



Social Isolation in the Digital Age: A Study of Management Undergraduate Students in Chitwan, Nepal

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Abstract

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Social isolation is characterised by a lack of meaningful social connections and a reduced sense of belonging in society. In the digital age, young people increasingly use online platforms for communication, which affects their social well-being. This study explores the relationship between social isolation and digital behavior among undergraduate management students, focusing on social media use, preference for digital communication, engagement in online learning, and screen time. Employing a quantitative research design, data was collected through a structured questionnaire.

The analysis revealed mixed results regarding the impact of digital behaviours on social isolation. While social media use, digital communication preferences, and online learning engagement did not significantly influence social isolation, increased screen time was linked to lower levels of social isolation. This suggests that moderate, intentional digital engagement might enhance social connectedness rather than detract from it. Regression analysis corroborated the finding that most digital engagements do not significantly predict social isolation, whereas screen time notably affects students' social experiences.

The study highlights the importance of balancing online and offline interactions to foster healthy relationships. Participants indicated that structured screen use can positively impact social well-being by facilitating communication and social support. The findings underscore significant implications for educators, policymakers, and mental health professionals in crafting interventions that promote healthy digital practices and strengthen social connections in digital educational settings.

Keywords: *digital behaviours, digital communication, online learning engagement, social isolation, undergraduate students*



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Introduction

Researchers are increasingly examining how screen time affects social well-being, given that young adults use digital devices regularly. Conventional perspectives highlight potential risks: excessive and passive internet use can replace face-to-face interaction, weaken interpersonal relationships, and lead to emotional isolation, which continue to influence academic and popular discourse (Kuss & Gryphon, 2017). However, more recent data present a more nuanced picture of social isolation. Purposeful and contextually controlled screen time can promote social connection in contexts where in-person engagement is scarce. For instance, Anderl, Hofer, and Chen (2024) found that, smartphone screen time was associated with lower perceptions of social connectivity, suggesting that usage patterns and situational factors influence the impact of screen time in certain situations.

Similarly, research on older adults in Japan has shown that regular use of ICT, including voice calls and smartphones, significantly reduces feelings of social isolation and loneliness, highlighting the importance of interaction quality over usage volume. (Huang, Sempala, & Wang, 2025).

With the rapid advancement of technology and the rise in digital connectedness, social isolation has become a significant issue for young adults, particularly higher level education students. This study aimed to assess the prevalence of social isolation among undergraduate management students in Chitwan, Nepal, in this digital era. It examined how digital communication platforms such as social media, smartphones, and online networks affect students' sense of connectivity, mental health, and social interactions. This study's objective is to determine how digital tools affect students' ability to form meaningful, face-to-face relationships in a society that is becoming increasingly digital, and whether they reduce or exacerbate feelings of loneliness. Although undergraduate students in Nepal, particularly in Chitwan, are rapidly embracing digital tools, scholarly assessments frequently mirror the negative assumptions prevalent in foreign literature. The question of whether structured

digital habits might reduce social isolation in South Asian environments is currently untested.

This study examined Chitwan's undergraduate management students to reduce this gap. Screen time, online learning engagement, digital communication preferences, and social media usage are the four facets of digital behaviour were examined. In particular, it looks at how purpose-driven online engagement might reduce social isolation. This study aimed to improve cross-cultural understanding and provide useful information for educators, scholars, and policymakers to promote meaningful digital engagement while preserving face-to-face relationships and cultural values in Nepal (Baral, 2022; Baral & Adhikari, 2024).

Theoretical Framework

Social Capital Theory (SCT) was used to understand the opinion and experience of undergraduate students because it clarifies how social networks provide resources such as emotional support, trust, and a sense of belonging, all of which are essential for understanding the issue of isolation. When analysing social isolation in the digital era, SCT is especially useful. To study about social isolation Putnam (2000) highlights the importance of the kinds and its characteristics of relationships by making a distinction between bonding and bridging. In contrast, scholars such as Bourdieu (1986) viewed social capital as inherent to enduring social interactions. People experience loneliness when using online platforms. According to Bourdieu (1986), Putnam (2000), and Ellison, Steinfield, and Lampe (2007), this theory offers a thorough framework for examining how shifts in the makeup and quality of digital social networks affect social isolation.

