

A Social Media Addiction across Generations: A Cohort Study of Generation Z and Millennials

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Abstract: This research is a quantitative study that aims to analyze generational differences in social media addiction between Generation Z and Millennials in Pakistan. It is based on a cross-sectional design, data were collected from 156 participants through a self-administered 5-point Likert scale. The Bergen Social Media Addiction Scale (BSMAS) was used to assess addiction levels. An independent samples t-test was applied to assess the association between the generations (Generation Z vs Millennials) and the social Media Addiction Scores. The findings suggested a statistically significant difference in addiction scores between the two groups. Generation Z participants had a higher mean score ($M = 17.46$, $SD = 4.01$) than Millennials ($M = 15.86$, $SD = 3.95$), with $t(154) = 2.12$ and $p = .035$. Therefore, the results support the research hypothesis, indicating that Generation Z is more addicted to social media than Millennials. This study provides insight into the comparative impact of generational belonging in social media addiction. These findings can help mental health professionals, educators, and policymakers in designing interventions.

Keywords: Social Media Addiction, Generation Z, Millennials

Introduction

In recent years, the use of social media has become a crucial part of human life, especially for younger generations. It has altered the way we interact, communicate, learn, and even work. (Grover et al., 2022). With the rapid growth of digital platforms such as Instagram, Facebook, and Twitter, people have started devoting most of their time and energy to them, which has led to addiction. This addiction has spread very quickly throughout society in the recent years, especially to the people born after the advent of the internet and social media, and now both young and old have become obsessively absorbed (Arora & Mehta, 2023). The word addiction comes from the Latin word "addicere", which means "to be obsessed with" or "enslaved by" (Olsen, 2022). Social media addiction refers to the obsessive use of online platforms, resulting in negative impacts on mental health, social interactions, and daily functioning (Tullett-Prado et al., 2023). With the evolution of the internet over a period of time, people from all ages started investing more time and it has become an indispensable tool to communicate with others (Temnikova &

Vandisheva, 2022). Studies have shown that people spend one third of their time using a smartphone, tablet, computer, and playing digital games every day (Kim & Fingerman, 2022)

In Pakistan, sudden growth in the computer and wireless technologies, along with the rapid availability of smartphones and broadband connectivity, have developed digital communication and played a part in the rapid expansion of social media use in recent years (Masudi & Mustafa, 2023). By January 2021, the number of internet users in Pakistan had reached approximately 61 million (27.5% of the population), with 46 million active social media users, over 77% of whom accessed these platforms via mobile devices (Ittefaq et al., 2022). At the start of 2025, Pakistan had approximately 116 internet users, while the number of active social media users reached 66.9 million making 26.4 of the total population (DataReportal, 2025). Pakistan is placed at the 27th position globally in terms of internet usage (Siddiqui et al., 2021). Among the most active users of social media are Generation Z and Millennials, especially in how they access and engage with online information (Blandi et al., 2022). Generation Z (born 1997-2012) and Millennials (born 1981-1996) are two cohorts defined by the time period in which they were born and the extent of their exposure to digital technology and social media (Twenge, 2023). Generation Z has been exposed to social media from an early age, using it not only for communication but also for entertainment, identity building, and self-expression (Hoque & Hossain, 2023). In contrast, Millennials has experienced the rise of digital world in their adolescent and early adult years witnessing a shift from more traditional media to the highly interactive social media platforms adapting their media use style accordingly (Ittefaq et al., 2022). While both generations are deeply immersed in social media, their patterns of engagement, motivations, and psychological impacts differ significantly, raising important questions about the nature and extent of social media addiction within these groups. These differences in engagement are shaped by the distinct cultural, social, and technological environments in which each generation was raised (Miranda et al., 2023). Previous studies have suggested that because of the immersion digital technologies Generation Z from an early age, may face higher risks of addiction and its associated negative consequences, such as anxiety, depression, and impaired sleep quality (Benavides et al., 2023). Conversely, Millennials who witnessed the rise of social media during their adolescence and early adulthood. They use these platforms more for networking and professional purposes, although they are also affected by excessive use but, their risk of addiction-related issues may be somewhat lower compared to Gen Z (Henzel & Håkansson, 2021). To explore this difference, we conducted a research to compare the levels of social media addiction between Generation Z and Generation Y (Millennials). The goal was to determine whether Generation Z is more addicted to social media than Millennials. By focusing on social media addiction, this research aims to highlight generational patterns and offer useful insights for addressing the negative impact of excessive social media use.

