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Social Media Addiction, Personality Factors and Fear of Negative Evaluation in a Sample of Young Adults

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Abstract: Despite growing attention paid to exploring the benefits as well as negative consequences of social media use, we know less about the background variables involved in social media addiction. Therefore, the aim of this study was to investigate several potential contributors to addiction to social media, namely, self-esteem, fear of negative evaluation, sensation seeking and five personality variables. The participants of the online survey were Hungarian university students (N = 250, aged between 18 and 35 years; 59.2% female). Females scored higher on the social media addiction scale [t(248) = -2.42, p < 0.05]. The findings showed that (a) fear of negative evaluation positively predicted social media addiction ($\beta = 0.28$, p < 0.001) and (b) self-esteem ($\beta = -0.23$, p < 0.01) and conscientiousness ($\beta = -0.14$, p < 0.05) negatively predicted social media addiction in this sample of young adults. Additionally, social media addiction was negatively correlated with emotional stability [r (250) = -0.38, p < 0.001] and positively with extraversion; however, these variables were not significant predictors in the multivariate analysis. These findings suggest that young people should learn how to carefully use the Internet and social media settings, e.g., courses on addiction to digital devices should be accessible to all university students.

Keywords: social media addiction; fear of negative evaluation; self-esteem; conscientiousness; young adults



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1. Introduction

During the past decade, there has been a drastic increase in the use of various social media platforms, with up to 6 billion users worldwide [1]. Smartphone use among adolescents and young adults has become almost universal, providing them with continuous online participation [2]. Social networking sites are particularly popular, offering a variety of activities to communicate, connect, socialize, share and entertain a widely accessible audience [3]. Not surprisingly, it has become an inevitable part of our daily lives, especially for young people who have grown up in the era of digitalization [4,5]. University students often benefit from social media: they can use these platforms to socialize with peers, share information and for entertainment [6]. Despite many benefits, increasing attention has been paid to the negative consequences of social media use, particularly problematic use and social media addiction. Paradoxically, despite many users aiming to use social networking sites to improve their well-being, several studies report worsening psychological well-being in parallel with the growing number of hours spent online [7-9]. People expect social media to satisfy their social needs to belong and reduce feelings of loneliness, but heavy use may alienate them from the real (offline) world, deteriorating their social skills and subjective well-being [10]. In addition, heavy use may often lead to addiction.

It is inevitable that among different Internet platforms, social networking sites were found to be the most addictive [11]. Without pathologizing social media addiction or problematic social media use (they are not listed in the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders: DSM-5), it can contribute to several mental

health problems, such as depression and anxiety; moreover, it can lead to the deterioration of these problems [12]. To measure social media addiction, a generic instrument was introduced that captured the totality of all social networking sites and not only one specific site (e.g., Instagram or Facebook) [13]. According to Kaplan and Haenlein, the term 'social media' describes various forms of media content that are publicly available and created by users [14]. Social networking sites are platforms that enable users to connect via different applications, such as sharing personal information, visiting profiles, sending messages, accessing news, etc. Although there are hundreds of social networking sites, we usually think of Facebook, Instagram, TikTok, etc., as the most commonly used platforms. Boys and Allison defined social networking sites as "web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection and (3) view and traverse their list of connections and those made by others within the system" [15]. Searching for risk factors of problematic social media use and addiction may help with finding those who are particularly susceptible to overuse and the harmful aspects of social media/social networking sites. Among these factors, we have to map what people are looking for when being active on social media.

Self-esteem, an overall evaluation of one's worth or value, is closely connected with emotions and its role in behavioral decisions both online and offline. Socio-emotional processes and emotion regulation are formed during face-to-face interactions that involve learning to express our emotions and perceive others accurately; however, this skill operates differently in the virtual world and offline [16]. Obviously, interpreting emotions on social media is more difficult and prone to misunderstanding due to the lack of clear body language. Not surprisingly, the more time we spend online, the greater the possibility of losing interest in offline activities, and instead of emotional growth, negative experiences may occur [17]. In this process, self-esteem can play a decisive role. In an earlier study, a low level of self-esteem was related to the overuse of social media; in addition, those lacking appropriate self-esteem showed greater emotional investment in social networks, making them susceptible to emotional fatigue and depression [18]. On the other hand, a high level of self-esteem was negatively correlated with social media use, suggesting that self-esteem can act as a protective factor against problematic social media use. Peer pressure has a great impact on social media use among young people; however, those with higher self-esteem are less likely to become addicted. Thus, self-esteem may moderate the effect of peer pressure on social media overuse [19]. Low self-esteem is particularly related to anxiety and fearful thoughts, e.g., 'a fear of missing out' (FoMo), which can contribute to social media addiction [20].