According to Shankar (2023), social isolation (SI) is the subjective perception and factual reality that an individual is not engaging with society. Physical isolation, a smaller or less varied social network, and less time spent with friends and family characteristics are defined as social isolation (Donovan & Blazer, 2020). They postulated that the degree of social isolation and integration are determined by four domains: marital status,

frequency of social interaction, involvement in religious activities, and engagement in other community groups, because social isolation is linked to several physical and mental health issues, it is a critical issue that has a significant negative long-term impact on quality of life (Muralikrishnan & Balasundaram, 2025). According to Shannon et al. (2022), adults and young adults who experience social isolation are also more likely to use social media problematically. It is because lonely people may rely more on online interactions to compensate for their lack of in-person acquaintances. When someone uses social media excessively for extended periods, it can lead to social, physical, and mental problems (Aslan & Polat, 2024).

It has been suggested that terms like "problematic social media use" are more accurate ways to characterise to adjust social media behaviours. According to Salari et al. (2025), 18.4% of college students globally suffer from a social media addiction. The percentage was much higher, at 22.8%, according to studies conducted in Asia (Aryal & Rajbhandari, 2024). The main causes of social media addiction include excessive use and a lack of self-control, which is comparable to the behaviour of obsessive shoppers. Even in social situations, loneliness can be detrimental to our mental health (Cacioppo & Hawkley, 2009). Online communication and social media are crucial for students in the digital age, as active engagement improves connectedness and reduces loneliness, whereas passive use of social media can worsen feelings of loneliness (Primack et al., 2017).

Conceptual Framework

Based on this theoretical framework, the study's conceptual framework covers four aspects of digital behaviours: screen time, online learning engagement, digital communication preferences, and social media use, as well as how those aspects relate to social isolation. According to the paradigm, excessive or disengaged use of digital technology can lead to social disengagement, whereas intentional and active use can promote a sense of social inclusion and belonging. This integrated paradigm explains how digital behaviours can either build or damage social

relationships among undergraduate management students, whose everyday routines rely on online studies and digital communication. It offers a basis for examining how contemporary digital behaviours affect students' social relationship and general social well-being.

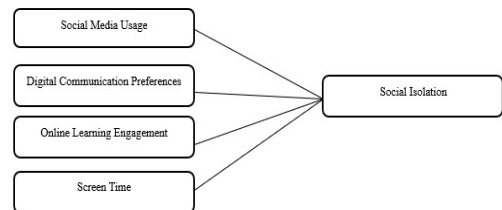


Figure 1. Conceptual Framework

Literature Review

It has been discovered that deliberate, structured digital relationships positively affect social connectivity. Anderl et al. (2024) conducted a 6-month longitudinal study of teens' smartphone use. They found that intentional screen time enhances social relationships and that usage patterns and context significantly influence human well-being. Similarly, Sánchez-Moreno (2025) found that youth and young adults who engage in purposeful online activities have stronger social support networks and experience less loneliness. Additionally, Blumberg et al. (2025) noted that the type and context of digital engagement affect mental health, suggesting that intentional digital activities can reduce loneliness. Furthermore, Qirtas et al. (2023) distinguished between active and passive social media use, demonstrating that active engagement such as conversing or joining online groups reduces feelings of loneliness.

Data from Nepal support the results of Aryal and Rajbhandari's (2024) study who found that controlled online interactions reduce social anxiety and help Nepalese students connect with their classmates. Paudel et al. (2024) highlighted that while excessive smartphone use has a detrimental effect on mood and social well-being, moderate and deliberate screen time fosters social connectivity. Maharjan, Paudel, and Kunwar (2023) found that undergraduate students in Kathmandu who engaged in meaningful digital activities maintain

stronger peer networks, highlighting the need for culturally appropriate involvement. Deliberate and structured digital behaviours can increase social relationships and lessen social isolation, according to the study of Santos et al. (2023); Schmidt-Persson et al. (2024) and Qirtas et al. (2023).

This review is based on the Human-Computer Interaction (HCI) theoretical framework, which maintains that social behaviour and emotional well-being are impacted by the nature and intent of technology-mediated interactions rather than merely usage time (Dix, 2009). Despite a wealth of data, few studies have examined at how deliberate digital participation affects social isolation among Nepali undergraduate students, and little is known about the influence of contextual and cultural factors. The desire to bridge this gap inspired the current study, which aims to assess the role of structured digital interaction in lowering social isolation among Nepali undergraduate students.

