Demographic Variables and Social Media Addiction among University Students in Nairobi County, Kenya

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ABSTRACT

Social media use has surged in recent years with college students emerging as the primary users. This study investigated the relationship between demographic variables of age, gender, and social media addiction among university students. The study utilized quantitative approach and employed correlational research design. The study targeted a population of 1268 and through simple random sampling, a sample size of 235 participants were selected to participate in the study. The data was collected using demographic details and social media addiction scale. The collected data was analyzed using descriptive statistics and Pearson correlation analysis. The results showed there was no significant relationship between gender and social media addiction ($r = .078$, $p = .236$) but found a significant negative correlation between age and social media addiction ($r = −.249$, $p < .01$), indicating addiction decreases with age.Results show younger students are more prone to social media addiction, driven by factors such as peer approval, social comparison, and fear of missing out. Conversely, older students use social media more intentionally, primarily for professional networking. Gender differences were evident in platform preferences, with female students gravitating toward visually-focused platforms like Instagram and experiencing greater psychological effects, such as anxiety, while male students preferred gaming and information-oriented platforms. The findings emphasize the importance of targeted interventions to foster balanced social media use across age and gender demographics. Furthermore, research should explore culturally and demographically tailored strategies to mitigate addiction and its associated mental health risks.

Keywords: Demographic Variables, Social Media Addiction, University Students, Nairobi Kenya

INTRODUCTION

Social media use has been growing in recent years with students being the biggest consumers of it. Interpersonal communication is essential to meeting human beings' basic desires for belonging and connection (Wang, 2013). Interpersonal communication methods have undergone a significant shift in the last several decades due to the advancement of information technology, particularly the explosive growth of Internet-based social media platforms like Facebook, WeChat, and Instagram (Smith & Anderson, 2018; Stone & Wang, 2018).College students are among the most frequent users of Facebook, Instagram, Snapchat, TikTok, and other social networking sites.According to Pellegrino et al. (2022), as of 2022, there were 4.62 billion active social media users out of the 7.91 billion people on the planet, and people used the internet for an average of 6 hours and 58 minutes per day, with an average of 2 hours and 27 minutes spent on social media platforms.

Social media addiction is a possibility due to the widespread use of social media platforms and the ease of access to the Internet. According to Keles et al. (2020), the prevalence of social media addiction is considerably higher among those between the ages of 18 and 25 than among older adults. This group is especially vulnerable throughout the developmental stage of emerging adulthood, marked by identity discovery and social comparison. On the other hand, Younger college students, especially those in their late teens, appear to be more addicted to social media than older students (Andreassen et al., 2016; Twenge et al., 2018). Addiction habits are exacerbated by younger students' increased usage of social media for peer approval and social recognition. On the other hand, older students such as those enrolled in graduate programs tend to use social media less for leisure and more for professional networking, which lowers the prevalence of addiction.

Addiction to social media has been connected to several mental health issues, such as anxiety, depression, and insomnia. A meta-analysis by Huang (2020) found a strong link between depressive symptoms and excessive social media use, especially among college-aged people. Because their coping strategies and emotional regulation abilities are still maturing, younger students are more vulnerable to the negative effects of social media addiction on their mental health. Furthermore, overuse of social media frequently gets in the way of academic obligations. Al-Menayes (2015) found a negative relationship between academic performance and social media addiction, with younger students more likely to procrastinate and receive lower grades as a result of their time spent on these platforms.

According to Jiang (2022), Internet addiction is becoming a more widespread societal problem in many cultures worldwide. With more Internet users than any other country in the world, China has seen the expansion of the Internet as well as the emergence and consequences of Internet addiction,

particularly among young people. The student's usage of social media is linked to a higher likelihood of addiction, which is associated with personal characteristics such as impulsivity, a lack of self-control, and a strong desire for social approbation. Environmental factors, such as peer pressure and exposure to social media culture, also play a significant role (Hou et al., 2019). University students in Japan are becoming more and more addicted to social media, particularly on sites like Instagram and LINE. Students are frequently under pressure to stay active on social networks due to cultural norms that support peer connectedness and group cohesion, which can result in obsessive behaviors. Yu and Luo (2021) urged that younger pupils are more likely to experience a "fear of missing out" which makes them more dependent on these platforms. Students' decreased physical activity and sleep difficulties have also been connected to the problem. Japan has concentrated on promoting self-regulation through awareness campaigns and offline social contacts to lessen these consequences.

