Digital Isolation: Social Disconnectedness and Interaction Anxiety among Adolescent Social Media Users

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Abstract

The rapid amalgamation of social media into daily life has transformed how adolescents engage socially, presenting both opportunities and challenges for their mental well-being. The present study examines the relationship between social media usage, social disconnectedness, and social interaction anxiety among 150 adolescents in Trivandrum, Kerala. Findings reveal that a significant number of adolescents are moderate users of social media, spending approximately 2-3 hours daily across multiple platforms like Facebook, Instagram, and WhatsApp. Despite all-encompassing digital connectivity, many participants report moderate to high levels of social disconnectedness, indicative of feelings of lonesomeness and inadequate social support. Moreover, a substantial portion of adolescents also exhibit moderate to high social interaction anxiety, linked to their digital engagement patterns. Statistical analyses demonstrate positive correlations between social media use, social disconnectedness, and social interaction anxiety, emphasizing the impact of online interactions on adolescents' social well-being. Gender differences in social disconnectedness are observed, with males reporting higher levels than females, possibly influenced by varying patterns of social media usage. These findings emphasize the need for precise interventions to foster healthier digital behaviours and mitigate adverse psychological outcomes among adolescents in the digital age. The findings also accentuate the dual nature of social media's impact on adolescent social dynamics offering unparalleled connectivity while also potentially exacerbating feelings of isolation and anxiety. The study contributes to a scientific understanding of how digital technologies shape adolescent socialization processes and psychological health. Implications for intervention and policy include promoting balanced digital behaviours, enhancing digital literacy, and fostering supportive offline social environments to mitigate adverse psychological outcomes associated with excessive social media use.

Keywords: Social Disconnectedness; Social Interaction Anxiety; Social Media Usage; Adolescents

Introduction

The emergence and rapid explosion of social media platforms have transformed the landscape of interpersonal communication, fundamentally altering how individuals connect, interact, and express themselves in the digital age. Platforms such as Facebook, Instagram, Snapchat, and Twitter have transcended geographical boundaries, enabling instantaneous global connectivity and reshaping social dynamics [1]. While these platforms offer unparalleled opportunities for social engagement, self-expression, and community building, they also introduce complex socio-

psychological dynamics that warrant critical examination, particularly among adolescents-a demographic that is both productive and vulnerable in its use of social media.

Adolescence, represents a critical period of development characterized by significant biological, cognitive, and socio-emotional changes [2]. It is a time marked by exploration of identity, establishment of peer relationships, and acquisition of social skills essential for navigating adult life [3]. During this developmental phase, adolescents rely heavily on social interactions to cultivate a sense of belonging, develop self-esteem, and acquire interpersonal competencies that contribute to their overall well-being [2]. However, the pervasive influence of social media in adolescents' lives introduces both opportunities and challenges that can profoundly impact their social connectedness and psychological wellbeing. Social media platforms offer adolescents a virtual arena for socialization that extends beyond physical proximity, facilitating connections with peers, exploration of interests, and participation in cultural trends [1]. These platforms serve as venues for self-presentation and identity experimentation, enabling adolescents to construct and maintain social identities through curated online personas [4]. Moreover, social media supports continuous interaction, enabling adolescents to stay connected with friends and family irrespective of geographical barriers, which can be particularly beneficial in maintaining long-distance relationships and mitigating feelings of loneliness [1].

Despite these benefits, concerns have emerged regarding the potential negative consequences of excessive social media use on adolescent well-being. One prominent issue is the phenomenon of social disconnectedness-a subjective feeling of isolation and loneliness despite being digitally connected to a wide network of peers [5]. Research suggests that the superficial nature of many online interactions, characterized by selective self-presentation and limited emotional depth, may contribute to feelings of inadequacy and social comparison among adolescents [6]. Furthermore, the emphasis on popularity metrics such as likes, followers, and comments can foster a competitive social environment that exacerbates anxiety and diminishes authentic social connection [7]. Moreover, the asynchronous and disembodied nature of digital communication may hinder the development of crucial social skills necessary for effective face-to-face interactions [8]. Adolescents who predominantly engage in online interactions may experience heightened social interaction anxiety-a fear of negative evaluation or rejection in social settings [9]. This anxiety can manifest as avoidance behaviours in real-world social situations, potentially leading to further isolation and exacerbating mental health challenges [8].

Objectives and Significance

Given the multifaceted impacts of social media on adolescent social connectedness and psychological health, this study seeks to address the following research objectives:
- **To determine the extent of social media usage, social disconnectedness, and social interaction anxiety among adolescents.**

This objective aims to provide a comprehensive assessment of adolescents' engagement with social media platforms, including frequency and patterns of use. By examining these behaviours, the study seeks to identify correlations between social media usage and feelings of social disconnectedness and social interaction anxiety. Through empirical analysis, the research intends to shed light on the prevalence and potential determinants of these psychological states among adolescents in the digital age.
- **To examine the nature of the relationship between social disconnectedness and social interaction anxiety among adolescents.**

This objective focuses on elucidating the complex interplay between social disconnectedness and social interaction anxiety within the context of adolescent social media use. By exploring potential causal relationships and mediating factors, the study aims to deepen understanding of how digital engagement influences adolescents' social well-being and interpersonal dynamics. This exploration is crucial for informing evidence-based interventions and strategies aimed at promoting healthier digital behaviours and mitigating negative psychological outcomes among adolescents.
- **To examine demographic variations in Social disconnectedness and Social interaction anxiety among adolescent social media users.**

Method

The study utilized a descriptive research design to investigate the relationships between social media usage, social disconnectedness, and social interaction anxiety among emerging adults. Descriptive research was deemed appropriate as it facilitated a detailed exploration of these variables and their interconnections within the specified population. The study included a sample of 150 adolescents from Trivandrum, selected through purposive sampling. This sampling method was chosen to ensure that all participants were active users of social media, which was a crucial criterion for the study's focus.

