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Sofalizing and its relationship with social media addiction and psychosocial factors: A new phenomenon among emerging adults

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ABSTRACT

Sofalizing is a term that emerged from the combination of the words 'sofa' and 'socializing', and can be defined as interacting with others online from home rather than going out and actually meeting individuals. In the present study, the relationships between psychosocial factors (including social anxiety and social connectedness) and sofalizing were examined. Additionally, the possible mediating role of social media addiction between social anxiety and connectedness with sofalizing was also investigated. The participants comprised 666 university students (69% female, M_{age} = 20.35 years, SD = 2.28, age range = 17 to 40 years) recruited via convenience sampling. The data were analyzed using exploratory and confirmatory factor analyses, correlation analysis, t-tests, and structural equation modeling. Results showed that social anxiety, but not social connectedness, was indirectly significantly associated with sofalizing via social media addiction. Social media addiction also had a moderate effect on sofalizing. The present study is the first to empirically explore the concept of 'sofalizing' and its potential contributing factors, and suggests that sofalizing warrants further examination of its impact on mental health and wellbeing.

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Introduction

Due to the increase of mobile technologies, traditional socialization environments have been transformed and started to be supplemented via social networks. Sociologically, two different views have been posited in terms of the effect of the internet on social interaction. On the one hand, it has been claimed that online interactions on the internet increases or supports face-to-face meetings (Giddens, 2008). On the other hand, it has been claimed that individuals spend less time communicating face-to-face because they spend longer on the internet by

communicating online (Giddens, 2008). While the use of internet technologies makes separations and distances from family and friends more bearable, by contrast, concerns remain that such communication technologies cause an increase in social abstraction and fragmentation (Giddens, 2008). Consequently, the issue becomes whether online technologies result in a situation where individuals rarely leaves their homes and lose their communication skills (Giddens, 2008).

A relatively new term, 'sofalizing', has started to be used to refer to individuals' preference for online social interaction. Sofalizing is a term that comes from the combination of the words 'sofa' and 'socializing', and refers to the use of the internet or other electronic devices (e.g., texting, e-mail, social media messaging, status updates, tweets) for socializing with individuals from home rather than in person (Collins Dictionary, 2019). It has been claimed in the non-academic literature that increasing numbers of individuals choose to engage in sofalizing rather than go out to meet individuals even when there is time to see individuals face-to-face (Realwire, 2010). Another dimension to sofalizing involves individuals sitting in their homes while they are watching television and at the same time exchanging views online about what they watch online with friends or strangers (BBC, 2011). According to the Macmillan Dictionary (2019), the motivations for sofalizing include convenience, laziness, multitasking, time pressure, the expense of going out, and/or to avoid lengthy conversations. According to market research on sofalizing commissioned by the online casino *Yazino,* 26% of individuals do all their communicating from the comfort of home. The report also found that at weekends, one in ten adults were more likely to stay at home and tended to sofalise rather than going out to meet individuals in person (Realwire, 2010).

Technology can provide a fast, low-cost, private, and hidden form of communication. Moreover, this communication can be difficult to display, and can be synchronous or asynchronous (Barak, 2007). Researchers have focused on communication over social networks

and have reported both positive mental health benefits and online risks. However, some researchers refer to it as "somewhere between two extremes" to avoid the positive and negative dichotomy (Bryant, Sanders-Jackson, & Smallwood, 2006 p. 577). In the present study, hypotheses are examined concerning four areas of social outcomes in relation to online communication: (i) displacement, (ii) increase, (iii) rich-get-richer, and (iv) social compensation.

The 'displacement hypothesis' is one of the important hypotheses and focuses on the negative effects of the internet and suggests that the frequency of internet use is negatively related to the frequency and quality of face-to-face communication (Lee, 2009). This condition, which is expressed as negatively affecting psychological wellbeing, is called the internet paradox. It has been suggested that individuals do not participate in face-to-face social activities due to the fact that they devote a lot of time to online communication, and also strong face-to-face relationships are replaced by more online relationships of lower quality (Kraut et al., 2002). The 'increase hypothesis' states that internet usage increases social interaction, the width of social networks, and closeness of friendships (Lee, 2009). This hypothesis is the basis for the 'uses and gratifications theory' (UGT) and notes that individuals mostly use the internet to communicate (Blumler & Katz, 1974). In this respect, it is said that the internet has become supportive of face-to-face communication in social interaction (Wellman, Hasse, Witte, & Hampton, 2001). Valkenburg and Peter (2007) also concluded that online communication, directly and indirectly, affects the quality of friendships and the time spent with friends. In addition, it has been asserted that online communication does not cause an increase or decrease in the duration of face-to-face communication. (Wellman et al., 2001; Shklovski et al., 2004). Kraut et al. (2002) have stated that in relation to the 'rich-get-richer hypothesis', those with stronger social networks and social skills benefit more from using the internet. They concluded that in terms of wellbeing, loneliness and self-esteem are related to better outcomes for extroverts and worse outcomes for introverts.