Although extensive researches has been conducted on generation differences in social media addiction, but the research within the context of Pakistan is limited. There are very few cohort studies who have explored the social media addiction difference between Generation Z and Millennials within Pakistan. Pakistan is a diverse country with its own

societal norms, technology infrastructure and with a rapidly increasing population that uses social media. This could impact the pattern of social media addiction. Hence we wanted to check whether the difference between social media addiction pattern across generation within Pakistani context aligns with previous research or not. This study aims to address this gap by investigating how social media addiction varies across these generations in the Pakistani context.

Rationale of the Study:

Theoretical Importance

This study adds to the existing body of research on generational difference in social media addiction between two cohorts i.e. Generation Z and Millennials in the context of Pakistan. Although many similar studies have been conducted in the western world but the cultural and societal factors in Pakistan may affect the addiction patterns. Thus, the findings of our research can help improve global psychological models by including data from South Asia, specifically Pakistan.

Practical Implications

The results of our study can help inform the mental health professionals, educators, parents and policymakers about the extent and type of vulnerabilities of different generations in Pakistan. Recognizing that Generation Z is more susceptible to social media addiction can help them meet the demands of different generations differently while designing wellness programs, targeted intervention and parental awareness campaigns. It can also help e commerce and marketers to target their specific audiences better.

Objectives:

To compare the level of social media addiction between two cohort: Generation Z and Millennials.

Hypotheses:

Generation Z have significantly higher social media addiction scores than Millennials.

Conceptual Framework:

Conceptual framework supposes the generational cohorts (Generational Z vs Millennials) as the independent variable that affects the social media addiction scores that is dependent variable.

Figure 1

Conceptual Framework: Generational Cohorts and Social Media Addiction



**Generation Z vs
Millennials**

(IV)

Social Media Addiction

(DV)

This figure shows the hypothesized relationship between (Generation Z vs Millennials) and social media addiction scores. Arrows indicate the direction of the expected association between variables.

Material and Methods:

Sample:

This quantitative study employed a non-probability convenience sampling technique, where participants were selected based on availability and willingness to participate in the research. A total of 316 individuals participated in the survey, which aimed to assess the level of social media addiction among two generational groups: Generation Z (born 1997–2012) and Millennials (born 1980–1996). The sample was selected to provide a diverse range of respondents from both generations. The mean value for the independent variable was 17.04 with a standard deviation of 4.26.

Data were collected through a self-administered questionnaire by using Google Forms, which was distributed through platforms such as WhatsApp and Gmail. Before taking the responses, participants were assured of the confidentiality of their responses. The survey included demographic information (age, gender, socioeconomic status, and occupation) along with the six items from the Bergen Social Media Addiction Scale.

Instruments:

The Bergen Social Media Addiction Scale (BSMAS) is a widely used scale to measure the social media addiction. It was developed by Dr. Cecilie Schou Andreassen and her colleagues in 2016. The scale is a revised version of the Bergen Facebook Addiction Scale (BFAS), which was originally designed to scale Facebook addiction, and later revised to be applicable to general social media addiction. The BSMAS consists of 6 items, each reflecting the main components of social media addiction: salience, mood modification, tolerance, withdrawal, conflict, and relapse. Responses are measured on a 5-point Likert scale ranging from 1 (very rarely) to 5 (very often).

Statistical Analysis:

The data were analyzed by applying descriptive and inferential statistical methods by using SPSS (Version 26). At the univariate level, researchers summarized demographic characteristics such as gender, age group, occupation, and socioeconomic status using descriptive statistics, including frequencies and percentages. Additionally, mean, standard deviation, and Cronbach's alpha were calculated to measure the central tendency, variability, and internal consistency of the Social Media Addiction Scale (SMAS).

At the bivariate level, the dependent variable (social media addiction) was compared across generational groups categorized by age: Generation Z (ages 12–27) and Millennials (ages 28– 40). An independent samples t-test was applied to assess the significant difference that existed in SMA scores between the two age groups. The results revealed a significant difference, with Generation Z scoring higher on average than Millennials, thereby supporting the directional hypothesis that Generation Z is more addicted to social media than Millennials.