Data collection was conducted using the following instruments:
Personal Data Sheet: This instrument captured demographic information of the participants.
Social Media Usage Schedule: This schedule assessed the frequency, duration, and types of social media platforms

used by the participants.

Social Disconnectedness Scale: This scale measured participants' perceptions of social isolation and lack of social support.

Social Interaction Anxiety Scale: This scale evaluated participants' levels of anxiety related to social interactions [10].

Data were analysed using the following statistical methods: Frequency Analysis: Used to describe the patterns of social media usage among the participants. Pearson's Correlation: Employed to examine the relationships between social media usage, social disconnectedness, and social interaction anxiety. Independent Samples t-test: Conducted to compare levels of social disconnectedness and social interaction anxiety across different demographic groups within the sample.

The methodological approach allowed for a comprehensive investigation into how social media usage relates to feelings of social disconnectedness and anxiety in social interactions among emerging adults in Trivandrum. The chosen instruments and analytical techniques provided robust insights into the nature of these relationships within the study's targeted population.
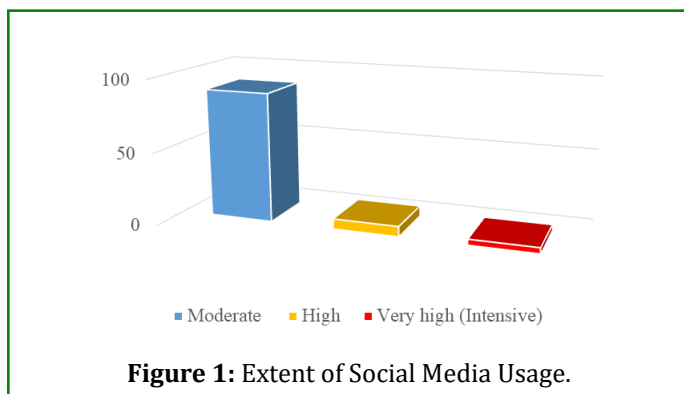
Results and Discussion

Social Media Usage

Figure 1: Extent of Social Media Usage.

Eighty nine percent of the adolescents were classified as moderate users of social media, seven percent were high users, and four percent were intensive users. The analysis revealed that a significant majority of participants accessed multiple social media platforms daily, with Facebook, Instagram, and WhatsApp being the most frequently used platforms. The average time spent on social media was approximately 2-3 hours per day, with some participants reporting usage of up to seven hours. The analysis showed that 72.8% of the sample had more than two social media accounts, 21.2% had two accounts, and 6% had one social media account. Regarding the frequency of social media

access, 95.3% of the sample accessed social media more than twice a day, 3.7% accessed it twice a day, and 1% accessed it once a day. When it comes to time spent on social media daily, 13% of the sample spent less than one hour on social media daily, 42.3% spent more than one hour, and 44.7% spent more than two hours.

In terms of posting frequency on social media, 24.3% of the sample posted daily, 48.6% posted more than once a week, and 27.1% posted once a week. Regarding checking social media before going to bed, 35.5% of the sample checked social media every day, 21.3% did not check social media just before going to bed, and 43.3% checked social media some days just before going to bed. Similarly, 54% of the sample checked social media every day before getting out of bed, 11% did not check social media before getting out of bed, and 35% checked social media some days before getting out of bed.
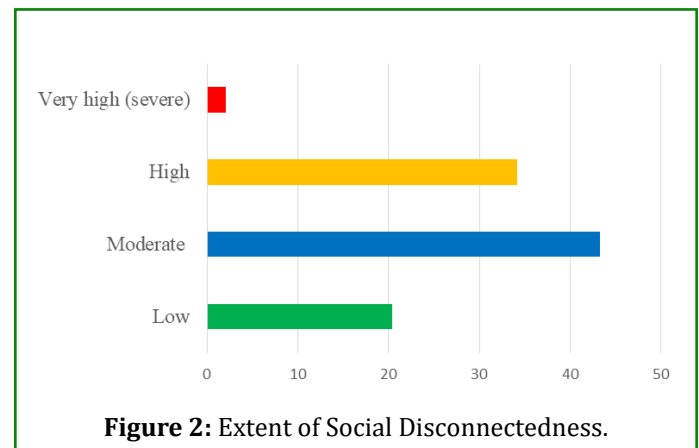

Figure 2: Extent of Social Disconnectedness.

The findings indicated high levels of social disconnectedness among participants. Many reported feelings of loneliness and a lack of meaningful social support, despite being active on social media. The Social Disconnectedness Scale scores ranged from moderate to high, with a mean score indicating substantial social isolation. The analysis showed that 43.3% had moderate social disconnectedness, 34.2% had high social disconnectedness, 20.4% had low social disconnectedness, and 2.1% had severe social disconnectedness.

Thirty-nine percent of the sample agreed that it was difficult for them to talk with a person sitting near while using social networking sites, 21% strongly agreed, 19% disagreed, 10% strongly disagreed, and 11% were undecided. Thirty-three percent of the sample agreed that they felt distracted when someone talked to them while using social media, 2.3% strongly agreed, 28% disagreed, 14.2% strongly disagreed, and 22.5% were undecided. Thirty-two point eight percent of the sample agreed that they usually chatted with friends rather than meeting them in person, 2.6% strongly agreed,

24.3% disagreed, 13% strongly disagreed, and 27.3% were undecided. Regarding family gatherings, 9.7% of the sample agreed that they postponed family gatherings to spend more time on social media, 40% strongly disagreed, 39% disagreed, and 11.3% were undecided. Eighteen point three percent of the sample agreed that they had more virtual friends than real friends, 2% strongly agreed, 40.3% disagreed, 30.7% strongly disagreed, and 8.7% were undecided. Thirty-seven point four percent of the sample agreed that they relied on online friends for getting ideas and advice, 2.1% strongly agreed, 26.5% disagreed, 22.6% strongly disagreed, and 11.4% were undecided.