Similarly, Bryant et al. (2006) stated that individuals with more friends tend to message more, and Valkenburg and Peter (2007) reported sociable adolescents communicate more frequently online. Finally, according to the 'social compensation hypothesis', the internet can be an alternative to face-to-face communication for socially anxious or isolated individuals. Through many motivators such as self-expression, self-disclosure, anonymity, and true/idealized identity presentation, it is possible to establish new relationships or strengthen existing relationships.

Despite a number of advantages provided by sofalizing (e.g., convenience, ability to handle several tasks simultaneously, avoiding possible expenses of spending time outside), excessive online social interaction can lead to serious detrimental psychosocial effects for a small minority (Caplan, 2003). A recent longitudinal study found a causal relationship between smartphone addiction and decreased social support, and asserted that the extensive use of social communication technologies could diminish the psychosocial wellbeing of its users by lowering social support over time (Herrero, Uruena, Torres, & Hidalgo, 2019). It is therefore important to determine the factors that facilitate individuals to engage in more sofalizing in order to develop prevention strategies. The present paper focuses on the psychosocial determinants as distal factors (i.e., social anxiety, social connectedness) and social media addiction as a proximal factor in understanding sofalizing.

Social anxiety can be characterized as having fear and discomfort arising from the concern over negative evaluation during face-to-face communication, and can seriously harm an individual's real-life social interactions (Lundy & Drouin, 2016). According to the cognitive-behavioral model of social anxiety (Clark, 2001), anxious thoughts and physical problems including sweating and stuttering can increase individuals' focus on themselves during real-life social interactions, leading to elevated anxiety concerning social situations. Socially anxious individuals find it easier to communicate via an online medium, given that mediated

communication provides feelings of higher control and monitoring during interactions (Caplan, 2007). A meta-analysis study demonstrated that social anxiety was positively correlated with feelings of comfort online (Prizant-Passal, Shechner, Aderka, 2016). Socially anxious individuals also perceive themselves as more successful in computer-mediated communication compared to face-to-face interaction (Shalom, Israeli, Markovitzky, & Lipsits, 2015). Therefore, they can benefit from using online communication platforms to compensate for poor offline sociability if they are open to meeting new people in online contexts and willing to engage in self-disclosure (Lee, 2009). Additionally, instant messaging promotes increased interpersonal connectedness among those with elevated social anxiety (Lundy & Drouin, 2016). Consequently, it was hypothesized in the present study that socially anxious individuals (compared to non-socially anxious individuals) would be more likely to prefer sofalizing rather than socializing because they can express themselves better while sofalizing by having a more controlled sense of communication with others.

Another potential factor contributing of excessive sofalizing is poor real-life social connectedness. Social connectedness refers to an individual's sense of belonging they feel towards their society and peers, and is considered to be one of the most fundamental psychosocial needs for individuals (Lee & Robbins, 1995). Those with low social connectedness tend to have a low self-esteem, lack social identity, and become disconnected from society (Lee & Robbins, 1998, 2000). Consequently, socially disconnected individuals are more likely to have less social capital, and in turn, less face-to-face interactions. Therefore, these individuals can be expected to compensate their need for belonging by attempting to connect with others (e.g., strangers) in online platforms. Online social platforms can be a convenient medium for interacting with different individuals simultaneously, leading to increased sofalizing. For instance, *Facebook* use may lead to lower depression and anxiety and greater life satisfaction by providing development

and maintenance of social connectedness (Grieve, Indian, Witteveen, Tolan, & Marrington, 2013). Consequently, it is hypothesized that higher engagement in sofalizing will be positively associated with being socially disconnected.

It is well established that socially anxious and socially disconnected individuals are prone to addictive use of social media (Kircaburun et al., 2019; Lee & Stapinski, 2012). Social media addiction has been defined as being preoccupied with social media, having a strong motivation to use social media, and spending excessive time on social media, leading to impairments in social, personal, and/or professional life, as well as psychological health and wellbeing (Andreassen & Pallesen, 2014). In a study with adolescents and emerging adults, decreased social connectedness and feeling of belongingness were associated with elevated social media addiction (Kircaburun et al., 2019). A cross-sectional study showed that social anxiety was positively related to internet addiction when controlling for depression and general anxiety (Lee & Stapinski, 2012). From a compensatory internet use model perspective, socially anxious and disconnected individuals can use social media as a compensation for their real-life social interactions, and in turn, successful attempts for compensating social interactions appear to lead to addictive use of it among a minority (Kardefelt-Winther, 2014). Furthermore, individuals with lower social anxiety and connectedness may use social media to avoid real-life or virtual communications by simply utilizing different applications without interacting with anybody. Social anxiety has been positively associated with passively using *Facebook* (Shaw, Timpano, Tran, & Joormann, 2015). Furthermore, passing time using social media and obtaining entertainment gratifications from social media have also been related to social media addiction (Kircaburun, Alhabash, Tosuntaş, & Griffiths, 2020).

