RESEARCH ARTICLE

Doomscrolling and mental well-being in social media users: A serial mediation through mindfulness and secondary traumatic stress

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Abstract

Considering that large-scale events such as natural disasters, epidemics, and wars affect people all over the world through online news channels, it is inevitable to investigate the impact of following or avoiding negative news on well-being. This study investigated the effect of doomscrolling on mental well-being and the mediating role of mindfulness and secondary traumatic stress in social media users. A total of 400 Turkish adults completed scales to assess doomscrolling, mental well-being, mindfulness, and secondary traumatic stress. The average age of the participants was 29.42 (SD = 8.38; ranged = 18−65). Structural equation modeling was conducted to examine the mediating roles of mindfulness and secondary traumatic stress in the relationship between doomscrolling and mental well-being. Mindfulness and secondary traumatic stress fully mediated the relationship between doomscrolling and mental well-being. The results are discussed in light of existing knowledge of doomscrolling, mental well-being, mindfulness, and secondary traumatic stress. High levels of doomscrolling, which is related to an individual's mental well-being, can predict the individual's distraction from the here and now and fixation on negative news. This situation, in which mindfulness is low, is related to the individual's indirect traumatization and increased secondary traumatic

stress symptoms in the face of the negative news he/she follows.

KEYWORDS
doomscrolling, mental well-being, mindfulness, secondary traumatic stress

1 | INTRODUCTION

In recent years, with the developments in the field of technology, there has been an increase in internet usage and the number of social media users. According to the We Are Social 2023 Report, there are 4.76 billion social media users in the world in 2023. This rate corresponds to almost 60% of the world population. According to the same report, this rate is 83.4% in Türkiye. The rate of active social media users is 73.1%. The fact that the rate is so high shows that most individuals are social media users, and the frequent use of social media facilitates access to events around the world. In the context of Türkiye, finding information on any subject and staying informed about news and events are reported as the main reasons why individuals use social media. In terms of duration, individuals spend an average of 7 h and 24 min on the internet. The average duration of social media use was found to be 2 h and 54 min.

Spending too much time on social media increases the risk of being influenced by negative news and content (Zenelaj, 2014). In addition, the intensity of social media use is positively associated with negative emotions (Lin et al., 2017). Studies show that the duration of social media use is associated with negative emotions such as depression and anxiety (Jiang, 2021; Majeed et al., 2020). This may be because exposure to negative events and subsequent negative emotional states can harm our daily activities. In this context, the concept of doomscrolling, which is newly accepted in the literature, draws attention. The concept of doomscrolling entered our lives with the coronavirus disease (COVID-19) pandemic that shook the whole world in early 2020 (Barabak, 2020). Doomscrolling is defined as the state of constantly following negative online news by negatively affects individuals' mental health (Jennings, 2020; Watercutter, 2020). After the earthquake disaster in Türkiye in February, there has been a significant increase in the number of earthquake-related news on social media. It is thought that mindfulness and secondary traumatic stress discussed in the study will help explain the relationship between doomscrolling and well-being.

1.1 | Doomscrolling and mental wellbeing

The terms doomscrolling and doomsurfing mean following bad news that leads to sadness, despair, and depression (Merriam-Webster, 2020). The Oxford English Dictionary has defined doomscrolling as one of the words of 2020. According to the definition made by Oxford Languages, it is the act of obsessively scrolling through social media or news feeds about negative news (Oxford Languages, n.d.). Research shows that not only in Türkiye but also in other countries around the world, social media platforms are used extensively as a public discourse tool when there is a current development or a chaotic event (Borch et al., 2020; Fergen et al., 2021). The motivations behind the public search for information about this development or event are explained as a collective experience of negative information seeking (Huang, 2023).

According to a study conducted on Twitter, one of the social media platforms, the likelihood of retweeting news containing negative emotions was found to be higher than news containing positive emotions (Wu & Shen, 2015). In addition, excessive news monitoring related to stressful current events also predicts mental

health (Huckins et al., 2020). Comstock and Platania (2017) found that approximately one-quarter of the participants were significantly affected by negative events viewed on social media, and individuals who reported viewing negative news frequently experienced more stress. Another variable associated with the frequency of following negative news is well-being (Buchanan et al., 2021; Nguyen et al., 2021). Examining the well-being of the individual and increasing well-being has been one of the fields of study in positive psychology. The World Health Organization (World Health Organisation, 2004) defines mental well-being as a state in which each individual is aware of his/her abilities, can cope with the normal stresses of life, can work productively and efficiently, and contribute. In a study, it was found that individuals who experienced doomscrolling more frequently experienced more psychological distress and this predicted low psychological well-being (Satici et al., 2023).

