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Smartphone Addiction: Generational Differences

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Abstract

Aim: This study aimed to examine the relationship between smartphone addiction and life satisfaction, and to identify the sociodemographic and behavioral factors influencing these variables in a sample of adult smartphone users.

Materials and Method: This analytical, cross-sectional study was conducted with volunteer participants aged 18 years and over who applied to our clinic over a 6-month period. Data were obtained via a 36-item questionnaire covering sociodemographic features, smartphone usage habits, internet and social media use, and factors that may influence life satisfaction as well as the 10-item Smartphone Addiction Scale–Short Form (SAS-SF) and 5-item The Satisfaction with Life Scale (SWLS). Statistical analyses were performed using the SPSS version 25.0 software package.

Results: The findings revealed a moderate negative correlation between smartphone addiction and life satisfaction (β=-0.327, $p<0.001$). Higher addiction scores were observed among younger participants, women, single individuals, those with a psychiatric diagnosis, and those with more frequent smartphone use, higher social media engagement, and more frequent phone replacements. Conversely, life satisfaction scores were higher among older participants, married individuals, and those with less screen exposure. Generation Z participants had higher addiction and lower life satisfaction scores compared to Generations Y and X.

Conclusion: Smartphone addiction is a complex behavioral issue that negatively impacts subjective well-being. The results underscore the importance of considering demographic and risk factors in addressing smartphone dependency. Targeted interventions promoting digital balance, especially among younger and high-risk populations, may enhance life satisfaction and reduce the psychological burden associated with excessive smartphone use.

Keywords: Smartphone Addiction, Life Satisfaction, Social Media.

INTRODUCTION

Throughout history, communication tools have played a fundamental role in human life, shaping interpersonal relationships and social development (1). The social nature of individuals and their constant need for interaction have driven the evolution of communication technologies (2). In this process, traditional telephones have gradually been replaced by mobile phones with internet access, leading to the widespread use of smartphones multifunctional devices that combine the features of mobile phones and personal computers (3).

Initially designed for voice communication, smartphones have transformed into indispensable tools that support a wide range of daily activities including social media engagement, online shopping, gaming, banking, media consumption, and even work-related tasks (4). While offering significant convenience and accessibility, the pervasive use of smartphones has also raised concerns regarding their potential negative effects. Excessive and

uncontrolled use can lead to disruptions in daily functioning, social isolation, and adverse effects on mental and physical health, such as impaired concentration and visual fatigue (5) .

Smartphone addiction is characterized by excessive and compulsive usage, failure to limit use, experiencing stress in the absence of access, and misrepresentation of usage patterns (6). High processing power and constant internet connectivity enhance the addictive potential of smartphones, as these devices provide relief from stress or anxiety (7).

The consequences of excessive smartphone use have become a prominent issue in modern societies. It has been associated with sleep disturbances, increased stress and anxiety, reduced academic performance, decreased physical activity, and strained interpersonal relationships (8). Moreover, smartphone use while driving or walking poses significant safety hazards (9). 16.9% Swiss adolescents seem to show signs of smartphone addiction (10).

As highly personalized and accessible digital tools, smartphones may lead to behavioral addiction, which manifests in symptoms such as mood disturbances, loss of control, and increasing tolerance. However, the extent of this addiction can be influenced by individual factors such as emotional intelligence, self-regulation, and the ability to understand and manage one's own emotions. These characteristics are crucial determinants of life satisfaction (11).

Life satisfaction refers to an individual's subjective evaluation of their quality of life, based on a comparison between personal expectations and current circumstances. Several studies have reported a negative association between smartphone addiction and life satisfaction, suggesting that increased addiction levels correspond to lower perceived well-being (8). Given that communication is a key component of well-being, the ongoing shift from face-to-face interaction to virtual communication raises critical questions regarding its potential impact on individuals life satisfaction (12).

This study aims to examine the relationship between smartphone addiction and life satisfaction, emphasizing the importance of understanding how the use of digital technologies influences individuals' subjective well-being in the context of modern communication patterns.