Fear of negative evaluation, similar to low self-esteem, may be another risk factor for social media addiction. This feeling and other negative emotional experiences may stem from an upward social comparison (either valid or not) and underestimation of the self in social situations [21]. The concept of social comparison was initially proposed by Festinger (1954), stating that individuals evaluate their own opinions and abilities by comparing themselves to others [22]. In this digital age, people often use social media to compare themselves with others as a source of self-evaluation [23]. Negative social comparisons on social networking sites can be especially detrimental to perceptions about the self for those who are lonely [24] or prone to self-criticism and social anxiety [25]. Fear of negative evaluation is one of the main features of social anxiety and is characterized by anticipation of negative feedback from others. Paradoxically, this may lead to an urge to be conspicuous and successful [26]. Interestingly, higher levels of fear of negative evaluation often imply 'compensation' as a strategy for resolving the feared situation, closely related to what we call adaptive perfectionism [27]. Social anxiety, fear of negative evaluation and perfectionism can be strongly related to many negative effects on mental health. In relation to social media, it has been found that social anxiety may increase fear of negative evaluation and rejection, and social fears mediate the relationship between social anxiety and social media addiction [28]. Compulsive behavior can arise from social anxiety, fear

of negative experiences, rejection or low level of self-esteem and shyness and using social media for short-term gratification as compensation [29]. In a study of young adults, social anxiety and low self-esteem facilitated fear of negative evaluation, leading to problematic internet and social network site use [30]. Consequently, fear of negative evaluation can play a decisive role in social media addiction.

Besides self-esteem and fear of negative evaluation, we also anticipate that sensation seeking may contribute to social media overuse. Social media may provide a lot of novelties within a short period of time, and sensation seekers can spend more time searching, browsing, sharing, etc. Indeed, sensation seeking was positively related to internet addiction, especially concerning playing online games [31]. Among university students, impulsivity was found to positively predict social media usage [32], problematic social media and smartphone use [33]. In terms of smartphone use, sensation seeking mediated the relationship between impulsivity and smartphone addiction [34]. In a recent study of Chinese university students, there was a relationship between sensation seeking and social media addiction that was mediated by fear of missing out [35]. Interestingly, sensation seeking was found to predict cyberbullying on social media mediated by experiences of boredom [36]. It seems that the role of sensation seeking is rather controversial.

As Wang et al. suggest, personality dimensions may also play a role in social media use [31]. For example, in their study, extraverts had more friends on social networking sites, but conscientiousness and openness did not play a role in activities on social media. However, studies have not reached a consensus on what factors can contribute to the development of social media addiction. In a meta-analysis, agreeableness, openness to experience and conscientiousness were negatively related to Facebook addiction [37]. In a study of university students, social media addiction was found to be positively associated with neuroticism and negatively with agreeableness and conscientiousness. In addition, extraversion and openness to experiences did not show a relationship [38]. In another study that included Turkish university students, conscientiousness, openness to experience and agreeableness were negative predictors of Facebook addiction [39]. Unlike these findings, a study on addiction to three social media sites (Snapchat, Instagram and Facebook) revealed the lack of significant relationships between social media addiction and the Big Five indicators [40]. On the other hand, an earlier meta-analysis reported that all personality indicators were associated with internet addiction: openness, agreeableness, extraversion and conscientiousness were negatively associated; however, neuroticism was positively associated with internet addiction [41].

In this paper, our objective is to report on potential contributors to social media addiction in a sample of Hungarian university students. We included a set of variables, namely self-esteem, fear of negative evaluation, sensation seeking and personality factors, to explore their roles in the development of social media addiction. Among them, several factors need further investigation due to previous inconsistent findings (e.g., sensation seeking or personality factors). Besides these factors, age and sex as socio-demographics were also controlled for. Recent statistical data show a slight surplus of male users on social media platforms (excluding Snapchat) [42]. In terms of social media addiction, a recent article reported slightly but significantly higher scores on the scale among females [43]. Beyond descriptive statistics, we calculated bivariate relationships between the variables and applied multivariate regression analysis to find the most relevant predictors of young adults' social media addiction. Based on our literature review and research questions, we have established the following hypotheses: (1) social media addiction shows higher levels among female students; (2) there are negative associations between social media addiction and conscientiousness, agreeableness, emotional stability and self-esteem; and (3) there are positive correlations between social media addiction and extraversion, openness to experiences, fear of negative evaluation and sensation seeking.

2. Materials and Methods

2.1. Participants and Procedure

Participants were recruited using an online questionnaire package hosted on Google Forms between October 2022 and January 2023. The public link was shared on websites and special Internet communication platforms (Facebook groups and Instagram) that are popular among those who represent our target population, i.e., Hungarian university students. The study population included students from college years up to full-time postgraduate students aged between 18 and 35 years. We decided to include this age group of young adults with shared psychosocial characteristics due to the similar lifestyles of university students (both under- and postgraduate). The questionnaire was applied to Hungarian students; therefore, as an inclusion criterion, we enrolled exclusively Hungarian students. Altogether, the sample consisted of Hungarian university students (N = 250; mean age = 21.7 years, SD = 2.6 years). Of the young adults sampled, 148 (59.2%) were females, and 102 (40.8%) were males; 72% of them were full-time students and 28% studied part-time while also having a job. For detailed sample characteristics, see Table 1. The study protocol was approved by our Institutional Review Board of the University of Szeged (Ethical approval no. 6/2021, in accordance with the Helsinki Declaration. Data collection was based on convenience sampling; the students' participation was voluntary and confidential. The respondents were informed about the details of the study, and their consent was obtained. The estimated time to complete the questionnaire was approximately 15-20 min.

Table 1. Descriptive statistics for sample characteristics (N = 250).