1.2 | Mindfulness and secondary traumatic stress as serial mediators

Another concept that has recently attracted the attention of researchers is mindfulness. Mindfulness refers to paying attention to the present moment in a way that is free from prejudices (Kabat-Zinn, 2005). Brown et al. (2007) stated that in the context of the concept of mindfulness, emphasis should be placed on a clear awareness of the individual's internal and external worlds such as thoughts, emotions, behaviors, and the environment they experience. The state of mindfulness is compromised when the individual starts to act impulsively or automatically without being aware of their behavior (Deci & Ryan, 1980). However, for certain individuals, directing attention towards the mind and turning focus inward can pose difficulties. This challenge arises from the potential discomfort in confronting thoughts and emotions that are hard to recollect, potentially triggering distressing memories (Deniz et al., 2023). It is possible to mention such a situation, especially considering that the study group of this research is individuals who have experienced an earthquake.

Therefore, considering that doomscrolling is the automatic following of negative news, it can be interpreted that doomscrolling is associated with low mindfulness. Studies show that mindfulness-based practices increase well-being (Giluk, 2009; Harrington et al., 2014; Haver et al., 2015; Wenzel et al., 2015). In the study conducted by Carmody and Baer (2009), an increase in the mindfulness levels and well-being levels of adults participating in the mindfulness-based stress reduction program was observed. At the same time, a decrease in the stress levels of these individuals is among the findings obtained.

Negative events witnessed on social media can cause individuals to experience several negative emotions. One of these emotions is undoubtedly traumatic stress. The indirect experience of traumatic stress through social media is conceptualized as secondary traumatic stress. Secondary traumatic stress is the stress that occurs after becoming aware of the traumatic event experienced by another person (Figley, 1995). At the same time, various sources have characterized the effects of experiencing secondary traumatic stress as almost the same as experiencing direct trauma (Bride et al., 2004; Figley, 1999). Studies are showing that secondary traumatic stress causes a series of distressing emotions (Courtois, 1988; Herman, 1992). In this direction, it can be said that secondary traumatic stress predicts low mental well-being.

1.3 | The present study

In this study, mindfulness, secondary traumatic stress, doomscrolling, and the path to mental well-being were examined as mediating variables in light of the literature. Studies are showing the relationships between these variables in the literature (Carmody & Baer, 2009; Giluk, 2009; Harrington et al., 2014; Haver et al., 2015; Satici et al., 2023; Sharma et al., 2022; Wenzel et al., 2015). However, there is no research examining four variables at the same time. In this context, the study aims to examine the nature of the relationships between the variables

together. Doomscrolling is the state of constantly following negative online news, which negatively affects individuals' mental health (Jennings, 2020; Watercutter, 2020) and is often associated with negative health outcomes (Huckins et al., 2020). The research was carried out with the effect of the earthquake in Türkiye in February 2023, considering that individuals may show a doomscrolling tendency by constantly following the earthquake news through social media, this tendency may predict the level of mindfulness, in this direction, they may experience secondary traumatic stress and a decrease in individuals' mental well-being may occur. At this point, the research is important in terms of shedding light on the effects of doomscrolling after the large-scale earthquakes in Türkiye in 2023. Research can provide mental health professionals with guidance on informing individuals about social media usage and coping with the negative effects of social media use. Additionally, the findings can contribute to the development of effective strategies to enhance mental well-being.

In light of previous findings in the literature, the research questions were formulated as follows:

RQ_1: Is there a mediating effect of mindfulness on the relationship between doomscrolling and mental well-being?

RQ_2: Is there a mediating effect of secondary traumatic stress on the relationship between doomscrolling and mental well-being?

RQ_3: Are there serial mediating effects of mindfulness and secondary traumatic stress on the relationship between doomscrolling and mental well-being?