Table 1. Summary of the Previous Studies

Authors (Year)	Source of Journal	Objectives	Research Methods	Key Results	Research Gaps
Baumeister and Leary (1995).	<i>Psychological Bulletin</i>	To examine the fundamental need for social bonds and their role in human behaviour.	Literature review, theoretical analysis	Identified the need to belong as a core human motivation and linked social isolation to psychological distress.	There is a lack of empirical studies on social isolation in digital contexts, particularly among students.
Cacioppo and Hawkley (2009).	<i>Trends in Cognitive Sciences</i>	To investigate the impact of perceived social isolation on cognition and health.	Longitudinal study, surveys	Chronic social isolation leads to higher stress, cognitive decline, and mental health issues.	Focus on older adults; there is a need for studies in younger populations (e.g., university students).
Nowland, Neeka and Cacioppo (2018).	<i>Perspectives on Psychological Science</i>	To explore the relationship between social internet use and loneliness.	Survey, structural equation modeling (SEM)	Social internet use can be a double-edged sword: it can both alleviate and exacerbate loneliness, depending on usage patterns.	Limited focus on the quality of online interactions and their emotional effects on students.
Turtle (2011)	<i>Basic Books</i>	To examine how digital technologies change social interactions and perceptions.	Qualitative research, interviews	Digital technology fosters superficial interactions but can lead to more profound social isolation in the long term.	More empirical evidence is needed on the role of social media in students' socialisation.
Vallenburg and Peter (2013).	<i>Current Directions in Psychological Science</i>	To investigate the social consequences of internet use on adolescents.	Survey, longitudinal study	Social media use can lead to loneliness due to social comparisons and increased anxiety about self-image.	There is a need for studies focusing on university-aged populations in non-Western contexts.
Cacioppo and Cacioppo (2014).	<i>Social and Personality Psychology Compass</i>	To explore the effects of perceived social isolation on physical and mental health.	Cross-sectional survey, experimental design	Perceived isolation is more damaging than actual isolation and is linked to adverse health outcomes.	There is a lack of research on how digital communication affects young adults, specifically in academic settings.
Primack et al. (2017).	<i>American Journal of Preventive Medicine</i>	To examine how social media use relates to feelings of loneliness.	Cross-sectional study, surveys	Higher social media use is associated with greater loneliness, particularly among students.	More research is needed on specific digital platforms and their varying effects on student isolation.
D'Souza, Hall, and Anderson (2018).	<i>Journal of Social and Personal Relationships</i>	To assess the impact of digital communication on loneliness among young adults.	Longitudinal survey, structural equation modeling	Frequent digital communication does not necessarily reduce loneliness and may contribute to feelings of alienation.	Exploration of the role of different types of digital communication (e.g., video calls vs. texting) in student loneliness.

Przepiorka and Kowalska (2019).	<i>Computers in Human Behavior</i>	To investigate the effect of online communication on social connectedness.	Mixed-methods, surveys, interviews	Online communication can provide a sense of connection, but it often falls short of satisfying deeper emotional needs.	Further research is needed on cultural differences in digital communication and the impact of social isolation on these differences.
Lee (2020)	<i>Journal of Youth Studies</i>	To analyse the role of social media in students' social integration and isolation.	Survey, regression analysis	Social media use is correlated with both positive and negative outcomes for students' mental health and social integration.	Lack of qualitative data on students' emotional experiences with social media.
Wang, Li, and Zhang (2020).	<i>Cyberpsychology, Behavior, and Social Networking</i>	To study the effect of digital social networking on loneliness and well-being.	Survey, statistical analysis	Strong correlation between excessive use of social media and increased loneliness among university students.	There is a need for longitudinal studies to assess the long-term effects of digital engagement on students.
Liu and Liao (2021).	<i>Asian Journal of Social Psychology</i>	To examine the relationship between digital technology use and social isolation among university students.	Cross-sectional survey	Excessive digital media use can lead to increased social isolation, particularly among students who have limited face-to-face interaction.	More research is needed on specific types of digital media (e.g., gaming, social apps) and their differential impacts.
Luong et al. (2022).	<i>Journal of Communication and Media Studies</i>	To investigate the impact of social media on students' emotional well-being and sense of connectedness.	Qualitative interviews, content analysis	Social media exacerbates feelings of loneliness by presenting curated, idealized content, which leads to negative social comparison.	Need to focus on students in diverse cultural contexts and how social media affects them differently.
Smith and Duggan (2023).	<i>Journal of Adolescence</i>	To understand the role of digital communication tools in mitigating or increasing isolation among college students.	Survey, focus groups	Digital tools help maintain connections, but they can also increase loneliness when they replace face-to-face interaction.	Further exploration of the balance between online and offline interactions in relation to students' social well-being.