On the other hand, social media addiction could lead to higher feelings of social anxiety and lower social connectedness. A cross-sectional study with university students showed that

compulsive internet use was related both to higher introversion and poor social connectedness (McIntyre, Wiener, & Saliba, 2015). Furthermore, socially anxious individuals' passive *Facebook* use may promote more negative beliefs about themselves and high standards for social performances, leading to more social anxiety (Shaw et al., 2015). Therefore, it is hypothesized that social media addiction will be associated with elevated symptoms of social anxiety and disconnectedness, in turn, exacerbating further need for sofalizing instead of socializing face-to-face. On the other hand, given that social media use often involves handling different tasks simultaneously, those addicted to social media may find it hard to detach from virtual worlds instead of going out and meeting others to socialize given that they can multitask from the comfort of their home. Consequently, the present study focused on psychosocial factors and social media addiction in relation to sofalizing. As highlighted above, social anxiety, social connectedness, and social media addiction can facilitate elevated sofalizing in line with the social compensation and displacement hypotheses. Therefore, the relationship between social anxiety, social connectedness, and sofalizing were examined by considering social media addiction as a mediator between the aforementioned variables. Internet use behaviors (i.e., daily internet use time, daily social media use time, daily number of social media profile visits, preferred social media platforms) were controlled for in relation to social media addiction and sofalizing in the analysis because the frequency and intensity of use of online platforms can moderately associate with addictive use of them (Kircaburun et al., 2020). In this context, the research hypotheses were formulated as following:

H1: Social anxiety will be directly associated with sofalizing.

H2: Social connectedness will be directly associated with sofalizing.

H3: Social anxiety and social connectedness will be indirectly associated with sofalizing via social media addiction.

Methods

Participants, procedure, and ethics

A total of 666 university students (69% female, M_{age} = 20.35 years, *SD* = 2.28, range = 17 to 40 years) who had active social media accounts (e.g., *Facebook, Twitter, Instagram*) participated in the study. Participants from two different Turkish universities completed 'paper-and-pencil' questionnaires voluntarily and anonymously. The research team promoted the study in each classroom informing participants about the nature of the study, and all participants gave their informed consent. Details regarding demographic details of the participants are presented in Table 1. Ethical approval for the study was received from the research team's relevant faculty administrative boards before the recruitment of the participants, and complied with the Declaration of Helsinki.

Measures

Data were collected via a survey comprising four psychometric scales as well as demographic questions concerning gender, age, daily internet use time (1 = less than one hour, 2 = between 1-3 hours, 3 = between 4-6 hours, 4 = more than seven hours), daily social media use time (1 = less than one hour, 2 = between 1-3 hours, 3 = between 4-6 hours, 4 = more than seven hours), daily number of social media profile visits (1 = 3-5 times, 2 = 6-10 times, 3 = 11-20 times, 4 = All the time), and preferred social media platforms (i.e., *Facebook, Whatsapp, Twitter, Instagram, Snapchat, YouTube, Google+*).

Sofalizing Scale (SS): Since the 'sofalizing' construct is being studied for the first time, the SS (Appendix A) was developed to assess sofalizing behaviors of the participants (i.e., socializing via a smartphone or a computer at home, instead of face-to-face communication). Scale items were developed through the use of data obtained from the online communication hypotheses (Lee, 2009) and preference of online social interaction (Caplan, 2003). In order to develop the