2 | METHOD

2.1 | Procedure and participants

Before data collection, participants were given an informed consent form explaining the purpose of the study and emphasizing that their participation was voluntary. In the informed consent form, they were asked to state that they agreed to participate in the study. Participants were also informed that they could leave the study at any time. In this study, the convenience sampling method was used. The determination of the requisite sample size was done by the researchers using G*Power (Faul et al., 2009), with this freely available program being utilized to ascertain a practical sample size. According to G*Power's calculations, a sample comprising 236 is deemed adequate for the inclusion of three predictive variables while maintaining a real power of 0.95. Data collection tools were written on Google Forms and shared with participants via social media. The study was conducted with a total of 400 people, 314 females (78.5%) and 86 males (21.5%) living in Türkiye. The perceived socioeconomic status of the participants is as follows: 58 (14.5%) poor, 293 (73.3%) moderate and 49 (12.2%) good. The average age of the participants was 29.42 (SD = 8.38; ranged = 18−65). The mean age of female was 29.39 years (SD = 8.44) and their average daily social media use was 3.40 h. The mean age of male was 29.82 years (SD = 8.15) and their average daily social media use was 3.80 h. In terms of the duration of social media use, 151 (37.8%) of the participants use social media for 0−2 h, 197 (49.3%) for 3−5 h, and 52 (13.0%) for 6+ hours.

2.2 | Measures

2.2.1 | Warwick-Edinburgh mental well-being scale short form

The original form of the scale was developed by Tennant et al. (2007) to measure the mental well-being levels of individuals. The validity and reliability studies of the Turkish short form of the scale were conducted by Demirtaş and Baytemir (2019). The short form of the scale is unidimensional and consists of 7 items (e.g., "Dealing with problems well I'm going out"). It was prepared on a 5-point Likert scale from 1 (never) to

5 (*always*). High scores obtained from the scale indicate high mental well-being. Cronbach Alpha's internal consistency coefficient of the scale is 0.86. In the current study, we calculated its internal consistency (α = 0.88, ω = 0.88).

2.2.2 | Mindful attention awareness scale

The Turkish adaptation study of the Mindfulness Scale developed by Brown and Ryan (2003) was conducted by Özyeşil et al. (2011). Consisting of 15 items, the scale has a unidimensional structure (e.g., "I do it on automatic without realizing what I am doing"). The Mindfulness Attention Awareness Scale is a 6-point Likert scale from 1 (*almost always*) to 6 (*almost never*). All items on the scale were reversed while scoring. Thus, high scores on the scale indicate high levels of mindfulness. Cronbach Alpha's internal consistency coefficient of the scale is 0.80. In the current study, we also calculated its internal consistency (α = 0.83, ω = 0.83).

2.2.3 | Doomscrolling scale

The Doomscrolling Scale was originally developed by Sharma et al. (2022). The Turkish adaptation study of the scale was conducted by Satici et al. (2023). Consisting of 15 items, the scale has a unidimensional structure (e.g., "I lose track of time when I read bad news on social media"). There is also a short form of the scale consisting of 4 items (Sharma et al., 2022). The Doomscrolling Scale is a 7-point Likert scale from 1 (*strongly disagree*) 7 to (*strongly agree*). High scores obtained from the scale indicate high doomscrolling. In this study, the short form of the scale consisting of four items was used. Cronbach Alpha's internal consistency coefficient of the scale is 0.94. In the current study, we also calculated its internal consistency (α = 0.85, ω = 0.86).

2.2.4 | Secondary traumatic stress scale for social media users (STSS-SM)

The STSS-SM was originally developed by Mancini (2019). The Turkish adaptation study of the scale was conducted by Balcı Çelik and Altınışık (2021). Although the original scale has three sub-dimensions, the Turkish version has a unidimensional structure. When CFA results were examined, it was seen that the scale, which had three factors in the original, was gathered in a one-factor in the Turkish adaptation. The scale consists of 17 items in total (e.g., "It felt like I was reliving the traumas experienced by the people I saw on social media"). The scale is a 5-point Likert scale from 1 (*never*) to 5 (*very often*). A high score on the scale indicates high secondary traumatic stress caused by social media. Cronbach Alpha's internal consistency coefficient of the scale is 0.95. In the current study, we also calculated its internal consistency (α = 0.92, ω = 0.92).