Summary of the Results

Students' emotional well-being and digital communication are complexly connected, according to research on social isolation in the digital era. Social media and texting are examples of digital technologies that provide efficient means of contact, but their effects on loneliness and isolation are not always clear. According to research, the need to fit in is a fundamental human need, and loneliness real or imagined can have negative effects on mental health, leading to stress, cognitive decline, and other issues (Baumeister & Leary, 1995; Cacioppo & Hawkey, 2009). While technology frequently results in "connections that fail to fulfil deeper emotional needs," meaningful relationships through digital communication can reduce feelings of loneliness (Turkle, 2011).

Social media can foster a sense of community, but it can also make you feel even more alone due to social comparison and concerns about what other people think of us (Valkenburg & Peter, 2013), because it substitutes in-person connections with more shallow, carefully curated online information, excessive social media use, particularly among students, is highly associated with feelings of loneliness and isolation (Primack et al., 2017; Cacioppo & Cacioppo, 2014). Furthermore, actual isolation can be less painful than perceived isolation, which is the sensation of being cut off despite having digital contacts (Cacioppo & Cacioppo, 2014). Finally, the results highlight that the quality of interaction whether digital or in-person is more important than the volume of online involvement. The profound, emotionally fulfilling ties that form in person cannot be replaced by digital tools, even though they can help students stay in touch. This emphasises the need for further research into ways to promote real-world online

interactions and help students manage their online and offline communication to reduce feelings of loneliness.

Gaps in Literature

Since most empirical studies focus on older adults, the literature review highlights important gaps in our understanding of digital communication and student social isolation. It emphasises the need for more research involving younger demographics, particularly college students. Although Baumeister and Leary (1995) and Cacioppo and Hawkley (2009) have highlighted about the fundamental human need for social connection, their conclusions are less applicable in Nepal because they fail to consider for cultural contexts (Valkenburg & Peter, 2013; Luong et al., 2022). Furthermore, although the impact of digital communication dynamics on social relationships is acknowledged, little research has examined how those dynamics manifest in educational settings (Cacioppo & Cacioppo, 2014). The prevalent reliance on quantitative analysis and cross-sectional surveys limits our understanding of causal association and emotional complexity. Longitudinal and mixed-method studies are clearly needed to record students' emotional experiences with digital devices and track shifts in connection and loneliness over time (Wang et al., 2020; Lee, 2020). Since they can significantly impact on perceptions of relationship, the emotional components of online engagement, such as authenticity and empathy, insisted on conducting further research (Nowland et al., 2018). Additionally, the relationship between social media use and loneliness has not been thoroughly examined in light of psychological moderators such as personality factors, social anxiety, and self-esteem. The investigation of cross-cultural variations in digital communication and their emotional consequences is severely lacking, according to recent research (Przepiorka & Kowalska, 2019; Luong et al., 2022). Lastly, there is little empirical data, despite a recent study emphasising the importance of striking a balance between online and offline relationships for social well-being (Smith & Duggan, 2023).

Methodology

This study employed a quantitative research design to investigate the relationship between undergraduate students' digital behaviours and social isolation, as this methodology enables systematic measurement of variables and statistical analysis of patterns and correlations.

The Survey Design

Two hundred and sixty-one ($n = 261$) undergraduate BBA management students from the Chitwan and Nawalparasi educational institutions comprised the target group. Purposeful sampling was our choice since it was straightforward and appropriate for the study (Adhikari, 2022). During our internship at an Audit business, we made friends with a Boston International College student. We first sent this acquaintance the structured questionnaire via Google Forms, and they helped us send it to their college groups. To obtain more responses, we also invited our college's juniors, seniors, and classmates to participate. People were asked how much time they spend in front of a screen, how they like to communicate with others online, how much time they spend on social media, and how lonely they feel. We examined the data we had collected using SPSS software to determine the significance and strength of the relationships between the independent factors and social isolation. The result presents the descriptive statistics for the independent variables: Social Media Usage (SU), Digital Communication Preference (DC), Online Learning Engagement (OL), and Screen Time (ST).

The binary logistic regression analysis was conducted to examine the influence of social media usage (SU), digital communication preference (DC), online learning engagement (OL), and screen time (ST) on social isolation among undergraduate students. The results indicated that SU, DC, and OL did not have a statistically significant effect on social isolation ($p > 0.05$).



Results and Discussion

Table 2: Reliability Analysis

Variables	Number of Items	Cronbach's Alpha	Reliability Decision
Social Media Usage	6	.911	Reliable
Digital Communication Preference	6	.888	Reliable
Online Learning Engagement	6	.883	Reliable
Screen Time	6	.894	Reliable

The reliability analysis results indicate that all four variables exhibit high internal consistency. Social media usage, measured with six items, has a Cronbach's Alpha of 0.911, indicating excellent reliability. Digital Communication Preference (0.888), Online Learning Engagement (0.883), and Screen Time (0.894) also exceed the acceptable threshold of 0.7, indicating that those items consistently measure their intended constructs, which results suggest that the \ questionnaire is reliable, and the data accurately reflect participants' responses. Overall, the instruments are stable and suitable for analysing the relationship between digital behaviour and social isolation among undergraduate students (see Table 2).