Variables	N (%)		
Sex			
Males	102 (40.8)		
Females	148 (59.2)		
Occupation status			
Full-time students	180 (72.0)		
Part-time students	70 (28.0)		
White collar jobs	,	28 (11.2)	
Blue collar jobs		14 (5.6)	
Both		27 (10.8)	
Unemployed		1 (0.4)	
Marital status		, ,	
Single	124 (49.6)		
Married/domestic partnership	120 (48.0)		
Permanent residence	,		
Village	17 (6.8)		
Town	174 (69.6)		
Capital	56 (22.4)		

2.2. Measurements

Besides socio-demographic data (age, sex, permanent residence, occupational and marital status), the questionnaire contained measurements of psychological variables (social media addiction, fear of negative evaluation, sensation seeking, self-esteem and personality).

Social media addiction was measured using the Hungarian-validated version [44] of the Bergen Social Media Addiction Scale (BSMAS) [45]. Thus, the 6-item scale was adapted from the previously validated Bergen Facebook Addiction Scale [46]. The items of the scale ask about experiences with social media use during the past 12 months. The answers can be rated on a five-point Likert scale ranging from 1 (very rarely) to 5 (very often). Sample item: "How often during the last year have you used social media so much that it has had a negative impact on your job/studies?". These ratings are summed, and the total sum reflects a "problematic social media score", where higher scores indicate a higher level of problematic use. The scale was reliable, with Cronbach's alpha = 0.78 in the current sample.

For the measure of self-esteem, we applied the Hungarian-validated version of the Rosenberg Self-Esteem Scale [47,48]. The scale includes 10 items assessing positive (e.g., "I feel that I have a number of good qualities") and negative self-cognitions (e.g., "At times I think I am no good at all"). Responses can be scored on a four-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Positive items and the reverse-scored negative items are summed, where higher scores show greater levels of self-esteem. The overall scale was reliable, with Cronbach's alpha = 0.86.

Fear of negative evaluation was measured using the Brief Fear of Negative Evaluation Scale [49]. This is a self-report scale that is often used to assess the key features of social anxiety disorder. We applied the Hungarian-adapted version [50]. Although the original Negative Evaluation Scale consists of 30 items [51], the brief version contains eight items with good internal consistency and reliability values. Statements (e.g., "I am afraid that others will not approve of me") are rated on a five-point Likert scale as follows: not at all characteristic of me (1); slightly characteristic of me (2); moderately characteristic of me (3); very characteristic of me (4); and extremely characteristic of me (5). The summary scores varied between 8 and 40, where higher scores indicate a greater fear of negative evaluation. The scale was reliable, with a Cronbach's alpha of 0.93.

Sensation seeking was measured with the 7-item Sensation Seeking Scale (SSS-7-HU) [52] derived from the 40-item Zuckerman's Sensation Seeking Scale V [53]. The short form was found to be a reliable and valid measure of the sensation-seeking personality trait. It contains nine statement pairs (e.g., "I like 'wild', uninhibited parties" vs. "I prefer quiet parties with good conversation"), and the respondents have to choose that which is more characteristic of their behavior. Higher scores indicate a greater level of sensation seeking and a higher risk of problem behavior. The scale was reliable, with a Cronbach's alpha value of 0.60.

The Ten-Item Personality Inventory (TIPI), as a very brief measure of the Big Five personality domains, was applied to measure the respondents' personalities [54]. In line with the Big Five dimensions, it contains five subscales: extraversion (e.g., extraverted and enthusiastic); agreeableness (e.g., sympathetic and warm); conscientiousness (e.g., disorganized and careless: reversed item); emotional stability (e.g., anxious and easily upset: reversed item); and openness to experiences (e.g., conventional and uncreative: reversed item), each measured using two items. The respondents are provided with a number of personality traits, and they have to indicate to what extent they agree with them on a scale ranging from 1 (strongly disagree) to 7 (strongly agree). The Cronbach alphas in the original study were 0.68, 0.40, 0.50, 0.73 and 0.45 [4]; in our study, they varied between 0.57 and 0.59.

2.3. Data Analysis

The SPSS program for MS Windows Release 25.0 was used for the calculations, with a maximum significance level of 0.05. Data analysis starts with descriptive statistics for the study variables by sex. In this case, Student's *t*-test was used to determine the statistical significance. Subsequently, Pearson correlation coefficients were calculated to test bivariate relationships between the variables. Finally, we applied multiple regression analysis to determine the most relevant predictors of young adults' social media addiction (as a dependent variable), including sex, age, self-esteem, fear of negative evaluation and personality factors (as independent variables).

3. Results

3.1. Descriptive Statistics

Table 2 presents the descriptive statistics used for the study variables, where t-tests indicate sex differences. In terms of the personality scales, females show higher scores in terms of agreeableness [t(248) = -3.02, p < 0.01], openness to experiences [t(248) = -3.33, p < 0.01], fear of negative evaluation [t(248) = -4.29, p < 0.001] and social media addiction

[t(248) = -2.42, p < 0.05]. On the other hand, males scored higher for the emotional stability subscale [t(248) = 3.13, p < 0.01].

Table 2. Descriptive statistics for the study scales by sex (N = 250).

