that SMA may not always be the sole contributor to psychological distress. Similarly, Chang et al. (2022) found no significant difference in anxiety levels between students with varying degrees of SMA in their longitudinal study.

Although findings vary, the overall research highlights a connection between SMA and psychological distress. It indicates that excessive social media usage can jeopardize students' mental health, potentially leading to conditions like stress, anxiety, and depression. Consequently, raising awareness about balanced social media practices and offering guidance on managing its use may serve as effective measures to tackle mental health challenges in young people.

The study confirmed the second hypothesis, demonstrating that SMA positively predicts doomscrolling. Existing research supports this finding by highlighting the relationship between doomscrolling and SMA. For instance, Pennycook et al. (2019) found that individuals prone to SMA are more likely to be exposed to disaster news, leading to increased stress levels. Similarly, Satici et al. (2023) identified an association between doomscrolling and SMA. In a longitudinal study conducted on adolescents (Akat & Hamarta, 2025), it was similarly reported that there was a positive relationship between SMA and doomscrolling. Furthermore, research indicates that doomscrolling might play a role in the emergence of SMA. According to Lee et al. (2020), frequent exposure to negative news and the compulsion to seek out such content can lead individuals to spend extended periods on social media. This behavior may elevate their likelihood of developing SMA and encountering psychological distress. While there is ample evidence supporting the relationship between SMA and doomscrolling, no studies have shown a lack of relationship between these variables. Thus, it can be inferred that there is indeed a relationship between SMA and doomscrolling, and this association negatively impacts psychological health.

Furthermore, the study's third hypothesis, which posited that doomscrolling positively predicts psychological distress, was also confirmed. Research during the Covid-19 pandemic has shown a positive relationship between doomscrolling and anxiety levels and psychological distress (Anand et al., 2021; Xiao et al., 2020). Shabahang et al. (2023) found that doomscrolling is linked to mental health, depression and stress in their study in Iran. Buchanan et al. (2021) also stated that exposure to negative news content on social media causes negative emotional consequences. Continuous exposure to negative news content can elevate stress levels and contribute to the development of psychological health issues.

In summary, the study's findings align with existing literature, highlighting the interrelatedness between SMA, doomscrolling, and psychological distress. Continuous exposure to negative news on social media platforms can exacerbate stress levels and contribute to psychological health problems.

The study validated the fourth hypothesis, showing that doomscrolling mediated the relationship between SMA and psychological distress. Although the mediating effect involving these three variables has not been directly examined, existing research supports their interconnectedness. For instance, Satici et al. (2023) identified a positive association between doomscrolling and SMA, with psychological distress mediating the link between doomscrolling and well-being. Similarly, Ytre-Arne and Moe (2021) observed an increase in doomscrolling during the Covid-19 pandemic due to heightened news consumption on social media, which negatively affected individuals' mental health. Sharma et al. (2022) also highlighted the close connection between doomscrolling, problematic internet and social media use, anxiety, poor self-regulation, and various personality traits. Price et al. (2022) stated that increased social media use during the Covid-19 period led to doomscrolling and as a result, disorders such as depression and post-traumatic stress disorder increased. In the scale development study conducted by Soraci et al. (2025), doomscrolling was found to be associated with both SMA and mental health. Moreover, Buchanan et al. (2021) suggested that consuming negative news on social media leads to adverse emotional outcomes. These findings imply that SMA may provoke doomscrolling, resulting in emotional distress among students. Conversely, doomscrolling could amplify both SMA and psychological distress, underscoring its mediating role and the risks it poses to students' social media use and mental health.

In summary, while there may not be direct evidence of the mediation effect of all three variables, the existing literature supports the notion that SMA, doomscrolling, and psychological distress are interconnected, with each potentially influencing the others in a complex manner.