scale, a 14-item version of the scale was subjected to exploratory factor analysis (EFA) utilizing the Principal Component Analysis extraction method and Oblimin with Kaiser Normalization rotation method via splitting the data randomly in half (N = 333). As a result of EFA, three items were removed from the scale because of their insufficient loadings or having loadings on both factors. The final version of the scale comprised 11 items comprising two factors including online displacement (e.g., "*I prefer meeting with my friends online rather than outside*") and social compensation (e.g., "*I feel like I am socializing while communicating in online contexts*"), explaining 46.33% of the variance (KMO = .84, Bartlett's Test of Sphericity = p<.001). Sufficient variance in behavioral sciences is said to be between 40% and 60% (Kline, 1994; Scherer, Luther, Wiebe, & Adams, 1988). Following this, construct validity of the 11-item scale was confirmed utilizing confirmatory factor analysis (CFA) with maximum likelihood discrepancy (N = 333). After correcting suggested error modifications between Items 1-10 and 3-9, CFA results demonstrated that two-factor structure of the scale indicate adequate fit to the data (χ^2/df = 2.87, RMSEA = .07 [CI 90% (.06, .9)], SRMR = .06, CFI = .86, GFI = .94). Error modification corrections were made in line with the suggestions positing that when there is a high modification error between two items, these items should be correlated to have a better model fit (Byrne, 2016). Standardized regression weights (ranging between .29 and .59) and squared multiple correlations of the items (ranging between .15 and .35) were adequate. The second-order CFA confirmed the two-factor structure of the scale. Finally, the internal consistency (Cronbach's alpha) coefficients of the subscales and total scale showed that the scale was reliable for assessing sofalizing (.64, .71 and .76 respectively). Results of the exploratory factor analysis (EFA) of the SS is presented in Table 2.

Bergen Social Media Addiction Scale (BSMAS): The BSMAS (Andreassen et al., 2016), which is an adaptation of Bergen Facebook Addiction Scale (Andreassen, Torsheim, Brunborg, &

Pallesen, 2012), was used to assess social media addiction. The BSMAS comprises six items (e.g., "*How often during the last year have you felt an urge to use social media more and more?*") on a five-point Likert scale from "*never*" to "*always*". Minimum and maximum scores that can be obtained from the scale are 6 and 30, and the cut-off score for determining being at risk for social media addiction is 19 and above. Since the BSMAS was translated into Turkish in the present study, CFA was conducted. Standardized regression weights (ranging between .46 and .78) and squared multiple correlations of the items (ranging between .21 and .61) were adequate. Analysis (χ^2/df = 2.18, Root Mean Square Residuals (RMSEA) = .04 [CI 90% (.01, .07)], Standardized Root Mean Square Residuals (SRMR) = .02, CFI = .99, GFI = .99) indicated that the Turkish form of the scale was valid and reliable for assessing social media addiction among Turkish individuals (α = .81).

Social Anxiety Scale Short Form (SAS-A): The SAS-A (Nelemans et al., 2017) comprises 12 items on a five-point Likert scale from "*never*" to "*always*", with three factors: social avoidance and distress-new (e.g., "*I get nervous when I meet new people*"), fear of negative evaluation (e.g., "*I worry about what others think of me*"), and social avoidance and distress-general (e.g., "*I'm afraid to invite others to do things with me because they might say no*"). A Turkish adaptation of the scale was carried out in the present study. CFA with the Turkish form indicated that the scale was valid and reliable for assessing social anxiety levels of Turkish emerging adults (χ^2/df = 3.16, RMSEA = .06 [CI 90% (.05, .07)], SRMR = .04, CFI = .98, GFI = .96). The second-order CFA showed that the scale can be used unidimensionally. Internal consistency of the total scale was excellent (α = .90).

Social Connectedness Scale (SCS): The SCS (Lee & Robbins, 1995) was used to assess social connectedness. The scale comprises eight items (e.g., *"I do not feel that I participate with anyone or any group"*) on a six-point Likert scale ranging from "*absolutely disagree*" to "*absolutely*

agree". Former studies with the Turkish form reported optimal validity and reliability of the scale (Duru, 2007). Internal consistency was excellent in the present study (α = .93).

Statistical analysis

In order to evaluate validity and reliability of the developed and adapted scales and to show the relationships between variables frequency, descriptive tests, Pearson correlations, EFA, CFA and structural equation modeling (SEM) were conducted via using SPSS 23.0 and AMOS 23.0 software. Normality assumptions were checked by examining the skewness and kurtosis values of the variables. In the EFA, Principal Component Analysis extraction, and Direct Oblimin with Kaiser Normalization rotation methods were used. In the CFA and SEM, maximum likelihood estimation method was used. SEM was carried out via using bootstrapping method with 5000 bootstrapped samples and 95% bias-corrected confidence intervals. Social anxiety and social connectedness were included into SEM as distal (independent) correlates and social media addiction as the proximal (mediator variable) to associate with the outcome variable (sofalizing). Where appropriate, *p*-values obtained from SEM analysis were adjusted for using the Bonferroni correction which was calculated for the model: $p = .05/3$ (number of statistical analyses performed on the dependent variable) = .017. According to Hu and Bentler (1999), thresholds for good and acceptable fit values are as follows: Root Mean Square Residuals (RMSEA) <.05 is good, Standardized Root Mean Square Residuals (SRMR) < .05 is good, Goodness of Fit Index (GFI) >.95 is good, Comparative Fit Index (CFI) > .95 is good, also RMSEA < .08 is acceptable, SRMR < .08 is acceptable, GFI > .90 is acceptable, CFI > .90 is acceptable. Finally, theTurkish adaptations of the scales were performed using a standardized forward-backward translation process (Beaton, Bombardier, Guillemin, & Ferraz, 2000).