	Sex	Mean	SD	t-Test Significance	
E to	Male	9.59	2.78	t = 0.96	
Extraversion (range: 2–14)	Female	9.22	3.15	p = 0.34	
A 11 (Male	9.49	2.46	t = -3.02	
Agreeableness (range: 3–14)	Female	10.40	2.24	p = 0.003 **	
C	Male	10.48	2.47	t = 0.59	
Conscientiousness (range: 2–14)	Female	10.66	2.19	p = 0.56	
Footier lot kill (come 2.14)	Male	10.13	2.70	t = 3.13	
Emotional stability (range: 2–14)	Female	9.01	2.81	p = 0.002 **	
0	Male	9.63	2.18	t = -3.33	
Openness to experiences (range: 5–14)	Female	10.53	2.07	p = 0.001 **	
C-16 (12 40)	Male	29.51	5.59	t = 2.28	
Self-esteem (range: 13–40)	Female	27.89	5.52	p = 0.24	
Francisco di conditionale (accesso (acc	Male	17.12	6.89	t = -4.29	
Fear of negative evaluation (range: 6–40)	Female	21.25	7.87	p < 0.001 ***	
Constitute analysis (was a 0.7)	Male	3.65	1.69	t = 2.38	
Sensation seeking (range: 0–7)	Female	3.16	1.51	p = 0.18	
Carial madical distinct (names) (20)	Male	11.61	4.27	t = -2.42	
Social media addiction (range: 6–30)	Female	13.01	4.65	p = 0.02 *	

Notes: Student's *t*-tests. * p < 0.05, ** p < 0.01, *** p < 0.001.

3.2. Correlation Analysis

Table 3 shows the Pearson correlation coefficients for the study scales, including social media addiction, other psychological variables and age.

Table 3. Correlation matrix for the relationships between social media addiction and other psychological scales.

	1	2	3	4	5	6	7	8	9	10
1. Extraversion	-	-	-	-	-	-	-	-	-	-
2. Agreeableness	-0.01	-	-	-	-	-	-	-	-	-
3. Conscientiousness	0.05	0.21 **	-	-	-	-	-	-	-	-
4. Emotional stability	0.20 **	0.31 ***	0.43 ***	-	-	-	-	-	-	-
5. Openness to experiences	0.30 ***	0.14 *	0.08	0.03	-	-	-	-	-	-
6. Self-esteem	0.35 ***	0.17 **	0.22 **	0.54 ***	0.18 **	-	-	-	-	-
7. Fear of negative evaluation	-0.31 ***	-0.05	-0.18 **	-0.42 ***	-0.05	-0.47 ***	-	-	-	-
8. Sensation seeking	0.20 **	0.01	-0.14 *	0.03	0.13 *	-0.02	-0.04	-	-	-
9. Social media addiction	-0.11	-0.10	-0.27 ***	-0.38 ***	-0.08	-0.42 ***	0.43 ***	0.02	-	-
10. Age	-0.05	-0.02	0.05	0.10	-0.08	0.07	-0.10	-0.01	-0.03	-

Notes: r correlation coefficients. * p < 0.05, ** p < 0.01, *** p < 0.001.

> The social media addiction scale was positively associated with fear of negative evaluation [r(250) = 0.43, p < 0.001] but negatively with conscientiousness [r(250) = -0.27, p]p < 0.001], emotional stability [r(250) = -0.38, p < 0.001] and self-esteem [r(250) = -0.42, p < 0.001]p < 0.01]. There was a negative correlation between the fear of negative evaluation scale and extraversion [r (250) = -0.31, p < 0.001], conscientiousness [r (250) = -0.18, p < 0.001]p < 0.01], emotional stability [r (250) = -0.42, p < 0.001] and self-esteem [r (250) = -0.47, p < 0.001]p < 0.001]. Among the personality scales, self-esteem was positively related to extraversion [r(250) = 0.35, p < 0.001], agreeableness [r(250) = 0.17, p < 0.01], conscientiousness [r(250) = 0.22, p < 0.01], openness [r(250) = 0.18, p < 0.01] and most strongly to emotional stability [r(250) = 0.54, p < 0.01]. Sensation seeking had a slight positive correlation with extraversion [r (250) = 0.20, p < 0.01] and openness to experiences [r (250) = 0.13, p < 0.05], although its connection with conscientiousness was negative [r (250) = -0.14, p < 0.05].

3.3. Multiple Regression Analysis

Finally, the results of the multiple linear regression estimates of the social media score can be found in Table 4. Although most personality variables did not prove to be significant contributors, fear of negative evaluation was a positive predictor ($\beta = 0.28$, p < 0.001), and conscientiousness was a negative one ($\beta = -0.14$, p < 0.05). Additionally, self-esteem also negatively contributed to social media addiction in this sample of young adults ($\beta = -0.23$, p < 0.01). All of these variables combined explained 29% of the total variation in social media addiction scores. The reliability of the models was further examined with VIF (Variance Inflation Factor) indices and tolerance values. The VIF values were all within the acceptable range (below 2).

	В	SE	β	Tolerance ^a	VIF a
Self-esteem	-0.19	0.06	-0.23 **	0.58	1.72
Fear of negative evaluation	0.16	0.04	0.28 ***	0.68	1.47

Table 4. Multiple regression analysis for the social media addiction scale among university students.