RESULTS:

Sample Demographic Characteristics

Sample Characteristics	Frequency (n=156)	Percentage (%)
Gender		
Male	197	62.4
Female	119	37.7
Age		
12-27	158	50
28-40	158	50
Occupation of the participant		
Student	149	47.2
Full-time employed	109	34.5
Unemployed	17	5.4
Housewife	41	13.0
Socioeconomic status		
Lower class	14	4.4
Middle class	278	88.3
Upper class	23	7.3

Table 1 shows demographic characteristics of sample consisted of 316 participants. Among the total participants, the percentage male (n = 197) was 62.4% and female (n = 119) was 37.7%. The age distribution showed that 50% of the participants were between

12 and 27 years old (n = 158), while 50% were between 28 and 40 years old (n = 50). Majority of participants were students (74.2%, n = 149), followed full-time employed (34.5%, n = 109), then housewives (13.0%, n = 41), and unemployed individuals (5.4%, n = 17). In socioeconomic status, 88.3% were identified as middle class (n = 278), 7.3% (n = 23) as upper class, and 4.4% (n = 14) as lower class.

Table 2

Psychometric properties for scale

Scale	No of items	M	SD	Range
Cronbach's α				
Social media addiction scale	6	17.500	4.262	24.00
0.698				

Mean value of the scale is **17.041** with the standard deviation of **4.26**, indicating variability in social media addiction levels among respondents. The **score range** was **24.00**, suggests a broad distribution of responses. With a Cronbach's alpha of **0.685**. The scale demonstrates a good of internal consistency ($\alpha = 0.698$), which shows that the SMAS is a reliable instrument for measuring social media addiction in this sample.

Table 4

T-value showing significant differences between males and females on Internet Addiction

Variables	Gen Z		Millennial		t(154)	P
Cohen's d						
	M	SD	M	SD		
Social media addiction scale	17.50	4.047	16.58	4.43	1.922	.046

Table 3 presents the results of an independent samples t-test comparing social media addiction scores between Gen Z and Millennials. The analysis revealed a statistically significant difference between the two groups, $t(154) = 1.922$, $p = .046$. Gen Z (M = 17.50, SD = 4.047) scored higher on social media addiction than Millennials (M = 16.58, SD = 4.43).

Discussion:

The results of our study supports the idea that the generation one belongs plays a significant role in social media addiction specifically that Generation Z are more addicted to social media compared to the older generation, millennials. This is likely due to the

psychological drives such as social stress and low self-regulation leading to higher social media addiction which is experienced more by the younger, Generation Z (Shetu et al., 2024). Generation Z has also experienced puberty and young adulthood in a more social-media-driven environment compared to their older generations which not only made them sensitive to social media use but also shaped the way they regulate emotions, interact socially and form social connections (Flannery et al., 2024). Younger users also use social media as a group-identity platform rather than solely for information seeking purpose as it helps them connect with peers and feel part of their social group making them more dependent (Tirado & Najmaei, 2025). There is a stronger integration of social media in Generation Z daily routine compared to Millennials which make them more prone to social media addiction (Mude, g., & Undale, s., 2023.) Another study found that Generation Z use social media for their psychological needs like social connection and mood regulation but it can lead to addictive behavior like prolonged screen time and compulsive checking for notifications (tirado, r., & najmaei, m. (2025). The younger users report increased negative impact and lack of control linked with high social media use on the other hand millennials reported these less intently suggesting less problematic use. Millennials have had more pre-digital social life before smartphones dominated everyday life compared to generation z that have seen social media since very young and that has tremendous impact on the level of dependency younger generations have on social media. (Şchiopu et al., 2023). Millennials use social media in a goal-oriented and intentional manner thus they are less prone to getting addicted unlike Generation Z that uses it for identity expression and emotional regulation (Mitra et al., 2022). Millennials use social media to relate to others by using social media features like posting and sharing however, this psychological need reduces as they age, reducing their social media use and dependency unlike the younger generation (Nikolinakou & Phua, 2024).

Our results are consistent with other national and international researchers. A study based in Pakistan proved that the link between social media addiction and related behavioral traits is greater in Generation Z compared to millennials (bano, masood & durrani (2022). Generation Z also report higher social media addictive behaviors (e.g urge, withdrawal and escape) than millennials, a cohort difference study. (marquez, m. (2022). Generation Z report significantly higher social media use and FOMO (fear of missing out) which can lead to addictive behaviors like social media addiction (sharma et al. (2023).

The majority of our sample consisted of young, middle class, student population which might have affected the pattern seen in our results because It has been proven that age, gender, marital status, education level and smartphone usage predict social media difference and social media addiction pattern differs for these different categories (Koçak et al., 2021). Hence the following are the factors that influence social media addiction patterns across generations.

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