Table 3. Demographic Profile of Respondents

Demographics		Number of Respondents	Percentages of Respondents
Gender	Male	154	59.0%
	Female	107	41.0%
Age	18-20	48	18.4%
	21-23	91	34.9%
	24-25	122	46.7%
Location	Urban	58	22.2%
	Suburban	190	72.8%
	Rural	13	5.0%
Income Level	Below 20000	75	28.7%
	21000-25000	45	17.2%
	26000-30000	37	14.2%
	Above 30000	104	39.8%
Do you use social media?	Yes	253	96.9%
	No	8	3.1%

A total of 261 undergraduate management students were included in the study; 59.0% were male,

41.0% were female, 46.7% were 24–25 years old, 34.9% were 21–23 years old, and 18.4% were 18–20 years old; 72.8% were from suburban areas, 22.2% from urban areas, and 5.0% from rural areas; 39.8% earned more than NPR 30,000, 28.7% earned less than NPR 20,000, 17.2% earned between NPR 21,000–25,000, and 14.2% earned between NPR 26,000–30,000; and 96.9% said they use social media, demonstrating that social media is a significant part of the digital and social lives of management students in Chitwan (see Table 3).

Table 4: Descriptive Statistics

	Number of Respondents	Mean	Std. Deviation
SU	261	3.5019	.91070
DC	261	3.6060	.83554
OL	261	3.6475	.78164
ST	261	3.7465	.79925

The results indicate that respondents indicated moderate to high levels of engagement with all digital activities (mean values ranged from 3.50 [SU] to 3.75 [ST], with standard deviations [0.78–0.91] reflecting moderate variability among respondents). In summary, the findings reveal a pattern of frequent digital activity among management undergraduate students in Chitwan (see Table 4).

Table 5: Correlation Analysis

		SU	DC	OL	ST
SU	Pearson Correlation	1	.897**	.702**	.601**
	Sig. (2-tailed)		0.000	0.000	0.000
DC	Pearson Correlation	.897**	1	.746**	.675**
	Sig. (2-tailed)	0.000		0.000	0.000
OL	Pearson Correlation	.702**	.746**	1	.841**
	Sig. (2-tailed)	0.000	0.000		0.000
ST	Pearson Correlation	.601**	.675**	.841**	1
	Sig. (2-tailed)	0.000	0.000	0.000	

The Pearson correlation analysis revealed that Social Media Usage (SU), Digital Communication Preference (DC), Online Learning Engagement (OL), and Screen Time (ST) are all positively and significantly correlated at the 0.01 level. SU showed a strong positive relationship with DC and moderate positive relationships with OL and ST. Similarly, DC was strongly correlated with

OL and moderately with ST, whereas OL was strongly positively correlated with ST, which indicate that higher engagement with social media and digital communication is associated with greater online learning participation and longer screen time among respondents, highlighting the interconnected nature of digital behaviours (see Table 5)

Table 6: Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	140.486 ^a	.243	.435

The model summary shows that the logistic regression has a -2 Log Likelihood value of 140.486, with Cox & Snell $R^2 = 0.243$ and Nagelkerke $R^2 = 0.435$, indicating that the model explains about 24% to 44% of the variance in social isolation, which reflects a moderate explanatory power (see Table 6).

Table 7: Binary Logistic Regression

Predictor		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 ^a	SU	-.116	.593	.038	1	.845	.890
	DC	-.664	.656	1.02	1	.311	.515
	OL	-.255	.524	.236	1	.627	.775
	ST	-.984	.426	5.34	1	.021	.374
	Constant	4.92	.923	28.41	1	.000	137.31

The results show a negative association between screen time (ST) and students' social isolation ($B = -0.984 < 0$, $p = 0.021$, $\text{Exp}(B) = 0.374 < 1$), which suggests that an increase in screen time is associated with a lower likelihood of social isolation among the respondents (see Table 7).