This study is original in testing a mediation model that has not been previously explored, offering a meaningful contribution to the existing literature. The findings reveal that young people often engage with social media in an unconscious and problematic manner. Therefore, it is crucial to raise awareness among young individuals about managing their social media usage effectively, developing balanced content consumption habits, and establishing healthy boundaries. In this context, it is recommended that universities undertake initiatives and programs focused on promoting the healthy and mindful use of social media. Students from faculties of communication (Journalism, Public Relations and Publicity, Radio, Television and Cinema) or students from faculties of education and young people from other faculties can come together. Or university professors in those departments can inform the students. In faculties of education, elective courses can be added to students to prevent social media addiction. Considering the mediating role of doomscrolling between SMA and psychological distress, seminars can be held for young people on topics such as limiting the news sites followed in the media and becoming healthy media literate. With regard to the relationship between psychological disorders such as depression, anxiety and stress and SMA and doomscrolling, elective courses can be added to universities on topics such as stress and anxiety management and the protection of psychological health. Professors of Psychological Counseling and Guidance and Psychology departments of universities can organize informative seminars on related topics.

Implications

This study has several limitations that should be acknowledged. Firstly, the sample was limited to university students from various provinces in Turkey. To gain a broader perspective, future research could include more diverse groups, such as middle or high school students, to examine the relationship between SMA, doomscrolling, and psychological distress across different age ranges.

Secondly, the use of convenience and snowball sampling methods may reduce the generalizability of the findings to the wider population. Employing more rigorous sampling methods, such as proportional stratified or systematic sampling, in future studies could yield more representative samples and improve the external validity of the results.

Thirdly, the study's cross-sectional design limits the ability to infer causal relationships among the variables. Future research could adopt longitudinal or qualitative approaches to better understand the evolving dynamics between SMA, doomscrolling, and psychological distress over time, offering richer insights into these interactions.

Finally, a meta-analysis could provide valuable insights into the association between SMA and specific psychological disorders, such as depression, anxiety, and loneliness. By integrating results from various studies, a meta-analysis could offer a more nuanced understanding of the strength and direction of these relationships.

Acknowledgements

This study was not funded by any institution. For this reason, there is no institution or person to thank.

Statement of Responsibility

The entire study was conducted by the corresponding author.

Conflicts of Interest

There is no conflict of interest in this study.

References

- Anand, N., Sharma, M. K., Thakur, P. C., Mondal, I., Sahu, M., Singh, P., ... & Singh, R. (2022). Doomscrolling and doomscrolling mediate psychological distress in COVID-19 lockdown: Implications for awareness of cognitive biases. *Perspectives in Psychiatric Care*, 58(1), 170-172. <https://doi.org/10.1111/ppc.12803>
- Andreassen, C., Pallesen, S., & Griffiths, M. (2017). The relationship between addictive use of social media, narcissism, and self-esteem: Findings from a large national survey. *Addictive Behaviors*, 64, 287-293. <http://dx.doi.org/10.1016/j.addbeh.2016.03.006>
- Anlı, G. (2023). Validity and reliability study of Doomscrolling Scale Turkish form. *Dokuz Eylül University Journal of Institute of Social Sciences*, 25(1), 301-316. <http://dx.doi.org/10.16953/deusosbil.1178025>
- Akat, M., & Hamarta, E. (2025). Doomscrolling and social media addiction in adolescents: a two-wave longitudinal study. *Journal of Addictive Diseases*, 1-9. <https://doi.org/10.1080/10550887.2025.2504231>