Results

Mean scores, standard deviations, score ranges, skewness and kurtosis values, and Pearson correlation coefficients are shown in Table 3. After Bonferroni correction, sofalizing was moderately positively correlated with social media addiction and social anxiety. Moreover, social connectedness (negatively), daily social media use (positively), daily number of social media profile visit (positively), and daily internet use (positively) were correlated with sofalizing with small effect sizes. Furthermore, *t*-tests were used to assess gender differences on study variables. After Bonferroni correction, there were no significant differences on sofalizing (t[664] = .27, p= .79), social media addiction (t[664] = -2.31, p=.021), social anxiety (t[664] = -1.62, p=.11), and social connectedness (t[664] = -1.23, p=.22) between males and females.

In order to examine the total, direct, and indirect effects of social anxiety and social connectedness via social media addiction on sofalizing, SEM was conducted (Figure 1). Goodness of fit indices of the final model indicated adequate fit to the data (χ^2 = 637.28, df = 190, χ^2/df = 3.35, RMSEA = .06 CI 90% [.03, .11], SRMR = .06, CFI = .91, GFI = .93). After Bonferroni correction, fully contradicting with H1 and partially in line with H3, social anxiety was indirectly (β = .20, p<.001; 95% CI [.13, .29]) associated with sofalizing via social media addiction, but not directly (β = .16, p=.034; 95% CI [.01, .32]). Contradicting fully with the second hypothesis (H2), and partially with H3, social connectedness was not associated with it either directly or indirectly (β = -.01, p=.91; 95% CI [-.17, .13]) with sofalizing. Furthermore, control variables, daily social media use (β = .18, p<.001; 95% CI [.12, .26]), and daily profile visit (β = .12, p<.001; 95% CI [.07, .18]) were indirectly associated with sofalizing via social media addiction. Daily internet use and gender were not associated with either social media addiction or sofalizing. Social media addiction (β = .60, p < .001; 95% CI [.47, .73]) and social anxiety (β = .36, p<.001; 95% CI [.21, .51]) had moderate total effects on sofalizing (Table 4).

The tested model explained 36% of the variance for social media addiction and 53% of the variance for sofalizing (Figure 2).

Discussion

The present study primarily focused on developing a sofalizing scale in order to assess sofalizing behaviors, and then examined the potential correlates of sofalizing. Social anxiety and social connectedness were included as the psychosocial factors. Social media addiction was the mediator variable between the aforementioned variables. Structural equation model indicated that social anxiety but not social connectedness was associated with elevated sofalizing. Furthermore, this direct relationship was partially explained by higher addictive use of social media.

As a result of the validity and reliability analyses, a valid and reliable scale was developed. This two-factor scale assesses the sofalizing behavior of individuals in two ways, compensation or displacement. In this respect, it can be said that it differs from the preference of online social interaction studies in the literature (Caplan, 2003; Chung, 2013; Leung, 2011). In addition, it is considered important in terms of conceptualizing sofalizing behavior.

Contrary to expectations, although social connectedness was negatively associated with sofalizing in the correlation analysis, there was no association between the former and latter in the structural model. This may be because social anxiety was a stronger factor than social connectedness in influencing elevated sofalizing. Individuals who perceived themselves more disconnected from society scored lower on sofalizing than the ones who perceived themselves as anxious while interacting with their social circles and/or strangers. This can be interpreted as being that those who were alienated from their real-life surroundings were less prone to compensate this gap in online platforms when compared to the socially anxious. Being socially disconnected was hypothesized as being an attempt to compensate their feelings of belonging by finding and interacting with others that might share similar interests. However, the findings of the

present study suggest that anxiety in real-life social interaction had a stronger relationship with sofalizing when compared to being socially disconnected from current society, implying that an individual's real-life immediate social circle might be an important factor for online social interaction compensation. While the hypotheses of this study lean more towards the compensation hypothesis, the results may be similar to the 'rich-get-richer' hypothesis because individuals with strong social skills, broad social networks and/or a higher number of friends also prefer online communication (Bryant et al., 2006; Kraut et al., 2002).