A study conducted by Chukwuere and Chukwuere (2017) examined at both the positive and negative effects of social media on South African university students' social habits. This study demonstrated how younger students frequently put social media above their academic obligations, leading to procrastination and ineffective time management.Additionally, South African university students use social media extensively, with the most popular platforms being Facebook, Instagram, YouTube, and WhatsApp. Compared to their male peers, female students typically spend more time on social media, frequently using it for communication, networking, and socializing (Chukwuere & Chukwuere, 201; Wario, 2022). Chukwuere and Chukwuere (2017), purported feelings of loneliness and isolation result from an over-reliance on social media, which erodes in-person social ties. Moreover, Learners report feeling more depressed, anxious, and under pressure to live up to ideals of success and attractiveness that they found online.

As people move from academic to professional settings, their reasons for using social media change. For example, older students are increasingly choosing where and how to use social media for career-related reasons. Employers conduct initial assessments of new hires via social media platforms (Zula et al., 2011). Students' posts on social media platforms may be taken into consideration while choosing a job. Even if they are still active on social media, older students typically utilize sites like Facebook and LinkedIn more deliberately for knowledge sharing and professional networking. Social networking sites are essential to young people's personal and professional interactions, their digital involvement are growing annually, and a significant portion of occupations demand digital abilities (Castillo et al., 2020). Numerous studies have examined the disparities between genders in social media addiction and consumption, identifying unique regional trends. Gender-based developments in social media addiction in the US mirror broader societal trends in platform usage and choice. Research indicates that female students are more prone to develop an addiction to visually-focused platforms such as Instagram, Pinterest, and TikTok due to their need for aesthetic engagement and social validation (Estrellado & Coy, 2024). Male students, on the other hand, are more likely to use entertainment and information-gathering websites like YouTube, Reddit, and social networking sites devoted to gaming.

In a study conducted in China among undergraduate students, Chen et al. (2017) discovered that Among participants, 29.8% had a smartphone addiction, with 30.3% of men and 29.3% of women affected. Game apps, anxiety, and poor sleep quality were factors linked to smartphone addiction in male students, while multimedia applications, social networking sites, depression, anxiety, and poor sleep quality were factors linked to smartphone addiction in female undergraduates. According to a study by Hu et al. (2023), COVID-19 made social media addiction worse in China because of the country's increasing stress, isolation, and shift to online contact during lockdowns. These dynamics were moderated by gender, with female Chinese exhibiting a greater susceptibility to social network addiction under stress.   Social media addiction prevalence among Japanese studentsis moderate to high, according to studies conducted in Japan. Because of peer pressure and the need for approval, female students are frequently more impacted than male students. In general, like their peers in China, men are more interested in online games and less socially focused platforms. According to Tateno et al. (2019), research relates social media addiction to mental health issues like anxiety and low self-esteem as well as an increase in loneliness. Female students frequently experience these consequences more strongly.

According to research by Zewde et al. (2022), female students are more likely to develop a social media addiction because they use it frequently to stay in touch and form social bonds. The likelihood of male students participating in goal-oriented activities like gaming or information-seeking, on the other hand, is higher. This is consistent with worldwide patterns, although it might also be impacted by the distinct sociocultural setting of South Africa. In her study, Wario (2022) discovered that excessive usage of social media has been associated with lower academic achievement among South African students, with females expressing stronger emotional repercussions like anxiety and fear of mission out. Male students struggle with time management and concentration, even if they are less likely to be addicted.