- Appel, H., Gerlach, A. L., & Crusius, J. (2016). The interplay between Facebook use, social comparison, envy, and depression. *Current Opinion in Psychology*, 9, 44–49. <https://doi.org/10.1016/j.copsyc.2015.10.006>
- Asibong, U., Okafor, C. J., Asibong, I., Ayi, E., Omoronyia, O., & Owoidoho, U. (2020). Psychological distress and social media usage: A survey among undergraduates of a university in Calabar, Nigeria. *Nigerian Postgraduate Medical Journal*, 27(2), 115-121. http://dx.doi.org/10.4103/npmj.npmj_169_19
- Ayaz, A., & Barış, A. B. (2024). Sosyal medya bağımlılığı: Üniversite öğrencileri üzerine bir inceleme. *Uluslararası Anadolu Sosyal Bilimler Dergisi*, 8(4), 1006-1025. <https://doi.org/10.47525/ulasbid.1572348>
- Baker, Z. G., & Algorta, G. P. (2016). The relationship between online social networking and depression: A systematic review of quantitative studies. *Cyberpsychology, Behavior, and Social Networking*, 19(11), 638-647.
- Balcı, Ş., & Baloğlu, E. (2018). The relationship between SMA and depression: "A field study on university youth". *Galatasaray University Journal of Communication*, 29, 209-233. <http://dx.doi.org/10.16878/gsuilet.500860>
- Bilge, Y., Baydili, K., & Göktaş, S. (2020). Anxiety, stress and daily social media use in predicting SMA: The case of a vocational college. *Journal of Dependence*, 21(3), 223-235.
- Boyd, D. N., & Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, 13, 210-230. <https://doi.org/10.1111/j.1083-6101.2007.00393.x>
- Buchanan, K., Aknin, L. B., Lotun, S., & Sandstrom, G. M. (2021). Brief exposure to social media during the COVID-19 pandemic: Doom-scrolling has negative emotional consequences, but kindness-scrolling does not. *Plos One*, 16(10), e0257728. <https://doi.org/10.1371/journal.pone.0257728>
- Chang, C. W., Huang, R. Y., Strong, C., Lin, Y. C., Tsai, M. C., Chen, I. H., Ling, C. Y., Pakpour, A. H., & Griffiths, M. D. (2022). Reciprocal relationships between SMA, problematic gaming, and psychological distress among university students: A 9-month longitudinal study. *Frontiers in Public Health*, 10, 858482. <https://doi.org/10.3389/fpubh.2022.858482>
- Demirci, İ. (2019). Bergen Sosyal Medya Bağımlılığı Ölçeği'nin Türkçeye uyarlanması, depresyon ve anksiyete belirtileriyle ilişkisinin değerlendirilmesi. *Anadolu Psikiyatri Dergisi*, 20, 15-22. <http://dx.doi.org/10.5455/apd.41585>
- Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39(2), 175–191. <https://doi.org/10.3758/bf03193146>
- Field, A. (2016). *Discovering statistics using IBM SPSS Statistics*. London: Sage.
- Fergen, J. T., Jacquet, J. B., & Shukla, R. (2021). 'Doomscrolling' in my backyard: Corrosive online communities and contested wind development in rural Ohio. *Energy Research & Social Science*, 80, 1-12. <https://doi.org/10.1016/j.erss.2021.102224>