Social media addiction fully mediated the relationship between social anxiety and sofalizing. Social anxiety was positively associated with social media addiction, and in turn, addictive use of social media was related to elevated sofalizing. This finding is in line with the social compensation hypothesis because social anxiety has been found to be positively associated with *Facebook* addiction among those who have a high level of need for social assurance (Lee-Won, Herzog, & Park, 2015). Another study found social anxiety was positively related to mobile phone addiction (often a proxy for social media addiction [Kuss & Griffiths, 2017]) via interpersonal sensitivity (You, Zhang, Zhang, Xu, & Chen, 2019). Previous research has shown that socially anxious individuals score higher on social media addiction which could partially be explained by the elevated need for self-regulation and internet use expectancies of avoidance and positive reinforcement (Wegmann, Stodt, & Brand, 2015). The aforementioned studies suggest socially anxious individuals' social gratification obtained from social media leads to addictive use, which also supports the notion that obtaining social gratification from social media could lead to its addictive use (Kircaburun et al., 2020).

On the other hand, socially anxious individuals can also use social media passively for avoidance expectancies (Wegmann et al., 2015). Those with higher social anxiety may differentiate their social media use in order to avoid both real-life and virtual communication

with strangers. For instance, they can control their self-image and impression on others by creating their *Facebook* profiles without interacting with others (especially strangers), while they are chatting with their friends via *WhatsApp* or *Snapchat*. Socially anxious individuals have been shown to produce more online content in social media, supporting the notion that those with higher social anxiety tend to present themselves more favorably to others (Fernandez, Levinson, & Rodebaugh, 2012). These simultaneous efforts made on different social media platforms might very well promote more sofalizing. Individuals who have become preoccupied and addicted to social media would be expected to engage in elevated sofalizing due to social media platforms' facilitation of multitasking and convenience for self-presentation. Consequently, being addicted to social media will prevent individuals from going out to meet individuals, and instead, facilitate them to communicate with others via mediums from their homes or offices where they feel more comfortable and in control.

Several limitations should be noted for the present study. The reliability levels of the Sofalizing Scale while adequate were relatively low. Although this is one of the limitations of the study, it may have been due to the low average age of the participants. Gennaro and Dutton (2007) state that young people use online communication in addition to face-to-face communication. In this respect, compensation may have made less sense than online displacement. In order to be able to test this, it may be useful to carry out a study with a wider age range. Additionally, the validity and reliability study can be repeated by constructing the scale utilizing one dimension. Second, the cross-sectional nature of the study prevents making any causal associations between variables. Future studies should investigate the bidirectional relationships among the variables by using a longitudinal design. Third, the study was carried out in two Turkish universities, which prevents the generalizability of the present findings. Future studies should replicate the results using samples from different countries and age groups.

Finally, the data were collected using self-report questionnaires, which are prone to well-known biases and limitations. Future studies should adapt more in-depth tools such as qualitative methods.

Despite its limitations, the present study is the first to empirically investigate 'sofalizing' and its relationships with social anxiety, social connectedness, and social media addiction. The present study demonstrated that social anxiety but not social connectedness was positively associated with sofalizing, which was in line with the social compensation hypothesis. Furthermore, the relationship between social anxiety and sofalizing was partially mediated by social media addiction. Socially anxious individuals demonstrated higher social media addiction, and those addicted to social media demonstrated higher sofalizing. The study emphasized the prominent role of social anxiety on problematic use of online platforms, and suggested that the anxiety arising from the fear of social interaction had a more robust role on preference for online social interaction when compared to the decreased level of social connectedness felt towards individuals' social circle and surroundings.

The present study offers valuable implications for those trying to understand the nature of social media addiction and the displacement of real-life communication with online interaction (e.g., sofalizing). The present findings suggest that interventions for social media addiction and sofalizing should focus on mitigating social anxiety. Furthermore, online platforms (e.g., social media) provide a good alternative for applying interventions for social anxiety because those who are socially anxious feel more comfortable and open when communicating in this medium. This makes it easier to overcome barriers in treating social anxiety symptoms. Health professionals and clinicians should focus on the underlying factors concerning social anxiety and social media addiction in order to alleviate the more negative aspects of sofalizing. More specifically, there have been several interventions for social anxiety including pharmacotherapy, cognitive-

behavioral therapy, psychodynamic psychotherapy, and interpersonal psychotherapy (Mayo-Wilson et al., 2014). Furthermore, there have also been recently developed social media addiction intervention strategies that have been reported to effectively reduce social media addiction among emerging adults (Hou, Xiong, Jiang, Song, & Wang, 2019).