Summary of the Results

A study of 261 management undergraduate students in Chitwan found that the measurements of Social Media Usage (SU), Digital Communication Preference (DC), Online Learning Engagement (OL), and Screen Time (ST) were all very reliable, with all variables having a Cronbach's Alpha of 0.7 and higher. The demographics show that most of the respondents were men (59%) and between the

ages of 24 and 25 (46.7%). Most of them (96.9%) used social media. Descriptive statistics showed that people were moderately to very engaged in digital activities, with average scores ranging from 3.50 to 3.75. Correlation analysis indicated substantial positive correlations among all digital behaviours, suggesting that greater participation in social media and digital communication is associated with increased online learning and screen time. Binary logistic regression revealed that only screen time showed a significant negative correlation with social isolation, indicating that higher screen time is associated with a lower probability of social isolation among students.

Discussion

The findings of this study indicate that among undergraduate management students, digital behaviours and social isolation are intricately interconnected. Unlike previous studies (Primack et al., 2017; Turkle, 2011) that associate increased screen time with heightened emotional detachment and loneliness, this research demonstrates a significant correlation between elevated screen time and diminished social isolation, which suggests that screen time, particularly for communication and collaboration, may reflect deliberate social engagement rather than disengagement in Nepali context, which is associated with recent studies indicating that the quality and intention of digital engagement are more critical predictors of social well-being than mere usage frequency (Anderl et al., 2024; Nagata et al., 2025). Nonetheless, no substantial correlation was identified between social isolation and social media usage, digital communication preferences, or online learning engagement. This indicates that those digital behaviours have become prevalent among students in their social and academic spheres, exerting a diminished influence on their sense of connectedness. This finding corroborates previous assertions that while social media facilitates opportunities for engagement, it does not necessarily enhance emotional intimacy unless the interactions are authentic and significant (D'Souza et al., 2018; Lee, 2020).

In this context, increased screen time appears to enhance, rather than hinder, social connectivity,

challenging the prevailing notion that digital technologies inherently diminish face-to-face interaction. These findings illustrate the impact of cultural and contextual factors, particularly collectivist ideologies and community-oriented social norms, on how Nepali students engage with technology to maintain social support and relationships (Valkenburg & Peter, 2013; Luong et al., 2022; Baral, 2022). The findings provide partial support for Social Isolation Theory (Weiss, 1973), which asserts that relational and structured digital activities can mitigate social isolation by enhancing social networks. This aligns with Cacioppo and Cacioppo's (2014), which show that perceived isolation adversely impacts well-being more than actual solitude. Nevertheless, the cross-sectional design of this study constrains causal interpretation, leaving ambiguous whether students who experience diminished isolation inherently communicate more via screens or if such communication intentionally mitigates isolation. Furthermore, the emphasis on management students limits the applicability to other demographics, underscoring the necessity for forthcoming mixed-method and longitudinal studies to investigate the impact of diverse digital behaviours on social relationships over time (Nowland et al., 2018; Wang et al., 2020). The findings underscore the importance of fostering mindfulness and substantive online relationships to enhance social well-being in the digital era. In general, the results suggest that being involved with technology isn't always bad; it depends on how it's used.

Conclusion

This study examined the association between social isolation and digital behaviours among undergraduate management students in Chitwan, Nepal, including screen time, online learning engagement, digital communication choices, and social media use. The findings showed that screen time was negatively correlated with social isolation, even though social media use, online learning engagement, and digital communication preferences did not significantly affect on social isolation. This suggests that intentional, interactive screen use can improve students'

sense of connectedness. The prevalent narrative in international literature, which generally depicts digital participation as a source of separation, is challenged by this discovery (Primack et al., 2017; Turkle, 2011). Rather, it endorses more contemporary viewpoints that claim that the social and emotional consequences of digital involvement are determined by its quality and intention (Anderl et al., 2024; Nagata et al., 2025).

The findings highlight how digital technology can lessen feelings of loneliness when used responsibly and in relationships, especially in educational environments where online contacts have become essential for communication and learning. According to Valkenburg and Peter (2013), Nguyen and Lee (2022), and Baral (2022), the study also emphasises the cultural and contextual uniqueness of Nepali students, whose collectivist values and community-oriented behaviours can foster more supportive digital interactions than those seen in Western contexts. The results show that structured and meaningful online connections can lessen perceived isolation, partially confirming Social Isolation Theory (Weiss, 1973). This supports Cacioppo and Cacioppo's (2014) highlights that perceived isolation is more harmful than actual solitude.

However, the study's shortcomings such as its cross-sectional design, dependence on self-reported data, and concentration on a single academic field indicate that more longitudinal and mixed-method studies are necessary to fully comprehend how digital behaviours affect social connectedness over time (Nowland et al., 2018; Wang et al., 2020). Generalisability would also be strengthened by additional research in various demographic and cultural contexts. Finally, this study adds to the growing body of evidence showing that social well-being is not always negatively affected by digital activity. Rather, its influence depends on how students use technology for relationships, collaboration, and communication. To ensure that technology serves as a bridge rather than a barrier to meaningful human connection, educators and legislators should support digital literacy initiatives that promote deliberate, emotionally authentic, and balanced use of digital platforms.