Eighteen point three percent of the sample agreed that they had never seen most of their close friends in person, 13.5% strongly agreed, 33.7% disagreed, and 34.5% strongly disagreed. Thirty-seven point six percent of the sample agreed that they used social media to create their identity, 2.5% strongly agreed, 22% disagreed, 23.4% strongly disagreed, and 14.5% were undecided. Thirty-three point five percent of the sample agreed that they preferred social media to visiting neighbours when they were bored, 18.5% strongly agreed, 16.6% disagreed, 15.4% strongly disagreed, and 16% were undecided. Regarding social media use while eating with family, 30.6% of the sample agreed that they used social media while eating with family, 2.7% strongly agreed, 18% disagreed, 31.7% strongly disagreed, and 17% were undecided. Twenty-seven point four percent of the sample agreed that their usual sleeping hours were reduced by social media use, 24.3% strongly agreed, 18.3% disagreed, 16.3% strongly disagreed, and 13.7% were undecided. Thirty-six point six percent of the sample agreed that their time for hobbies had been replaced by social media usage, 20.7% strongly agreed, 20.7% disagreed, 12% strongly disagreed, and 10% were undecided.

Thirty-three percent of the sample agreed that they preferred wishing others through social media to wishing them directly, 13.6% strongly agreed, 17% disagreed, 13.7% strongly disagreed, and 22.7% were undecided. Thirty-one point three percent of the sample agreed that they preferred group chatting to group get-togethers, 10% strongly agreed, 22% disagreed, 6.7% strongly disagreed, and 30% were undecided. Seventeen point four percent of the sample agreed that they felt socially isolated despite having many online friends, 5.2% strongly agreed, 25.4% disagreed, 14% strongly disagreed, and 38% were undecided. The results indicate that while adolescents are heavily engaged with social media, this engagement does not necessarily translate to meaningful social connections. The high levels of social disconnectedness reported suggest that virtual interactions on social media may not provide the same level of emotional support as face-to-face interactions. The preference for online communication over in-person meetings and the distraction caused by social media usage further contribute to feelings of loneliness and isolation. This study highlights the paradox of social media use among adolescents, where high engagement is accompanied by significant social disconnectedness. While social media platforms offer opportunities for interaction, they do not necessarily fulfil the need for genuine social support and meaningful connections. Further research is needed to explore strategies to mitigate the negative impacts of social media on adolescent well-being and to promote healthier online and offline social interactions.

Adolescents use social media to fulfil social needs, but it can detract from real-life relationships and intimacy with parents, siblings and friends. Higher social media use is associated with lower physical health, poorer mental health, and lower life satisfaction. Social conflicts arising from social media use, such as "technoference" or "phubbing – parental, or children," interfere with real-life interactions.

While social media provides platforms for identity exploration and social interactions, it also poses risks of social disconnectedness and adverse impacts on well-being. The findings highlight the need for balanced social media usage to foster healthy social connections and personal well-being.
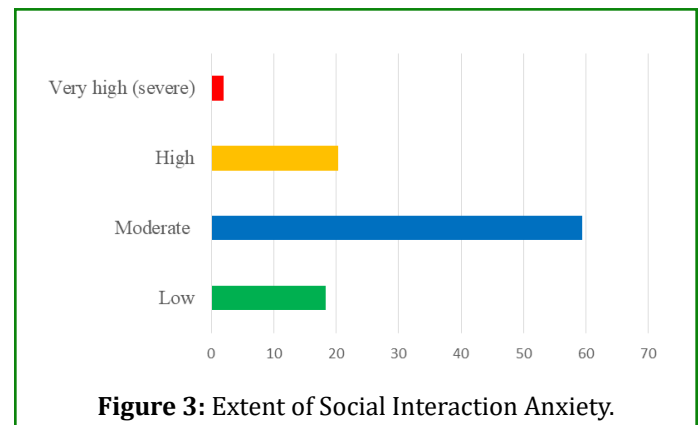

Figure 3: Extent of Social Interaction Anxiety.

Social media's role in shaping adolescent social behaviour is complex. On one hand, these platforms provide a means for adolescents to connect with peers and express themselves. On the other hand, they can exacerbate feelings of social anxiety and isolation. Studies have shown that excessive social media use is linked to higher levels of anxiety, depression, and perceived social isolation [11-13]. Frequency analysis indicates that 59.4% of the adolescents are having moderate social interaction anxiety, 18.3% of them have low social interaction anxiety, 20.3% of them have high social interaction anxiety and 2% have severe social interaction anxiety. The finding that 59.4% of adolescents experience moderate social interaction anxiety is significant. Moderate anxiety can impact daily activities, such as participating in classroom discussions or engaging in social events. The

constant comparison with peers and exposure to curated images of others' lives can lead to feelings of inadequacy and heightened anxiety [7]. Additionally, the asynchronous nature of online interactions may reduce opportunities for practicing real-time social skills, further contributing to anxiety [8]. The data indicates that 20.3% of adolescents have high social interaction anxiety and 2% have severe anxiety. These levels of anxiety are particularly concerning as they can severely impede an individual's ability to function in social settings. High levels of anxiety are often associated with avoidance behaviours, where individuals might withdraw from in-person interactions and rely more heavily on online communication [14]. This reliance can create a vicious cycle, where increased online interaction leads to reduced face-to-face social competence and higher anxiety [15]. Interestingly, 18.3% of adolescents reported low social interaction anxiety. These individuals might be using social media in a balanced way that supports their social interactions without leading to significant anxiety. It is possible that for some adolescents, social media serves as a useful tool to enhance their social network and maintain connections, which can reduce feelings of loneliness and anxiety [16]. The relationship between social media use and social interaction anxiety can be understood through several theoretical frameworks. The Social Compensation Hypothesis suggests that individuals with high social anxiety might use social media to compensate for their lack of offline social skills [17]. Conversely, the Rich-Get-Richer Hypothesis posits that those who are already socially skilled use social media to further enhance their social interactions [18].