	В	SE	β	Tolerance ^a	VIF ^a
Self-esteem	-0.19	0.06	-0.23 **	0.58	1.72
Fear of negative evaluation	0.16	0.04	0.28 ***	0.68	1.47
Sensation seeking	0.01	0.16	0.01	0.89	1.13
Extraversion	0.16	0.10	0.10	0.75	1.33
Agreeableness	0.02	0.11	0.01	0.82	1.22
Conscientiousness	-0.27	0.12	-0.14 *	0.77	1.29
Emotional stability	-0.15	0.12	-0.09	0.52	1.92
Openness	-0.10	0.13	-0.05	0.81	1.23
Sex (female = 2)	0.46	0.56	0.05	0.79	1.26
Age	0.06	0.10	0.04	0.97	1.13
Constant			16.05		
F-value			9.80 ***		
P 2			0.20		

Notes: one-tailed t-test. * p < 0.05, ** p < 0.01, *** p < 0.001. B = unstandardized regression coefficient; SE = standard error; β = standardized regression coefficients. ^a Collinearity statistics.

4. Discussion

Recently, growing attention has been paid to exploring the potential contributors to social media use and addiction since it may have a deep and long-term impact on people's cognitive processes and their mental health. We included a set of variables previously justified as potential contributors, such as self-esteem [18–20,30], fear of negative evaluation [28–30], sensation seeking [35] and personality factors [38,41]. Studies on the role of personality dimensions revealed particularly mixed and inconsistent results [37,41]. Whereas our first hypothesis has been justified, the second and third ones have been only partially supported.

First, we conducted descriptive statistics to explore sex differences for study variables. Although statistical data suggested a slight surplus of males among the global users of social media [42], females are more prone to social media addiction based on survey research [43]. Our results are in concordance with the latter finding: females scored higher on the social media addiction scale. Although there may be great differences between males and females in the platforms they use or activities they are engaged in, globally, females are more likely to share personal information or chat with friends, which can make them more susceptible to addiction [55]. Although several scientists argue that sex differences in personality dimensions are attributed to culture, i.e., these differences may be smaller in countries with more egalitarianism; studies usually show men's lower scores on neuroticism, agreeableness, conscientiousness and extraversion [56]. In our study, female students scored higher on agreeableness and were lower in terms of emotional stability; however, no differences were detected in the scores of extraversion. Instead, women reported more openness to experience. Furthermore, women also reported higher scores on the fear of negative evaluation scale [28].

According to correlation analysis, two of the five personality factors were associated with social media addiction: both conscientiousness and emotional stability were negatively correlated with it. Previous studies also found a negative correlation between conscientiousness and Facebook or social media addiction [37–39]. Therefore, conscientiousness seems to be a consequent negative contributor to social media addiction. A conscientious person has self-discipline, self-regulation, and appropriate internal control to avoid impulsive or compulsive behavior. Conscientious individuals tend to spend less time on social media and limit their usage to consciously chosen activities. As suggested in a previous study, conscientiousness also mediated the relationship between social media addiction and well-being [57]. These findings suggest that conscientiousness may act as a protective factor against social media addiction. In addition to conscientiousness, emotional stability was also negatively correlated with social media addiction in our study. Previous research reported a negative connection between social media addiction and neuroticism [38,41]. Emotionally stable people are less likely to overuse social media in the search for instant gratification, which may strengthen their self-esteem. In line with this, we found a negative relationship between self-esteem and social media addiction. This finding is consistent with previous results on the protective role of self-esteem [18–20]. Fear of negative evaluation was positively correlated with social media addiction and negatively associated with self-esteem. Having low levels of self-esteem, social anxiety, and fear of negative evaluation paradoxically may lead to spending more time on social media sites, searching for solutions for these problems seldom successfully, which helps develop social media addiction. The other personality factors (extraversion, openness to experiences and agreeableness) did not show significant relationships with social media addiction. Several prior studies also revealed the lack of significant associations with the Big Five personality dimensions [38,40]. Interestingly, not only openness to experiences but also sensation seeking did not show a relationship with social media addiction. As it seems, social media users do not necessarily seek novelties and new experiences on social media sites. On the other hand, sensation seekers and those open to experience are more likely to prefer online games [31].

In multiple analyses, three variables proved significant predictors for social media addiction: fear of negative evaluation (as a positive predictor), self-esteem and conscientiousness (as negative predictors). Fear of negative evaluation might be part of social anxiety when people tend to be concerned about what others think of them or talk to them [49,50]. Fear of negative evaluation may go together with shyness, both leading to social rejection in the real world. As a consequence, these people expect immediate gratification from finding new social contacts, which seems easier than socializing offline. Self-esteem was the second relevant predictor. Although fear of negative evaluation can serve as a risk factor, self-esteem can provide protection. Having an appropriate level of self-esteem means that one does not need to be engaged in social media to strengthen self-esteem by continuously posting, commenting, and looking for 'being liked' [58]. Finally,

being conscientious (i.e., self-disciplined, careful, organized) may also prevent one from being addicted to social media.

Our findings add further information to the literature on social media addiction. A growing number of studies concentrate on its negative consequences (and benefits), yet we know less about their contributors. However, we should also consider some limitations of the study. First, our analysis is based on a non-representative data collection due to convenience sampling, which may reduce generalizability. The cross-sectional study design does not allow us to make a cause-and-effect relationship. In Hungary, the willingness of university students to participate in online surveys without any financial or academic benefits is relatively small. Thus, the sample size is lower than expected. We used a brief version of the personality scale; the longer versions would be more detailed and reliable. We did not use the modern concept of gender; instead, we applied a binary construct. Finally, future research should extend the list of potential contributors to social media addiction, including other psychological variables and personality factors or concrete activities on social media. A possible research direction may be to detect differences in addiction to various social media platforms, e.g., Instagram, Facebook, Snapchat, etc. Various age groups can also be included to map the differences in the structure of contributors. All in all, intervention studies should find solutions to reduce the harmful consequences of social media addiction.