MATERIALS AND METHOD

This study was designed as a cross-sectional and analytical investigation conducted in a Family Medicine outpatient clinic. The primary aim was to determine the factors affecting smartphone addiction and life satisfaction, and to examine the relationship between these variables.

Participants consisted of adults aged 18 years and older who voluntarily applied to our day clinics during a six-month period and agreed to participate after being informed about the purpose and nature of the study. Data were collected through structured questionnaires and standardized measurement tools. These included a sociodemographic questionnaire, the Smartphone Addiction Scale–Short Form (SAS-SF), and the Satisfaction with Life Scale (SWLS). The questionnaire comprised 36 items designed to collect information on participants' sociodemographic characteristics (such as age, gender, educational level, occupation, and place of residence), smartphone usage habits, internet and social media use, and factors that may influence life satisfaction. The Smartphone Addiction Scale–Short Form (SAS-SF**)** is a validated, unidimensional instrument developed to assess smartphone addiction. It consists of 10 items scored on a 6-point Likert scale, ranging from 1 (strongly disagree) to 6 (strongly agree). The scale has no subdimensions. In this study, higher scores on the SAS-SF indicate a greater risk of addiction. The proposed cut-off points are 31 for males and 33 for females (6). The Satisfaction with Life Scale (SWLS) is a 5-item, 5-point Likert-type scale assessing overall life satisfaction. Each item is rated from 1 (strongly disagree) to 5 (strongly agree). The scale has a unidimensional structure and does not include a cut-off point. Total scores range from 5 to 25, with higher scores indicating greater life satisfaction (13). The collected data were analyzed using the SPSS 25.0 statistical software. Descriptive statistics, including mean, standard deviation, and minimum and maximum values, were calculated. The relationship between total scores of SAS-SF and SWLS and various continuous variables was analyzed using Pearson correlation analysis. To examine differences in SAS-SF and SWLS scores based on categorical variables, independent samples t-test was used for normally distributed two-group comparisons, and the Mann-Whitney U test was used for non-normally distributed variables. For variables with more than two groups, One-Way ANOVA was applied, and in cases of statistical significance, post-hoc analyses were conducted using Bonferroni and Dunn's tests to identify group differences. The relationship between categorical variables and smartphone addiction status (based on gender-specific cut-off scores) was assessed using Chi-square tests. Linear regression analysis was performed to determine the predictive relationship between SAS-SF and

SWLS total scores. In this study, a p-value of less than 0.05 was considered statistically significant.

RESULTS

The participants ranged in age from 18 to 67 years, with a mean age of 38.5±12.8 years. In terms of generational distribution, 38.5% (n=140) of the participants belonged to Generation X or older (>44 years), 35.0% (n=127) to Generation Y (28–43 years), and 26.5% (n=96) to Generation Z (12–27 years). The sample consisted of 51.0% males (n=185) and 49.0% females (n=178). Regarding marital status, 63.1% (n=229) of the participants were married, while 36.9% (n=134) were single. In terms of educational background, 70.0% (n=254) had completed college or held a university degree or higher.

The majority of the participants (71.6%, n=260) were employed. Occupational distribution showed that 21.8% (n=79) were public employees, 18.7% (n=68) were students, and 18.7% (n=68) were self-employed. In terms of income level, approximately half of the participants (51.5%, n=187) reported earning more than 1,300 USD per month. Regarding perceived income status, 45.5% (n=165) stated that their income and expenses were approximately equal. Most of the participants (81.0%, n=294) resided in urban areas, whereas 19.0% (n=69) lived in rural regions. Additionally, 11.6% (n=42) of the participants reported having a diagnosed psychiatric disorder.

Table 1 summarizes the comparisons of smartphone addiction scores and satisfaction scores according to different sociodemographic variables. The smartphone addiction scores of participants under the age of 45 were to be significantly higher than those of participants aged 45 and above (p<0,001), while no statistically significance was found between age groups in terms of life satisfaction scores (p>0,05).