The correlation analysis revealed a positive relationship between Social Media Usage, social disconnectedness and social interaction anxiety. Increased social media use is associated with higher social disconnectedness, which in turn is linked to increased social interaction anxiety. The positive relationship between social disconnectedness and social interaction anxiety highlights the detrimental impact of social isolation on mental health. As individuals feel more disconnected, their anxiety about engaging in social interactions increases, potentially leading to a cycle of avoidance and further isolation.

Variables	Social Disconnectedness	Social Interaction Anxiety
Social Media Usage	.456**	.420**
Social Disconnectedness	..	.356**

Table 1: Correlation Matrix.

The study's findings align with existing literature suggesting that while social media provides opportunities for connectivity, it also contributes to feelings of social disconnectedness and interaction anxiety. The positive correlation between social media usage and social disconnectedness supports the notion that online interactions often lack the depth and emotional richness of face-to-face communication. This lack of meaningful engagement can lead to feelings of isolation, despite being virtually connected to many people.

Variables	Gender	N	Mean	Std. Deviation	t-test for Equality of Means(t)	Sig.
Social Disconnectedness	Male	75	45.45	11.8849	4.31	0
	Female	75	37.25	11.409		
Social Interaction Anxiety	Male	75	30.88	13.743	0.385	0.701
	Female	75	30	14.279		

Table 2: Gender-wise Comparison in Social Connectedness and Social Interaction Anxiety.

The study findings indicate there is a significant difference in social disconnectedness based on gender. Males have greater social disconnectedness with a mean of 45.453 than that of females with a mean of 37.253. There is no significant difference in social interaction anxiety based on gender. The observed significant difference in social disconnectedness based on gender, with males exhibiting higher levels than females, may be influenced by patterns of social media usage. Research indicates that females tend to use social media platforms more frequently and for social interaction purposes, such as maintaining relationships and seeking social support, which can decrease feelings of social disconnectedness. In contrast, males are more likely to use social media for information gathering or entertainment, which may not provide the same level of social connectivity. Additionally, the nature of interactions on social media for males might be less personal and more superficial, leading to higher social disconnectedness. The lack of a significant

difference in social interaction anxiety between genders suggests that both males and females experience similar levels of anxiety in online interactions. This could be due to the ubiquitous nature of social media, where both genders face similar challenges, such as cyberbullying, privacy concerns, and the pressure to present an idealized self, contributing equally to social interaction anxiety. Several studies support the notion that social media usage patterns differ by gender and influence social disconnectedness. Research indicates that females are more likely to use social media for maintaining personal relationships and seeking emotional support. For instance, a study by Barker V [19] found that females frequently use social networking sites to reinforce existing connections and express themselves, which can mitigate feelings of social disconnectedness. Conversely, males tend to use social media for information and entertainment purposes. A study by Muscanell NL, et al. [20] supports this, highlighting that males often engage in social media for purposes that are less socially interactive and more oriented towards consumption of content. Furthermore, another study by Tifferet S, et al. [21] noted that males report a higher sense of social disconnectedness when their online interactions are less emotionally fulfilling

and more superficial. The lack of a significant difference in social interaction anxiety is corroborated by studies such as that of Casale S, et al. [22], which found that both genders experience similar levels of anxiety related to online social interactions, possibly due to common stressors like cyberbullying and the pressure of self-presentation, affecting them equally.

Baloglu M, et al. [23] has done a study entitled "Gender Differences in and the Relationships between Social Anxiety and Problematic Internet Use: Canonical Analysis". And found out that enhanced educational opportunities for women and their increasing role in the society have led women to become more active and thus closed the gap in social anxiety levels between men and women. men showed more difficulties than women in terms of running away from personal problems (ie, social benefit), used the Internet more excessively, and experienced more interpersonal problems with significant others due to Internet use. There is a substantial amount of association between social anxiety and PIU and the association is stronger for men than it is for women.

Variables	Education	N	Mean	Std. Deviation	t-test for Equality of Means(t)	Sig.
Social Disconnectedness	Under graduate	107	43.383	12.3331	3.287	0.001
	Post Graduate	43	36.302	10.8508		
Social Interaction Anxiety	Under graduate	107	31.65	14.012	1.689	0.093
	Post Graduate	43	27.42	13.567		

Table 3: Education-wise Comparison in Social Connectedness and Social Interaction Anxiety.

Results indicate that there exists significant difference in social disconnectedness based on education. There exists no significant difference in social interaction anxiety based on education. The significant difference in social disconnectedness based on education among adolescent social media users can be explained by several factors. Adolescents with lower levels of education may have less access to digital technologies and social media platforms, limiting their ability to engage in online social interactions and maintain connections with peers. This digital divide can contribute to feelings of social disconnectedness, as these individuals may perceive themselves as being left out or unable to participate fully in the social activities that their more educated peers engage in online. Additionally, adolescents with higher levels of education might possess stronger digital literacy skills and a better understanding of how to navigate and utilize social media for meaningful social interactions, thereby experiencing lower levels of social disconnectedness.