- Galea, S., Merchant, R. M., & Lurie, N. (2020). The mental health consequences of COVID-19 and physical distancing: The need for prevention and early intervention. *JAMA Internal Medicine*, *180*(6), 817–818. <https://doi.org/10.1001/jamainternmed.2020.1562>
- Griffiths, M. (2005). A ‘components’ model of addiction within a biopsychosocial framework. *Journal of Substance Use*, *10*(4), 191-197.
- Griffiths, M. D. (2013). Social networking addiction: Emerging themes and issues. *Journal of Addiction Research & Therapy*, *4*(5). <https://doi.org/10.4172/2155-6105.1000e118>
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2014). *Pearson new international edition: Multivariate data analysis, seventh edition*. Pearson Education Limited Harlow, Essex.
- Henry, J. D., & Crawford, J. R. (2005). The short- form version of the Depression Anxiety Stress Scales (DASS- 21): Construct validity and normative data in a large non- clinical sample. *British Journal of Clinical Psychology*, *44*(2), 227–239. <https://doi.org/10.1348/014466505X29657>
- Heo, J., Chun, S., Lee, S., Lee, K. H., & Kim, J. (2015). Internet use and well-being in older adults. *Cyberpsychology, Behavior, and Social Networking*, *18*(5), 268-272. <https://doi.org/10.1089/cyber.2014.0549>
- Huang, C. (2022). A meta-analysis of the SMA and mental health. *International Journal of Social Psychiatry*, *68*(1), 12-33. <https://doi.org/10.1177/0020764020978434>
- Jennings, R. (2020). Doomscrolling, explained. Vox. Retrieved from <https://www.vox.com/the-goods/21547961/doomscrolling-meaning-definition-what-is-meme>.
- Karadağ, A., & Akçınar, B. (2019). The relationship between SMA and psychological symptoms in university students. *Journal of Dependence*, *20*(3), 154-166.
- Keles, B., McCrae, N., & Grealish, A. (2020). A systematic review: the influence of social media on depression, anxiety and psychological distress in adolescents. *International Journal of Adolescence and Youth*, *25*(1), 79-93. <https://doi.org/10.1080/02673843.2019.1590851>
- 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.
- Koç, M., & Polat, Ü. (2006). Mental health of university students. *International Journal of Human Sciences*, *3*(2), 1-22.
- Kolhar, M., Kazi, R. N. A., & Alameen, A. (2021). Effect of social media use on learning, social interactions, and sleep duration among university students. *Saudi Journal of Biological Sciences*, *28*(4), 2216-2222. <https://doi.org/10.1016/j.sjbs.2021.01.010>
- 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.
- Lee, S. A., Jobe, M. C., Mathis, A. A., & Gibbons, J. A. (2020). Incremental validity of coronaphobia: Coronavirus anxiety explains depression, generalized anxiety, and

- death anxiety. *Journal of Anxiety Disorders*, 74, 102268. <https://doi.org/10.1016/j.janxdis.2020.102268>
- Leys, C., Klein, O., Dominicy, Y., & Ley, C. (2018). Detecting multivariate outliers: Use a robust variant of the Mahalanobis distance. *Journal of Experimental Social Psychology*, 74, 150-156. <https://doi.org/10.1016/j.jesp.2017.09.011>
- Lin, C. Y., Broström, A., Griffiths, M. D., & Pakpour, A. H. (2020). Investigating mediated effects of fear of COVID-19 and COVID-19 misunderstanding in the association between SMA, psychological distress, and insomnia. *Internet Interventions*, 21, 100345. <https://doi.org/10.1016/j.invent.2020.100345>
- Mirowsky, J., & Ross, C.E. (2002). Selecting outcomes for the sociology of mental health: Issues of measurement and dimensionality. *Journal of Health and Social Behavior*, 43, 152-170.
- Podsakoff, P., Mackenzie, S., Lee, J. Y., & Podsakoff, N. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903.
- Park, T., Ju, I., Ohs, J. E., & Hinsley, A. (2021). Optimistic bias and preventive behavioral engagement in the context of COVID-19. *Research in Social and Administrative Pharmacy*, 17(1), 1859-1866. <https://doi.org/10.1016/j.sapharm.2020.06.004>
- Pennycook, G., McPhetres, J., Zhang, Y., Lu, J. G., & Rand, D. G. (2019). Fighting misinformation on social media using crowdsourced judgments of news source quality. *Proceedings of the National Academy of Sciences*, 116 (7), 2521-2526. <https://doi.org/10.1073/pnas.1806781116>
- Perrin, A. (2015). *Social media usage: 2005-2015: 65% of adults now use social networking sites--a nearly tenfold jump in the past decade*. Pew Research Trust. Retrieved from <http://www.pewinternet.org/2015/10/08/2015/Social-Networking-Usage-2005-2015/>. Accessed 8 July 2023.
- Preacher, K. J., & Hayes, A. F. (2008). Contemporary approaches to assessing mediation in communication research. In A. F. Hayes, M. D. Slater, & L. B. Snyder (Eds.), *The Sage sourcebook of advanced data analysis methods for communication research* (pp. 13–54). Sage Publications. <https://doi.org/10.4135/9781452272054.n2>.
- Price, M., Legrand, A. C., Brier, Z. M., van Stolk-Cooke, K., Peck, K., Dodds, P. S., Danforth, C. M., & Adams, Z. W. (2022). Doomscrolling during COVID-19: The negative association between daily social and traditional media consumption and mental health symptoms during the COVID-19 pandemic. *Psychological Trauma: Theory, Research, Practice, and Policy*, 14(8), 1338–1346. <https://doi.org/10.1037/tra0001202>
- Polat Olca, S. (2023). Evaluation of university students' mental health literacy and psychological resilience levels. *Gümüşhane University Journal of Health Sciences*, 12(1), 118-126.
- Ridner, S. H. (2004). Psychological distress: Concept analysis. *Journal of Advanced Nursing*, 45(5), 536-545.