Recommendations

Educational institutions should encourage meaningful use of digital platforms for communication and teamwork, rather than passive browsing or comparison. They should incorporate digital literacy programs to enhance students' online habits and emotional awareness. A balance between online and offline interactions is crucial for improving in-person relationships. Promoting mindful screen time allows for relational engagement, which can reduce social isolation. Educators must create engaging online learning environments to foster communication and community, and colleges should provide counselling and support to address issues such as loneliness and internet dependence.

References

- Adhikari, B. P. (2022). *An investigation of the impact of the key components of the induction programme on the new teacher retention in Chitwan district, Nepal* (Doctoral dissertation, Itä-Suomen yliopisto).
- Anderl, C., Hofer, M. K., & Chen, F. S. (2024). Directly measured smartphone screen time predicts well-being and feelings of social connectedness. *Journal of Social and Personal Relationships*, 41(5), 1073–1090. <https://doi.org/10.1177/02654075231158300>
- Aryal, N., & Rajbhandari, A. (2024). Social media use and anxiety levels among school adolescents: A cross-sectional study in Kathmandu, Nepal. *BMJ Public Health*, 2(1), e000615. <https://doi.org/10.1136/bmjph-2023-000615>
- Aslan, I., & Polat, H. (2024). Investigating social media addiction and the impact of social media addiction, loneliness, depression, life satisfaction, and problem-solving skills on academic self-efficacy and academic success among university students. *Frontiers in Public Health*, 12. <https://doi.org/10.3389/fpubh.2024.1359691>
- Baral, R. P. (2022). The digital divide in online learning: A case study of university students in Nepal. *Prithvi Academic Journal*, 88–99. <https://doi.org/10.3126/paj.v5i1.45043>
- Baral, B., & Adhikari, B. P. (2024). Exploring the Intersection of Multicultural Society and Chicken Tikka Masala in the UK. *OCEM Journal of Management, Technology & Social Sciences*, 3(1), 35–48.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117(3), 497–529. <https://doi.org/10.4324/9781351153683-3>
- Blumberg, M. A., Shipman, A., Olyha, L., Gironda, S. C., & Weiner, J. L. (2025). Is the Relationship Between Adolescent Social Isolation and Anxiety-Like Behaviors Altered by Microglia Ablation in Female Long Evans Rats?. *Brain and Behavior*, 15(3). <https://doi.org/10.1002/brb3.70369>
- Bourdieu, P. (1986). *The forms of capital*. In J. G. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241–258). USA, Greenwood Press.
- Cacioppo, J. T., & Cacioppo, S. (2014). Social relationships and health: The toxic effects of perceived social isolation. *Social and Personality Psychology Compass*, 8(2), 58–72.
- Cacioppo, J. T., & Hawkley, L. C. (2009). Perceived social isolation and cognition. *Trends in Cognitive Sciences*, 13(10), 447–454. <https://doi.org/10.1016/j.tics.2009.06.005>
- Choi, E. J., Christiaans, E., & Duerden, E. G. (2025). Screen time woes: Social media posting, scrolling, externalizing behaviors, and anxiety in adolescents. *Computers in Human Behavior*, 170. <https://doi.org/10.1016/j.chb.2025.108688>
- D'Souza, M. S., Hall, C. A., & Anderson, C. A. (2018). The impact of digital communication on loneliness among young adults. *Journal of Social and Personal Relationships*, 35(7), 870–890.
- Dix, A. (2009). *Human-computer interaction*. In *Encyclopedia of Database Systems* (pp. 1327–1331). Germany, Springer.
- Donovan, N. J., & Blazer, D. (2020). Social