2.3 | Ethics

To collect the data, permissions were obtained from the relevant researchers for the measures to be used in the study, and ethical committee approval was also obtained from [Omitted] University Social and Human Sciences Ethical Committee (ID: 20230502042). All stages of the study were conducted according to Helsinki Declaration. In addition, an informed consent form was obtained from the participants who participated in the study.

2.4 | Data analysis

First, we examined descriptive statistics and correlations between doomscrolling, secondary traumatic stress, mindfulness, and mental well-being. We created parcels for the unidimensional secondary traumatic stress, mindfulness, and mental well-being scales. The parceling method is commonly used to minimize measurement errors when evaluating one-factor measurement tools (Little et al., 2002). Researchers have indicated that employing the parceling technique in assessing personality concepts enhances the normality and reliability of measurements (Nasser-Abu Alhija & Wisenbaker, 2006). Parcels are formed by grouping items to constitute factors in instruments with a one-factor. In this study, we utilized the parceling technique because the variables represent a one-factor. To create three parcels for mindfulness and secondary traumatic stress, as well as two parcels for mental well-being, we applied the factorial algorithm introduced by Rogers and Schmitt (2004). This methodology was embraced in this investigation to achieve superior results in terms of the overall fit of the model.

After completing initial analyses, we tested the structural model using a two-stage approach. With the two-stage approach, firstly, it was tested whether the measurement model provided sufficient goodness of fit. After obtaining sufficient goodness of fit values in the measurement model, the structural model was examined (Anderson & Gerbing, 1988). In the structural model, the model was first created with the observed variables (doomscrolling, secondary traumatic stress, mindfulness, and mental well-being). The results obtained from the measurement model and the structural model were evaluated based on the fit indices suggested by Hu and Bentler (1999). Accordingly, RMSEA and SRMR values should be greater than 0.08 and CFI, NFI, GFI, TLI, and IFI values should be greater than 0.90. Data analysis was performed using SPSS 26.0 and AMOS 22.

3 | RESULTS

3.1 | Preliminary analyses

Descriptive statistics, reliabilities of the variables, and correlations between variables are reported in Table 1. Mental well-being was negatively correlated both with doomscrolling ($r = -0.235$, $p < 0.01$), and secondary traumatic stress ($r = -0.344$, $p < 0.01$), and it positively correlated with mindfulness ($r = 0.436$, $p < 0.01$). On the other hand, doomscrolling was negatively correlated with mindfulness ($r = -0.198$, $p < 0.01$), and it positively correlated with secondary traumatic stress ($r = 0.424$, $p < 0.01$). In addition to, mindfulness was negatively correlated with secondary traumatic stress ($r = -0.321$, $p < 0.01$).

TABLE 1 Descriptive statistics for the study variables.

Variables	Mean	SD	Confidence İnterval	Variance	α	ω	1	2	3
	Descriptive Statistics and Reliabilities						**Correlations**		
1. Doomscrolling	9.15	5.44	8.59–9.70	29.64	0.85	0.86	–		
2. Mindfulness	59.33	12.3	58.09–60.48	151.75	0.83	0.83	−0.198**	–	
3. Secondary traumatic stress	45.55	14.1	44.30–46.94	199.36	0.92	0.92	0.424**	−0.321**	–
4. Mental well-being	25.0	5.81	24.40–25.60	33.71	0.88	0.88	−0.235**	0.436**	−0.344**

**p < 0.01

3.2 | Structural equation modeling

3.2.1 | Measurement model

The measurement model consisted of four latent variables (doomscrolling, mindfulness, secondary traumatic stress, and mental well-being), and 12 observed variables were examined. As a result of the confirmatory factor analysis (*CFA*), the measurement model showed good fit. The fit indices for the model were as follows: $\chi^2_{(48, N = 400)}$ = 127.194, $p < 0.05$; CFI = 0.97; NFI = 0.96; GFI = 0.95; IFI = 0.97; SRMR = 0.03; RMSEA = 0.06. In addition, factor loadings ranged from 0.68 to 0.93, and all factor loadings were statistically significant. In conclusion, the findings show that the observed variables are strong representatives of the latent constructs. After these analyses, structural equation modeling was conducted to investigate the mediating effects of mindfulness, and secondary traumatic stress on the relationship between doomscrolling, and mental well-being.