Conversely, the lack of a significant difference in social interaction anxiety based on education could be attributed to the universal nature of stressors associated with online interactions. Adolescents across different educational backgrounds may face similar challenges such as cyberbullying, fear of missing out (FOMO), and pressure to conform to social norms online. These factors can contribute to anxiety in social media use regardless of educational attainment, as all adolescents navigate the complexities of virtual social environments and the pressures associated with them. Thus, while education may influence the extent of social disconnectedness among adolescents using social media, it does not necessarily mitigate the common anxieties associated with these platforms. The observed significant difference in social disconnectedness based on education among adolescent social media users can be supported by several studies. Research by Poushter J, et al. [24] highlights disparities in social media use between developed and developing countries, indicating that access to digital

technologies and platforms varies significantly based on educational opportunities and infrastructure. Adolescents with lower educational attainment may face barriers to accessing social media, which can contribute to feelings of social disconnectedness compared to their more educated peers who have greater access and proficiency in using these platforms [25].

Additionally, studies such as "Generation M2" by Rideout VJ, et al. [26] underscore how digital literacy and skills influence adolescents' online behaviors and interactions. Those with higher educational backgrounds are often better equipped to navigate social media for meaningful social interactions, potentially reducing their sense of social disconnectedness. Conversely, the lack of significant difference in social interaction anxiety based on education aligns with findings that all adolescents, regardless of educational background, face similar stressors online, such as cyberbullying and the

pressure to conform to social norms [25]. These factors collectively suggest that while education influences access and proficiency in social media use, it does not necessarily mitigate the universal challenges and anxieties associated with online social interactions among adolescents. Subair S [27] has done a study entitled Social Media: Usage and Influence on Undergraduate Studies in Nigerian Universities. Findings from the study indicated that the undergraduate students surveyed spend an average of 2 to 3 hours daily on social media platforms; which may have an impact of distraction and addiction to social media platforms. Sharifah R, et al. [28] has done a study entitled "The Impact of Social Media among Undergraduate Students: Attitude". The most interesting fact of the study was that the impact of social media influenced the manners of the youngsters. They preferred to express their feelings of dissatisfaction through social media instead of facing the person face to face.

Variables	Religion	N	Mean	Std. Deviation	t-test for Equality of Means(t)	Sig.
Social Disconnectedness	Hindu	86	41.733	13.1913	0.724	0.47
	Christian	60	40.233	10.907		
Social Interaction Anxiety	Hindu	86	30.53	13.693	0.369	0.712
	Christian	60	29.67	14.372		

Table 4: Religion-wise Comparison in Social Connectedness and Social Interaction Anxiety.

The finding that there is no religion-wise difference in social disconnectedness and social interaction anxiety among adolescent social media users can be understood through several scientific reasons: Social media platforms operate on universal principles of social interaction and communication, which may mitigate any specific religious influences on psychological outcomes like social disconnectedness and interaction anxiety [29]. Online interactions often lead to a blending or homogenization of cultural and religious

differences due to the nature of digital communication [30]. This can reduce the impact of religious differences on psychological variables like social interaction anxiety. Adolescence is marked by universal challenges in social development and identity formation, which can overshadow specific religious influences on social behaviours [31,32]. Heavy use of technology, including social media, can create a shared experience among adolescents that supersedes religious differences in influencing social behaviours [33].

Variables	Place of living	N	Mean	Std. Deviation	t-test for Equality of Means(t)	Sig.
Social Disconnectedness	Rural	111	41.207	12.0959	-0.244	0.807
	Urban	39	41.769	13.0816		
Social Interaction Anxiety	Rural	111	28.92	12.615	-2.281	0.024
	Urban	39	34.77	16.701		

Table 5: Locality-wise Comparison in Social Connectedness and Social Interaction Anxiety.

There is no significant difference in social disconnectedness and social interaction anxiety among social media users based on locality .There exists significant difference in social interaction anxiety based on place of living. Adolescents living in living in urban area are having greater social

interaction anxiety with a mean of 34.77 than that of people living in rural area with a mean of 28.92. The finding that there is no significant difference in social disconnectedness and social interaction anxiety among social media users based on locality (urban vs. rural) can be attributed to

several scientific reasons: In today's digital age, access to and use of technology, including social media, is widespread across different localities. Urban and rural areas may have similar levels of access to smartphones, internet connectivity, and social media platforms [34]. Social media platforms operate globally and have similar functionalities regardless of the user's location. This globalization can lead to uniform experiences and behaviors among users irrespective of their geographical location [35]. Both urban and rural adolescents are exposed to similar social influences and pressures, such as peer interactions, societal expectations, and cultural norms, which can contribute similarly to feelings of social disconnectedness and social interaction anxiety [36]. The use of technology mediates social interactions in both urban and rural contexts, potentially buffering or exacerbating social disconnectedness and anxiety in similar ways [37].

Urbanization is one of the main health-relevant changes humanity is facing in our time, and will be facing in the coming decades [38]. Today more than 50 percent of the global population is living in cities; by 2050, this rate will increase to nearly 70 percent with more than 50 percent of the urban population living in cities of over 500 000 inhabitants . With growing urbanization, more and more people are exposed to risk factors originating from the urban social (e.g. poverty) or physical environment (e.g. traffic noise), contributing to increased stress, which in turn is negatively associated with mental health. The risk for some major mental illnesses (e.g. anxiety, psychotic, mood, or addictive disorders) is generally higher in cities. Studies on anxiety disorders (including posttraumatic stress disorder, distress, anger, and paranoia) found higher rates in urban versus rural areas in several Latin American and Asian countries.

Variables	Marital status	N	Mean	Std. Deviation	t-test for Equality of Means(t)	Sig.
Social Disconnectedness	Unmarried	138	41.348	12.3245	-0.019	0.985
	Married	12	41.417	12.7811		
Social Interaction Anxiety	Unmarried	138	31	14.167	1.675	0.096
	Married	12	24	9.789		

Table 6: Marital Status - wise Comparison in Social Connectedness and Social Interaction Anxiety.