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TABLES

Table 1. *Demographic features of the participants*

	% (n)
Gender	
Male	31 (209)
Female	69 (457)
Daily internet use	
Less than 1 hours	7 (50)
1-3 hours	42 (279)
4-6 hours	39 (259)
More than 7 hours	10 (69)
Daily social media use	
Less than 1 hours	16 (106)
1-3 hours	52 (345)
4-6 hours	26 (177)
More than 7 hours	6 (38)
Daily profile visit	
3-5 times	35 (235)
6-10 times	27 (178)
11-20 times	22 (146)
All the time	16 (107)
Most popular platforms	
WhatsApp	97 (648)
Instagram	84 (557)
YouTube	79 (527)
Facebook	62 (414)
Google+	60 (403)
Twitter	45 (302)
Snapchat	41 (271)

Table 2. *Results of exploratory factor analysis of the Sofalizing Scale (N = 333)*

Item Number	Factor Loadings		
	Online displacement	Social compensation	Communalities
Online displacement			
1. I prefer meeting with my friends online rather than outside.	**.73**	-.03	.51
2. Meeting with my friends in social media is same as meeting them face to face.	**.72**	-.06	.45
3. When I am outside with my friends I wish I was at home.	**.69**	-.11	.51
4. I can do most of the things, which we do with my friends outside, in online contexts.	**.68**	.15	.50
5. It is more economical to have conversations through social media compared with socializing by going out.	**.54**	.21	.34
Social compensation			
1. When I am alone I spend time in social media.	-.24	**.74**	.55
2. I think that the groups I join in on social media have a place in my social life.	-.13	**.69**	.42
3. Even though if I cannot meet with my family and friends in real life, I still feel close to them because of social media.	.08	**.60**	.51
4. I feel like I am socializing while communicating in online contexts.	.27	**.57**	.48
5. Even though I am actually alone in real life, if I log in to social media, I do not feel alone.	.26	**.56**	.45
6. I compensate my needs for communication and socializing via social media.	.30	**.47**	.38
Eigen Value	3.54	1.56	5.10
Variance (%)	32.17	14.16	46.33

Table 3. *Mean scores, standard deviations, score ranges, and Pearson correlation coefficients of the study variables (N = 666)*

	1	2	3	4	5	6	7
1. Sofalizing	-						
2. Social media addiction	.51**	-					
3. Social anxiety	.35**	.36**	-				
4. Social connectedness	-.22**	-.19**	-.45**	-			
5. Daily internet use	.21**	.26**	.09	-.00	-		
6. Daily social media use	.27**	.40**	.15**	.01	.60**	-	
7. Daily profile visit	.23**	.32**	.08	.04	.24**	.40**	-
M	26.38	15.44	27.16	39.56	2.53	2.22	2.19
SD	6.10	4.94	8.78	8.83	.78	.78	1.09
Score ranges	11-55	6-30	12-60	8-48	1-4	1-4	1-4
Skewness	.39	.14	.47	-1.14	.09	.32	.37
Kurtosis	.73	-.44	-.06	.71	-.39	-.19	-1.18

*p<.017, **p<.001.

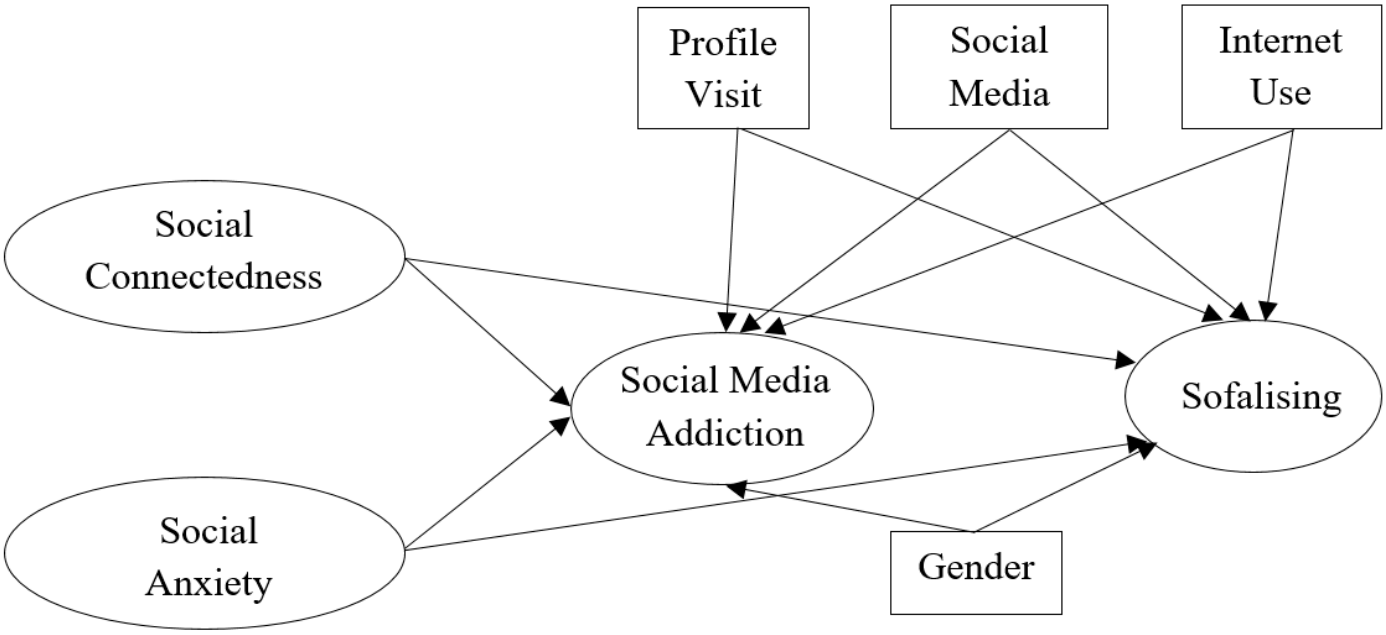
Table 4. *Standardized estimates of total, direct, and indirect effects on sofalizing (N = 666)*