3.2.2 | Structural model

Gender and economic status were added as control variables in structural equation modeling. First, the fully mediated model, which does not include the direct path from doomscrolling to mental well-being, was tested. The fit indices of the fully mediated model showed good fit ($\chi^2_{(70, N = 400)}$ = 175.215, $p < 0.05$, CFI = 0.96; NFI = 0.94; GFI = 0.94; TLI = 0.95; IFI = 0.96; RMSEA = 0.06; SRMR = 0.04, AIC = 245.215, ECVI = 0.615). We next tested a model with mediating variables (mindfulness and secondary traumatic stress), and a direct path from doomscrolling to mental well-being. The partially mediated model indices also showed good fit ($\chi^2_{(69, N = 400)}$ = 174.117, $p < 0.05$, CFI = 0.96; NFI = 0.94; GFI = 0.94; TLI = 0.95; IFI = 0.96; RMSEA = 0.06; SRMR = 0.04, AIC = 246.117, ECVI = 0.617). Therefore, the fit indices of both the partial model and the full mediation model showed good fit. However, as a result of the comparison between the full mediation and partial mediation models, the full mediation model was preferred since the AIC and ECVI coefficients of the full mediation model were lower than the AIC and ECVI coefficients of the partial mediation model and the partial mediation model did not contribute significantly to the model compared to the full mediation model in the chi-square test ($\Delta \chi^2$ = 0.933, df = 1, $p > 0.001$). The standardized path coefficients of the partial mediation model are shown in Figure 1.
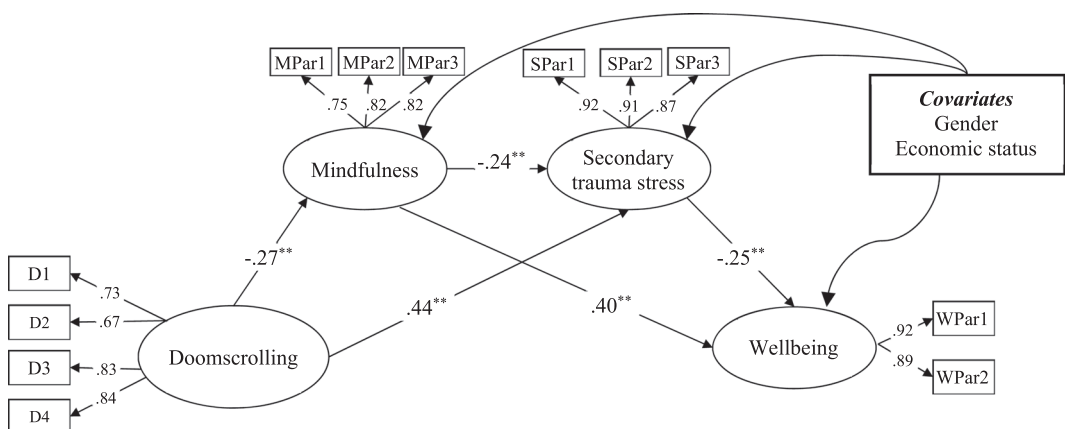

FIGURE 1 Standardized factor loadings for the serial model. **$p < 0.01$, *D*, items of doomscrolling; *MPar*:, parcel of mindfulness; *SPar*:, parcel of secondary traumatic stress; *WPar*:, parcel of wellbeing.

3.3 | Alternative model

In this study, an alternative model was also tested to see the validity of the main model tested by structural equation modeling. This method is recommended because it allows comparing the alternative model with the main structural model in terms of superiority and equivalence (Vandenberg et al., 2009). In the alternative model created in this study, doomscrolling was determined as the dependent variable, and the variables contributing to doomscrolling were analyzed. For this purpose, mental well-being was determined as an independent variable, and mindfulness and secondary traumatic stress as mediating variables. Testing the alternative model revealed acceptable goodness-of-fit indices ($\chi^2_{(57, \ N = 400)}$ = 143.955, $p < 0.05$, CFI = 0.97; NFI = 0.95; GFI = 0.95; TLI = 0.96; IFI = 0.97; RMSEA = 0.06; SRMR = 0.04). However, the paths from mental well-being ($\beta = -0.02$, $p > 0.05$), and mindfulness ($\beta = -0.02$, $p > 0.05$) to doomscrolling were not significant, leading us to prefer the main structural model.