The finding that there is no significant difference in social disconnectedness and social interaction anxiety based on marital status can be explained through several scientific reasons: Regardless of marital status, individuals may face similar social pressures, such as expectations from peers, family, and society, which can contribute to feelings of social disconnectedness and social interaction anxiety [39]. Psychological factors such as personality traits, coping mechanisms, and attachment styles can influence social interactions and feelings of disconnectedness, independent of marital status [40]. Other factors, such as employment status, educational background, and community involvement, can play significant roles in social integration and anxiety, often overshadowing the impact of marital status alone [41]. The quality of social relationships, including friendships, family ties, and community connections, can have a stronger influence on feelings of social disconnectedness than marital status alone [42]. Cultural and societal norms regarding social interaction and support systems can mitigate the effects of marital status on social outcomes. In some cultures, extended family and community ties may provide substantial social support regardless of marital status [43]. Life stage transitions, such as career changes, parenthood, or retirement, can impact social interaction anxiety and feelings of disconnectedness more significantly than marital status alone [44,45].

Gender differences in social roles and expectations may influence social interaction anxiety differently across marital status categories, but these differences may not always translate into significant overall differences [46,47]. The composition of one's social network (e.g., size, diversity, closeness of relationships) can affect social disconnectedness and interaction anxiety, potentially overriding the influence of marital status [48]. Increasing reliance on digital communication platforms for social interaction can reduce the impact of marital status on social disconnectedness and interaction anxiety, as online connections can supplement or replace traditional face-to-face interactions [37].

The pervasive use of social media among adolescents has transformed the landscape of social interaction, often leading to unintended consequences. Social platforms such as Facebook, Instagram, and Snapchat cultivate an environment where individuals curate idealized versions of their lives, emphasizing successes while downplaying failures. This phenomenon perpetuates a cycle of comparison among users, particularly impacting younger generations who are the most frequent users of these platforms. Studies highlight that a significant proportion of adolescents prefer digital communication via text and emojis, which, while facilitating immediate messaging, diminishes face-to-face or verbal interactions [49]. Furthermore, constant digital connectivity

through smartphones and earbuds can isolate individuals from their immediate physical surroundings, hindering real-time engagement with peers and family. Despite being physically present, adolescents often rely on virtual connections for social fulfillment, creating online personas that may not accurately reflect their true selves. This shift not only alters social dynamics but also limits opportunities for learning and growth from direct human interactions. As a result, adolescents may perceive a sense of autonomy in their online identities but risk detachment from authentic, real-life experiences crucial for social and emotional development [29,33,37,50].

The increasing integration of social media and technology into everyday life has fundamentally altered how individuals interact with each other and perceive their social environments. However, an imbalance in online engagement has been associated with several adverse outcomes that raise concerns about long-term well-being and social relationships. Research from the University of Pittsburgh has identified a troubling link between social isolation and increased mortality rates, emphasizing that individuals who feel socially disconnected are at higher risk of premature death compared to those who maintain meaningful connections [11]. This sense of isolation can be exacerbated by excessive use of social media, which often substitutes for genuine face-to-face interactions and creates a superficial sense of connection. Moreover, frequent interruptions from notifications and constant engagement with social media platforms contribute to distractions and can lead to addictive behaviours. Studies highlight that these interruptions not only diminish productivity but also impair the ability to fully engage in real-life experiences, thereby diminishing overall quality of life [51]. Furthermore, social media platforms foster a culture of social comparison, where users frequently compare their lives to carefully curated online personas. This behaviour has been linked to increased feelings of inadequacy, depression, and lower self-esteem among users who internalize unrealistic standards portrayed on social media [52,53].

Night-time use of technology, particularly among adolescents, has been associated with heightened anxiety and disrupted sleep patterns. Research from the University of Glasgow underscores that exposure to the blue light emitted by screens suppresses melatonin production, crucial for regulating sleep, further exacerbating these issues [54,55]. Additionally, the phenomenon of "virtual distance" illustrates how excessive digital engagement can emotionally detach individuals from their physical surroundings and impair meaningful face-to-face interactions. This trend not only impacts personal relationships but also hinders the development of essential social skills and emotional intimacy [56]. Despite these challenges, social media and technology offer significant benefits when used appropriately, facilitating connections with peers, access to information, and opportunities for entertainment and learning. Moving forward, it is essential to address privacy concerns and promote safe technology use while educating individuals about the importance of maintaining a healthy balance between online engagement and real-world interactions [57]. By fostering a mindful approach to technology, we can harness its potential to enhance rather than detract from human relationships and overall well-being.

Conclusion

The present study call for the necessity of Educational Programs and Awareness Campaigns to enrich adolescents regarding healthy and effective use of social media. Based on the findings that many adolescents experience feelings of social disconnectedness despite high social media use, educational programs can be designed to enhance digital literacy. These programs can educate adolescents about the potential impacts of online interactions on their social relationships and mental health. Awareness campaigns can also highlight the importance of maintaining balanced digital habits and fostering meaningful offline connections. Schools and community centres can play a crucial role in creating supportive environments that facilitate positive social interactions among adolescents. Programs that encourage face-to-face interactions, peer support groups, and activities that promote teamwork and communication skills can help mitigate the negative effects of social media-induced social disconnectedness. The study underscores the importance of parental and educator guidance in managing adolescents' digital engagement. Parents and educators can be educated about the potential risks associated with excessive social media use and equipped with strategies to support adolescents in developing healthy online behaviours. This includes setting limits on screen time, fostering open communication about digital experiences, and promoting offline activities.