5. Conclusions

Our study highlights some relevant contributors to social media addiction. We may conclude that those who (a) have a fear of negative evaluation, (b) possess a low level of self-esteem, and (c) are not conscientious enough are more likely to be addicted to social media. Although social media provide a number of social benefits, several unseen threats may occur. Despite the growing number of studies on social media use and addiction worldwide, their correlates have not yet been explored among Hungarian students. One of the few recent findings shows that social media addiction acted as a predictor of depression among them due to careless self-disclosure [59]. Young people who spend long hours on the Internet and social media platforms should use them carefully to avoid harmful consequences. Elective courses on behavioral addiction, including Internet, smartphone, and social media addictions, are available to students depending on their faculty. However, these courses, especially on addiction to digital devices, should be accessible to everyone. Additionally, since young people start using social media earlier than their college years, orientations should be started during adolescence as part of their health education programs.

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References

Statista. Number of Social Network Users Worldwide from 2017 to 2027. 2024. Available online: https://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/ (accessed on 20 January 2024).

- 2. Brodersen, K.; Hammami, N.; Katapally, T.R. Smartphone use and mental health among youth: It is time to develop smartphone-specific screen time guidelines. *Youth* **2022**, *2*, 23–38. [CrossRef]
- 3. Clark, J.L.; Algoe, S.B.; Green, M.C. Social network sites and well-being: The role of social connection. *Curr. Dir. Psychol. Sci.* **2018**, 27, 32–37. [CrossRef]
- 4. Khaola, P.P.; Musiiwa, D.; Rambe, P. The influence of social media usage and student citizenship behaviour on academic őperformance. *Int. J. Manag. Educ.* **2022**, 20, 100625. [CrossRef]
- 5. Liu, H.; Liu, W.; Yoganathan, V.; Osburg, V.-S. COVID-19 information overload and generation Z's social media discontinuance intention during the pandemic lockdown. *Technol. Forecast. Soc. Chang.* **2021**, *166*, 120600. [CrossRef]
- 6. Sivakumar, A.; Jayasingh, S.; Shaik, S. Social media influence on students' knowledge sharing and learning: An empirical study. *Educ. Sci.* **2023**, *13*, 745. [CrossRef]
- 7. Marttila, E.; Koivula, A.; Räsänen, P. Does excessive social media use decrease subjective well-being? a longitudinal analysis of the relationship between problematic use, loneliness and life satisfaction. *Telemat. Inform.* **2021**, *59*, 101556. [CrossRef]
- 8. Piteo, E.M.; Ward, K. Review: Social networking sites and associations with depressive and anxiety symptoms in children and adolescents—a systematic review. *Child Adolesc. Ment. Health* **2020**, *25*, 201–216. [CrossRef] [PubMed]
- 9. Hylkilä, K.; Männikkö, N.; Castrén, S.; Mustonen, S.; Peltonen, A.; Konttila, J.; Männistö, M.; Kääriäinen, M. Association between psychosocial well-being and problematic social media use among Finnish young adults: A cross-sectional study. *Telemat. Inform.* **2023**, *81*, 101996. [CrossRef]
- 10. Wheatley, D.; Buglass, S.L. Social network engagement and subjective well-being: A life-course perspective. *Br. J. Sociol.* **2019**, 70, 1971–1995. [CrossRef]
- 11. Baccarella, C.V.; Wagner, T.F.; McCarthy, J.P. Social media? It's serious! Understanding the dark side of social media. *Eur. Manag. J.* 2018, 36, 431–438. [CrossRef]
- 12. Seabrook, E.M.; Kern, M.L.; Rickard, N.S. Social networking sites, depression, and anxiety: A systematic review. *JMIR Ment. Health* **2016**, *3*, e50. [CrossRef]
- 13. Griffiths, M.D.; Kuss, D.J.; Demetrovics, Z. Social networking addiction: An overview and preliminary findings. In *Behavioral Addictions: Criteria, Evidence, and Treatment*; Rosenberg, K.P., Feder, L.C., Eds.; Academic Press: London, UK, 2014; Chapter 6; pp. 119–141. [CrossRef]
- 14. Kaplan, A.M.; Haenlein, M. Users of the world, unite! The challenges and opportunities of Social Media. *Bus. Horiz.* **2010**, *53*, 59–68. [CrossRef]
- 15. Boyd, D.M.; Ellison, N.B. Social network sites: Definition, history, and scholarship. *J. Comput. Mediat. Commun.* **2007**, *13*, 210–230. [CrossRef]
- 16. Taylor-Jackson, J.; Moustafa, A.A. The relationships between social media use and factors relating to depression. *Nat. Depr.* **2021**, 171–182. [CrossRef]
- 17. Aalbers, G.; McNally, R.J.; Heeren, A.; de Wit, S.; Fried, E.I. Social media and depression symptoms: A network perspective. *J. Exp. Psychol. Gen.* **2019**, *148*, 1454. [CrossRef] [PubMed]
- 18. Jenkins-Guarnieri, M.A.; Wright, S.L.; Johnson, B. Development and validation of a social media use integration scale. *Psychol. Pop. Media Cult.* **2013**, *2*, 38–50. [CrossRef]
- 19. Xu, X.; Han, W.; Liu, Q. Peer pressure and adolescent mobile social media addiction: Moderation analysis of self-esteem and self-concept clarity. *Front. Public Health* **2023**, *11*, 1115661. [CrossRef]
- 20. Gori, A.; Topino, E.; Griffiths, M.D. The associations between attachment, self-esteem, fear of missing out, daily time expenditure, and problematic social media use: A path analysis model. *Addict. Behav.* **2023**, *141*, 107633. [CrossRef]
- 21. Li, J.; Jia, S.; Wang, L.; Zhang, M.; Chen, S. Relationships among inferiority feelings, fear of negative evaluation, and social anxiety in Chinese junior high school students. *Front. Psychol.* **2022**, *13*, 1015477. [CrossRef] [PubMed]
- 22. Festinger, L. A theory of social comparison processes. Hum. Relat. 1954, 7, 117–140. [CrossRef]
- 23. Vogel, E.A.; Rose, J.P.; Roberts, L.R.; Eckles, K. Social comparison, social media, and self-esteem. *Psychol. Pop. Media Cult.* **2014**, *3*, 206–222. [CrossRef]
- 24. Yang, C.-C. Instagram use, loneliness, and social comparison orientation: Interact and browse on social media, but don't compare. *Cyberpsychol. Behav. Soc. Netw.* **2016**, *19*, 703–708. [CrossRef] [PubMed]
- 25. de Vries, D.A.; Kühne, R. Facebook and self-perception: Individual susceptibility to negative social comparison on facebook. *Pers. Individ. Differ.* **2015**, *86*, 217–221. [CrossRef]
- 26. Olino, T.; Birk, S.L.; Case, J.A.C.; Weeks, J. An Initial examination of fear of negative and positive evaluation in youth. *J. Anxiety Disord.* 2023, 100, 102784. [CrossRef] [PubMed]
- 27. Reichenberger, J.; Blechert, J. Malaise with praise: A narrative review of 10 years of research on the concept of Fear of Positive Evaluation in social anxiety. *Depress. Anxiety* **2018**, *35*, 1228–1238. [CrossRef]
- 28. Ali, F.; Ali, A.; Iqbal, A.; Zafar, A.U. How socially anxious people become compulsive social media users: The role of fear of negative evaluation and rejection. *Telemat. Inform.* **2021**, *63*, 101658. [CrossRef]