	Effect	S.E.	% explained of total effect
Social anxiety → Sofalizing (total effect)	.36*	.08	-
Social anxiety → Sofalizing (direct effect)	.16	.08	44%
Social anxiety → SMA → Sofalizing (indirect effect)	.20*	.04	56%
Social connectedness → Sofalizing (total effect)	-.01	.08	-
Social connectedness → Sofalizing (direct effect)	.01	.07	-
Social connectedness → SMA → Sofalizing (indirect effect)	-.02	.03	-

Note: SMA = Social media addiction; *p<.001

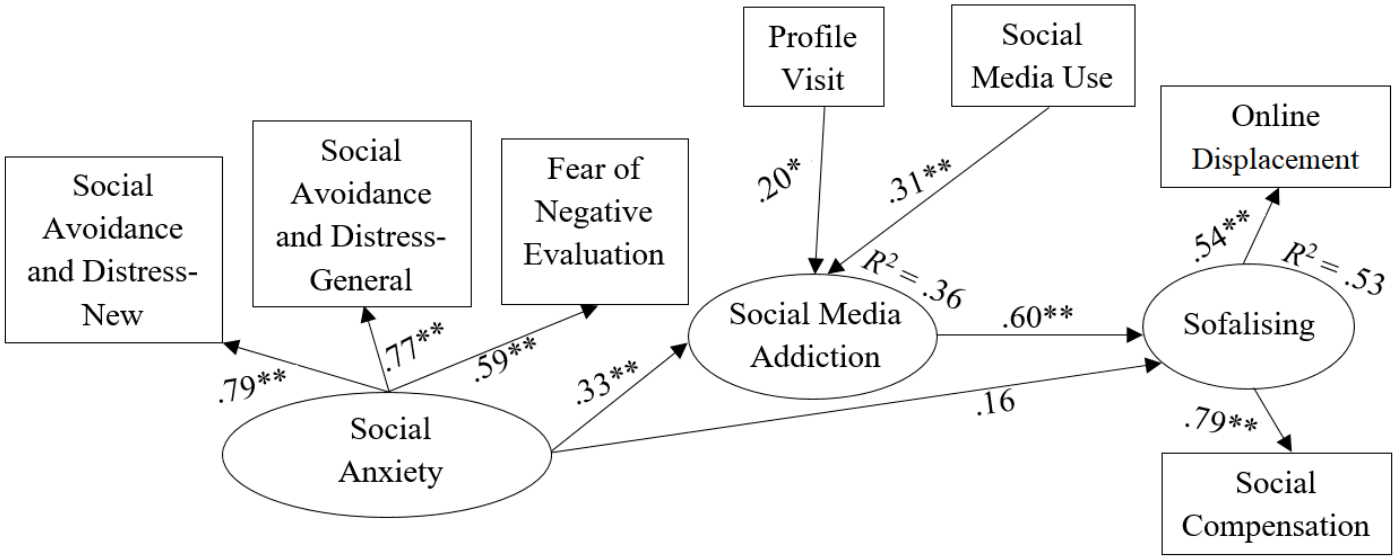
FIGURES

Figure 1. Hypothesized model



For clarity, items and sub-factors of the constructs have not been depicted in the figure. Latent variables in the model are represented with circle and observed variables with rectangles. Profile visit, social media use, internet use, and gender are included into the model as control variables.

Figure 2. Final model of the significant path coefficients among variables



For clarity, insignificant path coefficients (more specifically, pathways from gender and internet use to sofalising) and items of social media addiction have not been depicted in the figure. Latent variables in the model are represented with circles and observed variables with rectangles.
*p<.017, **p<.001