Social media platforms themselves can implement features and initiatives aimed at enhancing users' digital well-being. This can include tools for managing screen time, promoting meaningful interactions, and reducing the emphasis on metrics like likes and comments that may contribute to social comparison and anxiety. Policymakers can use the study's findings to inform policies related to digital literacy education in schools, guidelines for social media companies on user engagement practices, and regulations around advertising and content that may impact adolescents' mental health. Policies can also focus on ensuring equitable access to digital resources and opportunities across different socioeconomic backgrounds. Given the dynamic nature of digital technologies and adolescent development, longitudinal

studies are needed to track the long-term effects of social media use on adolescent social connectedness and mental health. Continued research can provide deeper insights into how evolving digital landscapes shape adolescent behaviours and perceptions over time.

References

1. Boyd DM, Ellison NB (2007) Social Network Sites: Definition, History, and Scholarship. Journal of Computer-Mediated Communication 13(1): 210-230.

2. Steinberg L (2014) Age of Opportunity: Lessons from the New Science of Adolescence. Houghton Mifflin Harcourt.

3. Arnett JJ (2004) Emerging Adulthood: The Winding Road from the Late Teens through the Twenties. Oxford University Press.

4. Boyd DM (2014) It's Complicated: The Social lives of Networked Teens. Yale University Press.

5. Turkle S (2011) Alone Together: Why We Expect More from Technology and Less from Each Other. Basic Books.

6. Chou HTG, Edge N (2012) They are Happier and Having Better Lives than I am: The Impact of Using Facebook on Perceptions of Others' Lives. Cyberpsychology, Behavior, and Social Networking 15(2): 117-121.

7. Vogel EA, Rose JP, Okdie BM, Eckles K, Franz B (2014) Who Compares and Despairs? The Effect of Social Comparison Orientation on Social Media Use and Its Outcomes. Personality and Individual Differences 86: 249-256.

8. Caplan SE (2007) Relations among Loneliness, Social Anxiety, and Problematic Internet Use. CyberPsychology & Behavior 10(2): 234-242.

9. Leary MR (1983) A Brief Version of the Fear of Negative Evaluation Scale. Personality and Social Psychology Bulletin 9(3): 371-375.

10. Mattick RP, Clarke JC (1998) Development and Validation of Measures of Social Phobia Scrutiny Fear and Social Interaction Anxiety. Behav Res Ther 36(4): 455-470.

11. Primack BA, Shensa A, Sidani JE, Whaite EO, Lin LY, et al. (2017) Social Media Use and Perceived Social Isolation among Young Adults in the U.S. American Journal of Preventive Medicine 53(1): 1-8.

12. Keles B, McCrae N, Grealish A (2020) A Systematic Review: The Influence of Social Media on Depression, Anxiety and Psychological Distress in Adolescents. International Journal of Adolescence and Youth 25(1): 79-93.

13. Baumeister RF, Leary MR (1995) The Need to Belong: Desire for Interpersonal Attachments as a Fundamental Human Motivation. Psychological Bulletin 117(3): 497-529.

14. Erwin BA, Turk CL, Heimberg RG, Fresco DM, Ellison NB (2004) Understanding and Treating Social Phobia: A Cognitive-behavioral Approach. CyberPsychology & Behavior 13(1): 210-230.

15. Weidman AC, Cheng JT, Tracy JL (2012) The Psychological Structure of Humility. Journal of Personality and Social Psychology 114(1): 153-178.

16. Best P, Manktelow R, Taylor B (2014) Online Communication, Social Media and Adolescent Wellbeing: A Systematic Narrative Review. Children and Youth Services Review 41: 27-36.

17. Valkenburg PM, Peter J (2007) Online Communication and Adolescent Well-being: Testing the Stimulation versus the Displacement Hypothesis. Journal of Computer-Mediated Communication 12(4): 1169-1182.

18. Kraut R, Patterson M, Lundmark V, Kiesler S, Mukophadhyay T, et al. (2002) Internet Paradox Revisited. Journal of Social Issues 58(1): 49-74.

19. Barker V (2009) Older Adolescents' Motivations for Social Network Site Use: The Influence of Gender, Group Identity, and Collective Self-Esteem. CybepPsychol Behav 12(2): 209-213.

20. Muscanell NL, & Guadagno RE (2012) Make New Friends or Keep the Old: Gender and Personality Differences in Social Networking Use. Computers in Human Behavior 28(1): 107-112.

21. Tifferet S, Vilnai-Yavetz I (2014) Gender differences in Facebook Self-presentation: An International Randomized Study. Computers in Human Behavior 35: 388-399.

22. Casale S, Fioravanti G (2011) Psychopathological Risk in Adolescents Using the Internet: Results from a Sample of Italian High School Students. Computers in Human Behavior 27(4): 1362-1369.

23. Baloglu M, Sagdic A, Kavas AB, Cagcalik O (2018) The Effects of Social Networking Sites on the Academic Performance of University Students in Turkey. Computers in Human Behavior 82: 180-190.

24. Poushter J, Bell J (2018) Internet Connectivity Seen as having Positive Impact on Life in Sub-Saharan Africa.

Pew Research Center.

25. Livingstone S, Haddon L, Gorzig A, Olafsson K (2011) Risks and Safety on the Internet: The Perspective of European Children. Full Findings and Policy Implications from the EU Kids Online Survey of 9-16 Year Olds and their Parents in 25 Countries. London School of Economics and Political Science, EU Kids Online, London, UK.

26. Rideout VJ, Foehr UG, Roberts DF (2010) Generation M²: Media in the Lives of 8 to 18-Years-Olds. Kaiser Family Foundation, Menlo Park, California.

27. Subair S (2019) The Influence of Social Media on Academic Performance of University Students: A Study of Three Universities in Nigeria. Journal of Education and Practice 10(18): 112-121.

28. Sharifah R, Zainab AN, Fariza MR, Nor AY (2015) Social Media Use and Academic Performance among University Students in Malaysia. Asian Social Science 11(18): 119-129.