29. Brook, J.S.; Zhang, C.; Brook, D.W.; Leukefeld, C.G. Compulsive buying: Earlier illicit drug use, impulse buying, depression, and adult ADHD symptoms. *Psychiatr. Res.* **2015**, 228, 312–317. [CrossRef]

- 30. Naidu, S.; Chand, A.; Pandaram, A.; Patel, A. Problematic internet and social network site use in young adults: The role of emotional intelligence and fear of negative evaluation. *Pers. Individ. Differ.* **2023**, 200, 111915. [CrossRef]
- 31. Wang, J.-L.; Jackson, L.A.; Zhang, D.-J.; Su, Z.-Q. The relationships among the Big Five Personality factors, self-esteem, narcissism, and sensation-seeking to Chinese University students' uses of social networking sites (SNSs). *Comput. Hum. Behav.* **2012**, *28*, 2313–2319. [CrossRef]
- 32. Savci, M.; Aysan, F. Relationship between impulsivity, social media usage and loneliness. *Educ. Proc. Int. J.* **2016**, *5*, 106–115. [CrossRef]
- 33. Guo, Z.; Liang, S.; Ren, L.; Yang, T.; Qiu, R.; He, Y.; Zhu, X. Applying network analysis to understand the relationships between impulsivity and social media addiction and between impulsivity and problematic smartphone use. *Front. Psychiatr.* **2022**, 13, 993328. [CrossRef] [PubMed]
- 34. Perez de Albeniz Garrote, G.; Rubio, L.; Medina Gomez, B.; Buedo-Guirado, C. Smartphone abuse amongst adolescents: The role of impulsivity and sensation seeking. *Front. Psychol.* **2021**, *12*, 746626. [CrossRef] [PubMed]
- 35. Meng, Y.; Li, M.; He, J. Sensation seeking and social network addiction among college students: A moderated mediation model. *Curr. Psychol.* **2023**, 42, 1–10. [CrossRef]
- 36. Zhang, X.-C.; Chu, X.-W.; Fan, C.-Y.; Andrasik, F.; Shi, H.-F.; Hu, X.-F. Sensation seeking and cyberbullying among Chinese adolescents: Examining the mediating roles of boredom experience and antisocial media exposure. *Comput. Hum. Behav.* **2022**, 130, 107–185. [CrossRef]
- 37. Rajesh, T.; Bangaiah, B. Relationship between personality traits and facebook addiction: A meta-analysis. *Heliyon* **2022**, *8*, e10315. [CrossRef] [PubMed]
- 38. López Rosales, F.; Becerra Guajardo, J.R.; Jasso Medrano, J.L. Addictive behavior to social networks and Five Personality traits in young people. *Psychol. Stud.* **2021**, *66*, 92–96. [CrossRef]
- 39. Horzum, B.H.; Güngören, Ö.C.; Erdoğan, D.G. The influence of chronotype, personality, sex, and sleep duration on Facebook addiction of university students in Turkey. *Biol. Rhythm Res.* **2022**, *53*, 1105–1115. [CrossRef]
- 40. Sheldon, P.; Antony, M.G.; Sykes, B. Predictors of problematic social media use: Personality and life-position indicators. *Psychol. Rep.* **2021**, 124, 1110–1133. [CrossRef]
- 41. Kayis, A.R.; Satici, S.A.; Yilmaz, M.F.; Şimşek, D.; Ceyhan, E.; Bakioğlu, F. Big five-personality trait and internet addiction: A meta-analytic review. *Comput. Hum. Behav.* **2016**, *63*, 35–40. [CrossRef]
- 42. Statista. Gender Distribution of Social Media Audiences Worldwide as of January 2023, by Platform. 2023. Available online: https://www.statista.com/statistics/274828/gender-distribution-of-active-social-media-users-worldwide-by-platform/ (accessed on 20 January 2024).
- 43. Mari, E.; Biondi, S.; Varchetta, M.; Cricentim, C.; Fraschetti, A.; Oizzo, A.; Barchielli, B.; Roma, P.; Vilar, M.M.; Sala, G.F.; et al. Gender differences in internet addiction: A study on variables related to its possible development. *Comput. Hum. Behav.* 2023, 9, 100247. [CrossRef]