Female participants had significantly higher smartphone addiction scores compared to male participants (p<0,001), whereas no significance was found in life satisfaction scores between genders (p>0,05).

Single participants had statistically and significantly higher smartphone addiction scores compared to married participants (p<0,001), whereas married participants reported significantly higher life satisfaction scores than their single counterparts (p<0,001).

Participants diagnosed with a psychiatric disorder had significantly higher smartphone addiction scores and significantly lower life satisfaction scores than those without a diagnosis (p<0,001, p=0,011, respectively).

Table 1. Smartphone Addiction and Life Satisfaction

Variables		**n**	**SAS-SF (Mean±SD)**	**SWLS (Mean±SD)**	**p**	**p**
Age	Generation Z	96	32,00±12,24	14,46±4,31	**<0,001**	**0,015**
	Generation Y	127	25,72±11,35	15,97±4,67		
	Generation X and others	140	22,72±11,36	16,07±4,47		
Marital Status	Single	134	28,31±12,36	15,78±4,35	**<0,001**	0,480
	Married	229	24,21±11,61	15,44±4,72		
Gender	Male	178	30,74±12,49	13,97±3,87	**<0,001**	**<0,001**
	Female	185	23,58±11,14	16,57±4,64		
Psychiatric Diagnosis	No	321	25,38±11,43	15,83±4,50	**<0,001**	**0,011**
	Yes	42	32,69±15,27	13,93±4,54		

Table 2 summarizes the comparisons of smartphone addiction scores and life satisfaction scores according to smartphone usage characteristics. A statistically significance was found between the total smartphone addiction scores and the daily time spent using a smartphone (p<0,001). Participants who used their phones for less than one hour per day had significantly lower addiction scores compared to all other groups (p<0,001). A statistically significance was also observed between daily phone use time and total life satisfaction scores (p=0,044).

The number of social media applications used was also significantly associated with smartphone addiction scores (p<0,001). Participants who did not use social media had significantly lower addiction scores than those using three or more applications (p<0,001). A significance was

also found between the number of social media applications used and life satisfaction scores (p=0,033).

There was a significant relationship between the average number of times the phone was checked daily and smartphone addiction scores (p<0,001). Participants who checked their phones fewer than 20 times per day had significantly lower addiction scores than those who checked their phones 30–39 times or 40 or more times (p<0,001). A significance was also observed in life satisfaction scores based on phone checking frequency (p<0,001), with those checking their phones 10–19 times per day reporting significantly higher life satisfaction than those checking 40 or more times (p<0,001).

Both smartphone addiction and life satisfaction scores showed significant differences depending on how often participants changed their phones (p<0,001 and p=0,007, respectively). Participants who believed they were addicted to their phones had significantly higher smartphone addiction scores and significantly lower life satisfaction scores than those who did not perceive themselves as addicted (p<0,001, p=0,004, respectively).

Table 2. Associations of Patterns with SAS-SF and SWLS Scores

Variables		**n**	**SAS-SF (Mean±SD)**	**SWLS (Mean±SD)**	**p**	**p**
Daily Phone Use	Less than 1 hour	24	14,75±5,48	15,25±4,42	**<0,001**	**0,044**
	1-2 hours	92	22,45±10,34	16,17±5,11		
	3-4 hours	135	24,64±10,09	16,12±3,89		
	5-6 hours	70	30,06±11,42	14,94±4,56		
	More than 6 hours	42	39,74±12,89	14,05±4,86		
Number of Social Media Apps	None	13	16,23±6,52	16,92±5,2	**<0,001**	**0,033**
	1	46	20,04±9,39	16,2±4,65		
	2	128	23,2±10,44	16,34±4,39		
	3	76	30,29±12,01	14,93±4,43		
	4 or more	100	31,15±12,84	14,75±4,52		
Phone Checking Frequency	Less than 10 times	51	19,63±9,81	15,84±4,74	**<0,001**	**0,001**
	10-19 times	108	22,03±9,58	16,92±4,19		
	20-29 times	71	25,28±10,82	15,93±4,73		
	30-39 times	50	30,22±11,54	15,24±3,59		
	40 or more	83	34,13±12,99	13,71±4,63		
Frequency of phone replacement	2 years and less	30	33,90±14,74	13,40±4,31	**<0,001**	**0,007**
	Every 3 years	56	31,00±12,29	15,04±4,79		
	Every 4 years	71	28,72±11,21	15,24±4,05		
	5 years and more	206	22,95±10,88	16,21±4,56		