4 | DISCUSSION

Considering that large-scale events such as natural disasters, epidemics, and wars affect people all over the world through online news channels (Newman, 2020), it is inevitable to investigate the impact of following or avoiding negative news on well-being (Mannell & Meese, 2022). Therefore, the concept of doomscrolling, defined as "the act of consuming an endless procession of negative online news, to the detriment of the scroller's mental wellness" (Watercutter, 2020), has become popular with the COVID-19 pandemic that started in 2020. However, the earthquakes in Türkiye in February 2023 made it necessary to examine the effects of earthquake-related doomscrolling on people living in Türkiye. Community-based explanations for doomscrolling also suggest that during and after a community disaster, individuals lose control of news search in an unstoppable impulse, and attention to things other than news search diminishes (Merriam-Webster, 2020; Ytre-Arne & Moe, 2021). No previous research has examined the relationship between doomscrolling, mindfulness, second traumatic stress on social media, and mental well-being. Therefore, this study tested a series of mediation links from doomscrolling to mental well-being to better understand the effects of doomscrolling on social media users, and to provide insight into the impact of doomscrolling on public health. The findings suggest that a pathway from doomscrolling to mental well-being is fully mediated by mindfulness and secondary traumatic stress. However, high levels of doomscrolling may be associated with low levels of mindfulness, which in turn may predict high levels of secondary traumatic stress. High secondary traumatic stress may then predict low levels of mental well-being. These results underline the vulnerability of an individual's well-being to doomscrolling and that doomscrolling is a risk factor for an individual's mindfulness and secondary traumatic stress.

According to the first finding of the study supporting hypothesis RQ1, increased doomscrolling in social media users was associated with low levels of mindfulness, which in turn predicted low mental well-being. Doomscrolling refers to a vicious cycle of being stuck in negative information-seeking behavior no matter how bad the news is (Satici et al., 2023). This vicious cycle, together with the loss of self-control, puts an emotional burden on the person, and can negatively affect their well-being (Saindon, 2021). Here, loss of self-control may be an indicator of loss of mindfulness. The person compulsively performs scrolling behavior by losing himself/herself with the motivation to search for negative news (Sharma et al., 2022). A study predicted the negative consequences of negative news scrolling on well-being during the COVID-19 pandemic (Buchanan et al., 2021). Therefore, when there is a global or country-wide current event, social media users may feel like they cannot stop following negative news and lose control over time. This may lead to a decrease in mental well-being due to the burden of negative news and negative feelings of losing control. In other words, continuous information-seeking behavior towards negative news may negatively predict individuals' mental well-being by reducing their level of mindfulness.

This research shows that increased doomscrolling is associated with increased secondary traumatic stress in social media users. Moreover, increased secondary traumatic stress predicts low mental well-being. These findings support the RQ2 hypothesis of the current study. Despite the limited amount of research on doomscrolling, the existing literature suggests that the amount of time spent on social media and the number of news sources consulted about an event of interest to large audiences predict greater mental distress (Buchanan et al., 2021; Prowse et al., 2021; Wathelet et al., 2020). In addition, spending too much time on social media increases the likelihood of being affected by negative news and content (Zenelaj, 2014) and can lead to psychological problems such as depression and anxiety (Vannucci et al., 2019). Therefore, it can be said that negative news on social media shows traumatic situations to users in the most vivid way. Thus, social media users may experience trauma indirectly and may have the same symptoms as those who experience trauma directly (Mancini, 2019). This can be considered as a risk factor for the mental well-being of social media users. Existing literature also confirms the negative impact of negative news on social media on health and well-being by traumatizing users (Memon, 2022). This is explained by the fact that the behavior of constantly searching for information about a negative situation increases the individual's anxiety (Buchanan et al., 2021). Doomscrolling may also negatively predict individuals' emotion regulation skills (Anand et al., 2022), causing them to be indirectly traumatized by negative news and reducing their mental well-being. Based on this information, it can be stated that doomscrolling may negatively predict individuals' mental well-being through secondary traumatic stress. Exposure to negative news and the tendency to constantly follow this negative news may increase the stress level of the individual, which may lead to the emergence of secondary traumatic stress and may be associated with negative mental well-being.