29. Valkenburg PM, Peter J (2011) Online Communication among Adolescents: An Integrated Model of its Attraction, Opportunities, and Risks. Journal of Adolescent Health 48(2): 121-127.

30. Livingstone S (2008) Taking Risky Opportunities in Youthful Content Creation: Teenagers' Use of Social Networking Sites for Intimacy, Privacy and Self-Expression. New Media & Society 10(3): 393-411.

31. Arnett JJ (1999) Adolescent Storm and Stress, Reconsidered. American Psychologist 54(5): 317-326.

32. Arnett JJ (2000) Emerging Adulthood: A Theory of Development from the Late Teens through the Twenties. Am Psychol 55(5): 469-480.

33. Twenge JM (2017) iGen: Why Today's Super-connected Kids are Growing up Less Rebellious, More Tolerant, Less Happy-and Completely Unprepared for Adulthood-and What that means for the Rest of Us. Atria Books.

34. Cruz-Jesus F, Oliveira T, Bacao F (2018) Digital Divide Across the European Union. Information & Management 49(6): 278-291.

35. Livingstone S, Helsper EJ (2007) Gradations in Digital Inclusion: Children, Young People and the Digital Divide. New Media & Society 9(4): 671-696.

36. Reio TG, Sanders-Reio J (2011) Thinking about Social Interaction Anxiety: Investigating the Role of Social Skills, Social Dominance Orientation, and Social Support. Personality and Individual Differences 50(5): 866-871.

37. Carrier LM, Spradlin A, Bunce JP, Rosen LD (2015) Virtual Empathy: Positive and Negative Impacts of Going Online Upon Empathy in Young Adults. Computers in Human Behavior 52: 39-48.

38. Adli M, Berger M, Brakemeier EL, Engel L, Fingerhut J, et al. (2017) Neurourbanism: Towards a New Discipline. The Lancet Psychiatry 4(3): 183-185.

39. Hawkley LC, Cacioppo JT (2010) Loneliness Matters: A Theoretical and Empirical Review of Consequences and Mechanisms. Annals of Behavioral Medicine 40(2): 218-227.

40. DiTommaso E, Spinner B (1993) The Development and Initial Validation of the Social and Emotional Loneliness Scale for Adults (SELSA). Personality and Individual Differences 14(1): 127-134.

41. Cornwell EY, Waite LJ (2009) Social Disconnectedness, Perceived Isolation, and Health among Older Adults. Journal of Health and Social Behavior 50(1): 31-48.

42. Holt-Lunstad J, Smith TB, Layton JB (2010) Social Relationships and Mortality Risk: A Meta-analytic Review. PLOS Medicine 7(7): e1000316.

43. Uchino BN (2004) Social Support and Physical Health: Understanding the Health Consequences of Relationships. Yale University Press.

44. Pinquart M, Sorensen S (2000) Influences of Socioeconomic Status, Social Network, and Competence on Subjective Well-being in Later Life: A Meta-analysis. Psychol Aging 15(2): 187-224.

45. Pinquart M, Sorensen S (2001) Influences on Loneliness in Older Adults: A Meta-analysis. Basic and Applied Social Psychology 23(4): 245-266.

46. Santini ZI, Jose PE, Cornwell EY, Koyanagi A, Nielsen L, et al. (2020). Social Disconnectedness, Perceived Isolation, and Symptoms of Depression and Anxiety among Older Americans (NSHAP): A Longitudinal Mediation Analysis. The Lancet Public Health 5(1): e62-e70.

47. Santini ZI, Koyanagi A, Tyrovolas S, Mason C, Haro JM (2020) The Association between Social Relationships and Depression: A Systematic Review. Journal of Affective Disorders 175: 53-65.

48. Wrzus C, Hanel M, Wagner J, Neyer FJ (2013) Social Network Changes and Life Events Across the Life Span: A Meta-Analysis. Psychol Bull 139(1): 53-80.

49. Krasnova H, Wenninger H, Widjaja T, Buxmann P (2013) Envy on Facebook: A Hidden Threat to Users'

Life Satisfaction? Wirtschaftsinformatik (WI), Leipzig, Germany, pp: 1-17.

50. Bronfenbrenner U (1977) Toward an Experimental Ecology of Human Development. American Psychologist 32(7): 513-531.

51. Rosen LD, Whaling K, Rab S, Carrier LM, Cheever NA (2013) Is Facebook Creating "iDisorders"? The Link between Clinical Symptoms of Psychiatric Disorders and Technology Use, Attitudes and Anxiety. Computers in Human Behavior 29(3): 1243-1254.

52. Steers M-LN, Wickham RE, Acitelli LK (2014) Seeing Everyone Else's Highlight Reels: How Facebook Usage is Linked to Depressive Symptoms. Journal of Social and Clinical Psychology 33(8): 701-731.

53. Seabrook EM, Kern ML, Rickard NS (2016) Social Networking Sites, Depression, and Anxiety: A Systematic Review. JMIR Mental Health 3(4): e50.

54. Scott H, Biello SM, Woods HC (2016) Social Media Use and Adolescent Sleep Patterns: Cross-sectional Findings from the UK Millennium Cohort Study. BMJ Open 9(9): e011017.

55. Scott H, Biello SM, Woods HC, Smith AJ (2016) Sleep in Adolescents and Young Adults. Current Opinion in Psychology 24: 16-20.

56. Gergen KJ (2002) The Challenge of Absent Presence. In JE Katz, et al. (Eds.), Perpetual Contact: Mobile Communication, Private Talk, Public Performance, Cambridge University Press, pp: 227-241.

57. Wang H (2013) Social Networking Sites and Social Anxiety. Journal of Social and Clinical Psychology 32(3): 235-260.