- Satici, S. A., Gocet Tekin, E., Deniz, M. E., & Satici, B. (2023). Doomscrolling scale: Its association with personality traits, psychological distress, social media use, and wellbeing. *Applied Research in Quality of Life*, 1-15. <https://doi.org/10.1007/s11482-022-10110-7>
- Schivinski, B., Brzozowska-Woś, M., Stansbury, E., Satel, J., Montag, C., & Pontes, H. M. (2020). Exploring the role of social media use motives, psychological well-being, self-esteem, and affect in SMA. *Frontiers in Psychology*, 11, 1-10. <https://doi.org/10.3389/fpsyg.2020.617140>.
- Shabahang, R., Hwang, H., Thomas, E. F., Aruguete, M. S., McCutcheon, L. E., Orosz, G., ... & Zsila, Á. (2024). Doomscrolling evokes existential anxiety and fosters pessimism about human nature? Evidence from Iran and the United States. *Computers in Human Behavior Reports*, 15, 100438. <https://doi.org/10.1016/j.chbr.2024.100438>
- Shabahang, R., Kim, S., Hosseinkhanzadeh, A. A., Aruguete, M. S., & Kakabaraee, K. (2023). "Give your thumb a break" from surfing tragic posts: Potential corrosive consequences of social media users' doomscrolling. *Media Psychology*, 26(4), 460-479. <https://doi.org/10.1080/15213269.2022.2157287>
- Sharma, B., Lee, S. S., & Johnson, B. K. (2022). The dark at the end of the tunnel: Doomscrolling on social media newsfeeds. *Technology, Mind, and Behavior*, 3(1), 1-13. <https://doi.org/10.1037/tmb0000059>
- Shensa, A., Escobar-Viera, C. G., Sidani, J. E., Bowman, N. D., Marshal, M. P., & Primack, B. A. (2017). SMA and depressive symptoms among US young adults: A nationally-representative study. *Social Science & Medicine*, 182, 150-157. <http://dx.doi.org/10.1016/j.socscimed.2017.03.061>
- Spence, P. R., Lachlan, K. A., & Griffin, D. R. (2007). Crisis communication, race, and natural disasters. *Journal of Black Studies*, 37(4), 539-562.
- Stronge, S., Mok, T., Ejova, A., Lee, C., Zubielevitch, E., Yogeewaran, K., Hawi, D., Osborne, D., Bulbulia, J., & Sibley, C. G. (2019). Social media use is (weakly) related to psychological distress. *Cyberpsychology, Behavior, and Social Networking*, 22(9), 604-609. <http://doi.org/10.1089/cyber.2019.0176>
- Soraci, P., Griffiths, M. D., Bevan, N., Pisanti, R., Trovato, M., Servidio, R., ... & Satici, S. A. (2025). Psychometric analysis of the Italian Doomscrolling Scale: Associations with problematic social media use, psychological distress, and mental well-being. *Current Psychology*, 1-12. <https://doi.org/10.1007/s12144-025-07976-9>
- Şahin, E., Türk., F. & Hamamcı, Z. (2022). Covid-19 pandemi sürecinde depresyon, anksiyete ve stres ile başa çıkma tutumlarının sosyal medya bağımlılığıyla ilişkisi. *Erciyes İletişim Dergisi*, 9(1), 165-186. <https://doi.org/10.17680/erciyesiletisim.1001102>
- Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics* (4th ed.). Allyn&Bacon, Inc.
- Taskin, S., Yildirim Kurtulus, H., Satici, S. A., & Deniz, M. E. (2024). Doomscrolling and mental well-being in social media users: A serial mediation through mindfulness and secondary traumatic stress. *Journal of Community Psychology*, 52(3), 512-524. <https://doi.org/10.1002/jcop.23111>