Because cell phones are being more widely used, the internet is becoming more reasonably priced, and social media platforms like Facebook, Instagram, TikTok, and WhatsApp are becoming more and more popular, social media addiction is becoming a bigger problem among African university students. According to studies, university students in Africa, especially those between the ages of 18 and 25, are most susceptible to developing a social media addiction. According to Waithaka et al. (2018), who studied university students in Kenya, most of them use social media for more than five hours every day, mostly for communication and amusement. Similarly, Dadzie and Fiawotoafor (2020) observed high rates of use among university students in Ghana, with younger students exhibiting a higher vulnerability to addictive behaviors than their older counterparts. According to research by Zewde et al. (2022), the prevalence of internet addiction, including social media use, among university students in East Africa varies from 16% to 35%. There are clear gender differences in social media addiction. Male students are more likely to have higher levels of internet addiction as a result of their extended usage of the internet for leisure and gaming. However, female students exhibit patterns of reliance on social media sites such as Instagram and WhatsApp, which are frequently associated with preserving social connections and academic cooperation.

Kenyan university students use social media extensively for entertainment, education, and communication. This group uses social media sites like Facebook, Instagram, and WhatsApp. However social media addiction is becoming more and more common, which affects students' social and academic lives. Research shows that Kenyan university students, both male and female, utilize social media in varied ways. While male students are

more likely to utilize platforms for networking and amusement, female students are more likely to use them for social contact and emotional connection. The type and severity of addiction may be impacted by these gendered consumption patterns. According to research, female students are disproportionately affected by excessive social media use, which can result in procrastination, poor academic performance, and increased mental health problems like anxiety and depression (Ongeri et al. 2021; Langat & Alferd, 2013).

Students in Kenyan colleges who are addicted to social media spend more time on online activities than studying, which has been connected to a decline in academic performance. Students who use social media as a stress-reduction strategy or as a diversion from their scholastic difficulties are especially affected. According to Langat and Alferd (2013), there are gender variations in the effects of social media on academic performance, with female students reporting higher levels of stress. Though social media has become a vital aspect of student life, there are drawbacks to its widespread use, such as addiction, mental health issues, and disruptions to academics. Since their developmental stage makes them more vulnerable to social pressures and behaviors that seek approval, younger students are especially vulnerable to its negative effects. The intricacy of the problem is highlighted by regional and gender-based differences in social media addiction, which calls for therapies that are both demographically and culturally relevant. Even if social media presents chances for professional development and networking, especially for senior citizens, its overuse needs to be curbed by awareness-raising, computer literacy instruction, and the encouragement of offline interaction. The aim of the current study was to examine the relationship between demographic variables of age, gender and social media addiction among university students in Nairobi County, Kenya.

METHODOLOGY

The study employed correlatinal research design to establish the relationship between demographic variables of age, gender and social media addiction among university students in Nairobi County, Kenya. The study was conducted with University students within Nairobi County. The target population was 1268 students studying in one of the universities within Nairobi. Due to young age, university students are prone social media addiction. Through simple random sampling, a sample size of 235 students was selected to participate in the study. The data was collected using the demographic information of age and gender provided by the participants and social media addiction scale that was developed by Şahin (2018). The scoring for the responses was Strongly Disagree:1, Disagree:2, Neither Agree or Disagree, Agree: 3, and Strongly Agree: 4. The data was analyzed using descriptive statistics particularly percentages and Pearson correlation analysis.

RESULTS AND DISCUSSION

The study investigated the relationship between demographic variables of age, gender, and social media addiction among university students in Nairobi County, Kenya. The social media scale reported a Cronbach's alpha value of.859. This shows a high degree of dependability. Based on the demographic characteristics, majority of participants were aged 23–27 years (30.6%), followed by 18–22 years (25.5%). Participants aged 28–32 years accounted for 14.5%, and smaller percentages were observed in older age groups, with the lowest being 53–57 years (1.3%). Additionally, the data indicates that the majority of the participants were male (60.9%), while females constituted 39.1% of the respondents.

Relationship between Demographic Variables and Social Media Addiction among University Students

A Pearson correlation analysis was run to establish the relationship between the demographic variables of age, gender and social media addiction among the university students. The results are presented in table 1.