The final finding of this study that supports hypothesis RQ3 is that increased doomscrolling in social media users is predicted by decreased mindfulness, and decreased mindfulness by increased secondary traumatic stress, which in turn predicts low mental well-being. Therefore, it seems possible that doomscrolling, which is associated with low mindfulness and high development of secondary traumatic stress, indirectly predicts mental well-being negatively. However, in our research result, mindfulness and secondary traumatic stress were found to fully mediate the relationship between doomscrolling and mental well-being. Mindful social media use increases self-awareness (Chisholm & Hartman-Caverly, 2022). It is known that in a crisis, social media users are dependent on news to meet their information needs and cannot stop themselves from scrolling through the apocalypse (Ytre-Arne & Moe, 2021). Individuals who are uncontrollably and intensely exposed to trauma stories are likely to experience secondary traumatic stress (Figley, 1995) and thus experience difficulties with emotional well-being (Nguyen et al., 2021). This can be explained by the fact that doomscrolling causes individuals to move away from the moment and focus their attention on negative news, thus becoming more vulnerable to negative news and becoming traumatized. Thus, a chain interaction may occur between doomscrolling, a decrease in mindfulness, and an increase in secondary traumatic stress, which may negatively predict the mental well-being of social media users.

5 | IMPLICATIONS

We believe that this study will contribute to the exploration of the negative effects of doomscrolling. The results of the study may help mental health professionals understand why individuals' mental well-being declines in crises despite not directly experiencing the event. In addition, interventions for doomscrolling may have the added benefit of increasing mindfulness and reducing secondary traumatic stress.

To our knowledge, this is the first study to examine the effects of doomscrolling in terms of mindfulness, secondary traumatic stress, and mental well-being. However, different crises in different countries around the world may have different consequences of doomscrolling. Therefore, similar studies to be conducted in other countries can investigate whether people living in other parts of the world and cultures fit this model or whether there are cultural differences. Future research could combine qualitative and quantitative methods to obtain more detailed information about the effects of doomscrolling. Based on the findings of the research, psychoeducation

programs can be developed to develop new skills on issues such as individuals' use of social media and coping with the negative consequences of social media use. In addition, the literature shows that mindfulness-based psychoeducation programs provide participants with skills to cope with stress and improve their mental well-being (Fazia et al., 2023). In this context, based on the research findings, psychoeducation programs can be developed on topics such as mindfulness in social media use and mindful internet use. The psychoeducation program developed in this direction can help individuals cope with stress and increase their mental well-being. In addition, longitudinal studies can be conducted to see the long-term consequences of doomscrolling.

6 | LIMITATIONS AND FUTURE RESEARCH

In addition to its findings, the study also has some limitations. The data were obtained from a Turkish sample and the results of the study may reflect the results of doomscrolling regarding the recent major earthquakes in Türkiye. The fact that the participants in the study were mostly women and young adults limits the generalizability of the research results. Another limitation of the study is that the research sample was determined by the convenience sampling method. In this context, in future research, multiple sampling methods such as cluster sampling can be employed instead of convenience sampling. In addition, the data on doomscrolling, mindfulness, secondary traumatic stress, and mental well-being were obtained from the participants through self-report. The use of self-report-based measurement tools in the study may increase the social desirability bias. To prevent social desirability bias in research, studies should assure participants of the confidentiality of their responses. In addition, the cross-sectional design of the study makes it difficult to establish causality between variables.

7 | CONCLUSIONS

When doomscrolling, which has an impact on the mental well-being of the individual, is high, the person may be distracted from the here and now and get caught up in negative news. This situation, in which mindfulness is low, causes the individual to indirectly experience trauma in the face of the negative news they follow, and the symptoms of secondary traumatic stress increase. Thus, there is a decline in mental well-being. However, individuals with low levels of doomscrolling can protect themselves from the secondary traumatic impact of negative news by paying attention to the moment they are living. This leads to positive health outcomes.

CONFLICT OF INTEREST STATEMENT
The authors declare no conflict of interest.

DATA AVAILABILITY STATEMENT
Data will be available on request.

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