- Tifferet, S. (2020). Gender differences in social support on social network sites: A meta-analysis. *Cyberpsychology, Behavior, and Social Networking*, 23(4), 199-209. <https://doi.org/10.1089/cyber.2019.0516>
- Thorisdottir, I. E., Sigurvinsdottir, R., Kristjansson, A. L., Allegrante, J. P., Lilly, C. L., & Sigfusdottir, I. D. (2020). Longitudinal association between social media use and psychological distress among adolescents. *Preventive Medicine*, 141, 106270. <https://doi.org/10.1016/j.ypmed.2020.106270>
- Türkiye İstatistik Kurumu (TUİK, 2024). Hanehalkı Bilişim Teknolojileri (BT) Kullanım Araştırması. Retrieved from [https://data.tuik.gov.tr/Bulten/Index?p=Hanehalki-Bilisim-Teknolojileri-\(BT\)-Kullanim-Arastirmasi-2022-45587](https://data.tuik.gov.tr/Bulten/Index?p=Hanehalki-Bilisim-Teknolojileri-(BT)-Kullanim-Arastirmasi-2022-45587) on 17 June 2025.
- Twenge, J. M., Joiner, T. E., Rogers, M. L., & Martin, G. N. (2018). Increases in depressive symptoms, suicide-related outcomes, and suicide rates among U.S. adolescents after 2010 and links to increased new media screen time. *Clinical Psychological Science*, 6(1), 3–17. <https://doi.org/10.1177/2167702617723376>
- Ytre-Arne, B., & Moe, H. (2021). Doomscrolling, monitoring and avoiding: News use in COVID-19 pandemic lockdown. *Journalism Studies*, 22(13), 1739-1755. <https://doi.org/10.1080/1461670X.2021.1952475>
- Xiao, H., Zhang, Y., Kong, D., Li, S., & Yang, N. (2020). The effects of social support on sleep quality of medical staff treating patients with coronavirus disease 2019 (COVID-19) in January and February 2020 in China. *Medical Science Monitor: International Medical Journal of Experimental and Clinical Research*, 26, e923549-1. <https://doi.org/10.12659/MSM.923549>
- Wang, J. L., Gaskin, J., Wang, H. Z., & Liu, D. (2016). Life satisfaction moderates the associations between motives and excessive social networking site usage. *Addiction Research & Theory*, 24(6), 450-457. <https://doi.org/10.3109/16066359.2016>.
- Watercutter, A. (2020). Doomscrolling is slowly eroding your mental health. Retrieved from <https://www.wired.com/story/stop-doomscrolling/> on 9 July 2023.
- Wathelet, M., Duhem, S., Vaiva, G., Baubet, T., Habran, E., Veerapa, E., & D'Hondt, F. (2020). Factors associated with mental health disorders among university students in France confined during the COVID-19 pandemic. *JAMA Network Open*, 3(10), e2025591. <https://doi.org/10.1001/jamanetworkopen.2020.25591>
- Yilmaz, O., Boz, H., & Arslan, A. (2017). The validity and reliability of depression stress and anxiety scale (DASS 21) Turkish short form. *Research of Financial Economic and Social Studies*, 2(2), 78–91.



This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0). For further information, you can refer to <https://creativecommons.org/licenses/by-nc-sa/4.0/>