Table 1: Relationship between age, gender and social media addiction among university students

	Gender	Age
	.078	-.249**
Social medial addiction	.236	.000
	235	235

The findings showed in table 1 revealed no significant correlation between gender and social media addiction (r=.078, p=.236). However, a significant negative correlation was found between age and social media addiction (r=−.249, p<.001), indicating that social media addiction tends to decrease with age. This trend aligns with previous literature that highlights the evolving patterns of social media use across age groups.As individuals' transition from academic settings to professional environments, their motivations for engaging with social media platforms shift. Older students increasingly utilize platforms such as Facebook and LinkedIn for career-related purposes, focusing on professional networking and knowledge sharing. Zula et al. (2011) noted that employers often evaluate potential hires through their social media presence, emphasizing the importance of deliberate and professional use of these platforms. Consequently, older students exhibit more intentional usage patterns, reflecting their career-oriented priorities.

In contrast, younger individuals demonstrate higher levels of social media addiction. This may be attributed to the fear of missing out a phenomenon. Yu and Luo (2021) identify as particularly prevalent among younger social media users. This fear drives younger users to engage more frequently with social media, leading to potential negative consequences such as reduced physical activity and sleep disturbances. Keles et al. (2020) further support these findings by reporting that the prevalence of social media addiction is significantly higher among individuals aged 18–25 compared to older age groups.The growing reliance on social media among younger populations can also be linked to their broader digital involvement and the increasing

demand for digital skills in the job market (Castillo et al., 2020). While this digital engagement offers opportunities for personal and professional interactions, it also underscores the need for balanced and mindful social media use to mitigate the risks associated with addiction. Overall, the findings highlight the interplay between age, social media addiction, and usage patterns. Younger users appear more susceptible to addiction due to psychosocial factors, while older individuals demonstrate a more purposeful engagement with social media, particularly for career-related reasons. This underscores the importance of tailored interventions and educational programs to promote healthy social media habits across different age groups.

The analysis revealed no significant correlation between gender and social media addiction (r=.078, p=.236). Despite this, existing literature highlights distinct gender-specific patterns in social media usage and susceptibility to addiction. Female students tend to gravitate toward visually-focused platforms such as Instagram, Pinterest, and TikTok, driven by aesthetic engagement and the need for social validation (Estrellado & Coy, 2024). This reliance often increases their vulnerability to social media addiction, especially under conditions of heightened stress or social isolation. For instance, Hu et al. (2023) observed that during the COVID-19 pandemic in China, stress and isolation exacerbated social media addiction, particularly among women. These findings suggest that female students may experience stronger psychological effects, such as anxiety and low self-esteem, due to their heightened engagement with social networking platforms (Tateno et al., 2019).

Male students, in contrast, are more inclined to engage with platforms centered on entertainment, gaming, and information-sharing, such as YouTube, Reddit, and gaming-specific social networks. According to Zewde et al. (2022), male students in East Africa display higher levels of internet addiction, often linked to prolonged usage of online platforms for leisure and gaming. This pattern aligns with findings indicating that males' social media addiction is less about maintaining social connections and more about accessing entertainment and gaming-related content. Interestingly, social media addiction has broader implications for mental health, such as anxiety, low self-esteem, and loneliness. Tateno et al. (2019) note that these effects disproportionately affect female users, who often rely on platforms for social connection and academic collaboration. On the other hand, male students may experience different psychological impacts due to their extended recreational use of the internet.

The varying prevalence of internet and social media addiction, as highlighted by Zewde et al. (2022), underscores the need to account for regional and cultural differences. For instance, in East Africa, the prevalence of internet addiction among university students ranges from 16% to 35%, with clear gendered differences in platform usage and motivations. While the statistical analysis shows no significant correlation between gender and social media addiction, literature reveals nuanced gendered patterns of social media use. Female students are more prone to addiction linked to aesthetic and social validation needs, while male students are more likely to engage with platforms for entertainment and gaming. These findings suggest that future research and interventions should consider these gendered differences to effectively address and mitigate social media addiction's diverse impacts.

CONCLUSION

The study concluded there was no significant correlation between gender and social media addiction among the university students in Kenya. This means both male and female students can be equally affected by social media addiction. This could be attributed to how university students spend their leisure time and how effectively they consider interpersonal relationships. In addition, the study concluded there was a significant negative correlation between age and social media addiction. This indicates social media addiction tends to decrease with age. This could be attributed to maturity and responsibility as people grow older. Mature adults are likely to be involved with job and career responsibilities and hence be able to use social media in a meaningful way compared to young people are who not yet mature and have no much responsibility in their lives.

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