Table 3 illustrates the relationship between smartphone addiction and life satisfaction. It was determined that there was a statistically significant and negative relationship between life satisfaction and smartphone addiction (β=-0.327, p<0.001)

Table 3. The relationship between smartphone addiction and life satisfaction

	SAS-SF						
Variables	**B**	**SE**	**Beta**	**%95 CI**		**t**	**p**
				Lower	**Upper**		
(Constant)	39,86	2,16		35,61	44,11	18,44	**<0,001**
SWLS	-0,87	0,13	-0,32	-1,13	-0,61	-6,57	**<0,001**
$R = .327$, $R^2 = .107$, $F = 43,188$, $p<0,001$							

DISCUSSION

Considering the possible score ranges of the Smartphone Addiction Scale–Short Form (SAS-SF) and the Satisfaction with Life Scale (SWLS), the participants in our study demonstrated moderate levels of both smartphone addiction and life satisfaction. Our findings revealed that as individuals' smartphone addiction increased, their life satisfaction decreased. The findings revealed a moderate negative correlation between smartphone addiction and life satisfaction. Additionally, increased age, smartphone usage duration, number of social media applications installed, and frequency of daily phone checking were all associated with higher levels of smartphone addiction and lower levels of life satisfaction.

In this study, Generation Z participants had higher mean smartphone addiction scores compared to Generations Y and X. Addiction scores decreased as age increased. This is consistent with Chen et al., who reported that younger individuals are more vulnerable to smartphone addiction due to early exposure in a highly digital environment (14). Considering generational characteristics, Generation Z was born into technology, Generation Y is highly familiar with it, while Generation X tends to face more challenges adapting (15). Early and frequent smartphone use for communication and social interaction among younger individuals may explain this pattern. Additionally, life satisfaction was lower among Generation Z compared to Generations Y and X, and it increased with age. These results align with previous studies indicating a positive association between age and life satisfaction (16-18). However, some studies found no significant relationship between these variables (12, 14). The lower life satisfaction among younger participants may be related to greater exposure to stressors such as economic uncertainty, job insecurity, social media pressures, and societal expectations.

Female participants in our study reported significantly higher smartphone addiction scores than males. The literature presents mixed results regarding

Gender differences in smartphone addiction. Women seem to have higher smartphone addiction than men (19, 20). There are also studies showing that there is no difference between smartphone addiction and gender (21, 22). One possible explanation for the higher addiction scores among women in our study could be that smartphones provide a socially safer and more accessible environment for communication, allowing women to socialize more freely. As for life satisfaction, our results did not reveal a significance between male and female participants. In the literature, there are studies in which females have higher life satisfaction (16, 23). Similar to our study results, there are studies in which there is no significance between males and females in terms of life satisfaction (24). The absence of a significance in our study may reflect increasing gender equity in social and professional roles.

In our study, single participants had significantly higher smartphone addiction scores compared to married participants. Similar findings have been reported in previous studies, where single individuals were more likely to display problematic smartphone use (25). One possible reason for this is that married individuals may use their phones less due to greater familial responsibilities (26). Additionally, single individuals may use smartphones and social media more frequently to meet new people, making such platforms more central to their lives (27). In our study, married participants reported significantly higher life satisfaction compared to singles, a finding consistent with the broader literatüre (28, 29). Being married can increase life satisfaction by meeting an individual's social and emotional needs.