- 44. Bányai, F.; Zsila, Á.; Király, O.; Maraz, A.; Elekes, Z.; Griffiths, M.D.; Andreassen, C.S.; Demetrovics, Z. Problematic social media use: Results from a large-scale nationally representative adolescent sample. *PLoS ONE* **2017**, *12*, e0169839. [CrossRef] [PubMed]
- 45. Andreassen, C.S.; Pallesen, S.; Griffiths, M.D. The relationship between addictive use of social media, narcissism, and self-esteem: Findings from a large national survey. *Addict. Behav.* **2017**, *64*, 287–293. [CrossRef]
- 46. Andreassen, C.S.; Torsheim, T.; Brunborg, G.S.; Pallesen, S. Development of a Facebook addiction scale. *Psychol. Rep.* **2012**, *110*, 501–517. [CrossRef]
- 47. Rosenberg, M. Conceiving the Self; Basic Books: New York, NY, USA, 1979.
- 48. Sallay, V.; Martos, T.; Földvári, M.; Szabó, T.; Ittzés, A. Hungarian version of the Rosenberg Self-esteem Scale (RSES-H): An alternative translation, structural invariance, and validity. *J. Ment. Health Psychosom.* **2014**, *15*, 259–275. (In Hungarian) [CrossRef]
- 49. Weeks, J.W.; Heimberg, R.G.; Fresco, D.M.; Hart, T.A.; Turk, C.L. Empirical validation and psychometric evaluation of the Brief Fear of Negative Evaluation Scale in patients with social anxiety disorder. *Psychol. Assess.* **2005**, *17*, 179–190. [CrossRef]
- 50. Perczel-Forintos, D.; Kresznerits, S. Social anxiety and self-esteem: Hungarian validation of the "Brief Fear of Negative Evaluation Scale–Straightforward Items". *Orvosi Hetil.* **2017**, *158*, 843–850. (In Hungarian) [CrossRef] [PubMed]
- 51. Watson, D.; Friend, R. Measurement of social-evaluative anxiety. J. Consult. Clin. Psychol. 1969, 33, 448–457. [CrossRef]
- 52. Andó, B.; Kökönyei, G.; Paksi, B.; Farkas, J.; Rózsa, S.; Demetrovics, Z. The 7-Item Brief Sensation Seeking Scale (SSS-7-HU). *J. Ment. Health Psychosom.* **2009**, *10*, 139–152. (in Hungarian). [CrossRef]
- 53. Zuckerman, M.; Eysenck, S.; Eysenck, H.J. Sensation seeking in England and America: Cross-cultural age and sex comparisons. J. Consult. Clin. Psychol. 1978, 46, 139–149. [CrossRef]
- 54. Gosling, S.D.; Rentfrow, P.J.; Swann, W.B. A very brief measure of the Big-Five personality domains. *J. Res. Personalit.* **2003**, 37, 504–528. [CrossRef]
- 55. Svensson, R.; Johnson, B.; Olsson, A. Does gender matter? The association between different digital media activities and adolescent well-being. *BMC Publ. Health* **2022**, 22, 273. [CrossRef] [PubMed]
- 56. Schmitt, D.P.; Long, A.E.; McPhearson, A.; O'Brien, K.; Remmert, B.; Shah, S.H. Personality and gender differences in global perspective. *Int. J. Psychol.* **2017**, *52*, 45–56. [CrossRef] [PubMed]

57. Bunz, U. Investigating the relationship between social media use, Big Five personality, and well-being. *J. Commun. Technol.* **2021**, 4, 25–52. [CrossRef]

- 58. Marengo, D.; Montag, C.; Sinderman, C.; Elhai, J.D.; Settanni, M. Examining the links between active Facebook use, received likes, self-esteem and happiness: A study using objective social media data. *Telemat. Inform.* **2021**, *58*, 101–523. [CrossRef]
- 59. Piko, B.F.; Kiss, H.; Rátky, D.; Fitzpatrick, K.M. Relationships among depression, online self-disclosure, social media addiction, and other psychological variables among Hungarian university students. *J. Nerv. Ment. Dis.* **2022**, 210, 818–823. [CrossRef]

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