Participants with a psychiatric diagnosis seemed to have significantly higher smartphone addiction and lower life satisfaction scores than those without such a diagnosis. Several studies have confirmed that psychiatric conditions often co-occur with smartphone addiction (30-34). Conversely, only a limited number of studies report no significant association between these variables (35).

Previous research has also highlighted a strong positive correlation between mental health and life satisfaction (6, 36). Psychiatric disorders may impair emotional regulation skills, increasing the risk of smartphone addiction, and can simultaneously reduce overall quality of life and well-being.

Our findings also indicated that increased time spent on smartphones was associated with higher levels of addiction and lower levels of life satisfaction. These results are consistent with existing literature, which suggests that excessive phone use leads to reduced engagement with offline life, attention deficits, time mismanagement, and the development of addictive behaviors (37, 38). For example, Dwyer et al. argued that constant accessibility to digital devices leaves individuals in a state of persistent cognitive and physical arousal, which may negatively impact overall quality of life (39). Excessive use of smartphones may impair the quality of interpersonal relationships and, in turn, decrease general life satisfaction.

As the number of social media applications used by participants increased, smartphone addiction levels also rose. Notably, this specific association has received limited attention in the literature, highlighting it as a unique contribution of our study. We also observed a decline in life satisfaction scores with an increase in the number of social media platforms used. This finding aligns with prior research suggesting that heavy social media use negatively impacts life satisfaction (40, 41). One study found that using multiple social media platforms may increase tendencies for social comparison, thereby reducing subjective well-being (42). The drive to engage with multiple social media services could be fragmenting users' attention and time, contributing to diminished life satisfaction.

Additionally, we found that higher frequency of phone checking was associated with increased smartphone addiction. Recent studies have linked checking the phone more than 50 times per day with digital distraction, emotional exhaustion, and social isolation (31). This suggests that compulsive checking behavior reflects a shift in the user-device relationship from user control to being controlled by the device (43). Frequent phone checking is not merely habitual but can be considered an indicator of compulsive and uncontrolled digital dependency. It is also associated with divided attention and elevated stress, which may further decrease life satisfaction (44, 45). Therefore, phone checking frequency should be considered a significant psychosocial factor affecting both addiction and well-being.

Finally, participants who replaced their smartphones more frequently have significantly higher addiction scores and lower life satisfaction. This supports previous findings that link frequent device replacement with stronger digital dependency and consumer behavior driven by novelty-seeking (35, 46). In terms of psychological well-being, excessive attachment to technology and the continuous pursuit of newer devices have been associated with lower life satisfaction (39, 47). These results suggest that rather than contributing to sustained happiness, digital consumption may be tied to transient satisfaction and habitual use.

CONCLUSION

In conclusion, smartphone addiction should be considered a multifaceted behavioral issue with notable implications for individuals' psychological wellbeing and life satisfaction. The findings of this study underscore the negative association between smartphone overuse and life satisfaction, emphasizing the role of demographic and usa-related factors such as age, gender, marital status, psychiatric conditions, screen time, and social media engagement.

These results offer valuable insights for the development of targeted interventions aimed at promoting healthier digital habits, particularly among younger individuals and high-risk groups. By identifying key psychosocial determinants of smartphone addiction and its inverse relationship with life satisfaction, this study contributes to the broader field of digital mental health and highlights the importance of preventive strategies in both clinical and community-based settings.

Although Generation Z is better at using phones and technology, the high level of addiction is also the responsibility of Generations X and Y, who raised Generation Z. Therefore, it may be appropriate to educate and raise awareness of previous generations on this issue.

Promoting digital well-being and reducing smartphone dependency may not only enhance life satisfaction but also support healthier coping mechanisms in an increasingly technology-driven society. Future research should continue to explore longitudinal outcomes and the effectiveness of intervention models tailored to different population segments.

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CONFLICTS OF INTEREST

No conflict of interest was declared by the authors

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