- isolation and loneliness in older adults: Review and commentary of a national academies report. *The American Journal of Geriatric Psychiatry*, 28(12), 1233–1244. <https://doi.org/10.1016/j.jagp.2020.08.005>
- Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The benefits of Facebook “friends”: Social capital and college students’ use of online social network sites. *Journal of Computer-Mediated Communication*, 12(4), 1143–1168. <https://doi.org/10.1111/j.1083-6101.2007.00367.x>
- Huang, J., Ssempala, R., & Wang, Z. (2025). The role of ICT use in reducing social isolation among older adults during the COVID-19 pandemic. *BMC Public Health*, 25(1), 2284. <https://doi.org/10.1186/s12889-025-23449>
- Kuss, D. J., & Griffiths, M. D. (2017). Social networking sites and addiction: Ten lessons learned. *International journal of environmental research and public health*, 14(3), 311. <https://doi.org/10.3390/ijerph14030311>
- Lee, J. (2020). The role of social media in students’ social integration and isolation. *Journal of Youth Studies*, 25(1), 65–80.
- Liu, J., & Liao, Q. (2021). Digital media use and social isolation: A study of university students. *Asian Journal of Social Psychology*, 21(2), 100–115.
- Luong, D. H., Nguyen, X. A., Ngo, T. T., Tran, M. N., & Nguyen, H. L. (2023). Social media in general education: A bibliometric analysis of Web of Science from 2005-2021. *Journal of Scientometric Research*, 12(3), 680-690.
- Maharjan, K., Paudel, R., & Kunwar, K. (2023). Screen-based media device use, its associated factors and sleep outcomes among undergraduate health students studying in colleges of Kathmandu valley, Nepal. *medRxiv*, 2023-09. <https://doi.org/10.1101/2023.09.18.23295755>
- Muralikrishnan, N., & Balasundaram, S. (2025). Epidemiology of loneliness & social isolation, an emerging public mental health predicament in India: a scoping review. *Discover Mental Health*, 5(1), 3. <https://doi.org/10.1007/s44192-025-00132-6>
- Nagata, J. M., Huang, O., Hur, J. O., Li, E. J., Helmer, C. K., Weinstein, E., & Moreno, M. A. (2025). Health benefits of social media use in adolescents and young adults. *Current Pediatrics Reports*, 13(1), 22. <https://doi.org/10.1007/s40124-025-00357-7>
- Nowland, R., Necka, E. A., & Cacioppo, J. T. (2018). Loneliness and social internet use. *Perspectives on Psychological Science*, 13(1), 70–87.
- Paudel, K., Shah, S., Khanal, P., Bhattarai, M., Gautam, K., Bhusal, S., Bhandari, P., Pandey, A., Niroula, S., Adhikari, T. B., & Shrestha, R. (2024). Association of sleep quality, smartphone addiction, and depressive symptoms among undergraduate medical students in Nepal. *Discover Psychology*, 4(1), 125. <https://doi.org/10.1007/s44202-024-00246-y>
- Primack, B. A., Shensa, A., Sidani, J. E., Whaite, E. O., Lin, L. Y., Rosen, D., Colditz, J. B., Radovic, A., & Miller, E. (2017). Social media use and perceived social isolation among young adults in the U.S. *American Journal of Preventive Medicine*, 53(1), 1–8. <https://doi.org/10.1016/j.amepre.2017.01.010>
- Przepiorka, A., & Kowalska, M. (2019). The impact of online communication on social connectedness. *Computers in Human Behavior*, 92, 212–219.
- Putnam, R. D. (2000). Bowling alone: the collapse and revival of American community. *Choice Reviews Online*, 38(04), 38–245438–2454. <https://doi.org/10.5860/choice.38-2454>
- Qirtas, M., Zafeiridi, E., Bantry White, E., & Pesch, D. (2023). The relationship between loneliness and depression among college students. *DIGITAL HEALTH*, 9. <https://doi.org/10.1177/20552076231211104>
- Salari, N., Zarei, H., Hosseini-Far, A., Rasoulpoor, S., Shohaimi, S., & Mohammadi,

- M. (2025). The global prevalence of social media addiction among university students. *Journal of Public Health*, 33(1), 223–236.
- Sánchez-Moreno, E., Gallardo-Peralta, L. P., Rodríguez-Rodríguez, V., de Gea Grela, P., & García Agüña, S. (2025). Unravelling the complexity of the relationship between social support sources and loneliness: A mixed-methods study with older adults. *PloS one*, 20(1). <https://doi.org/10.1371/journal.pone.0316751>
- Santos, R. M. S., Mendes, C. G., Sen Bressani, G. Y., de Alcantara Ventura, S., de Almeida Nogueira, Y. J., de Miranda, D. M., & Romano-Silva, M. A. (2023). The associations between screen time and mental health in adolescents: a systematic review. *BMC psychology*, 11(1), 127.
- Schmidt-Persson, J., Rasmussen, M. G. B., Sørensen, S. O., Mortensen, S. R., Olesen, L. G., Brage, S., Kristensen, P. L., Bilenberg, N., & Grøntved, A. (2024). Screen media use and mental health of children and adolescents. *JAMA Network Open*, 7(7). <https://doi.org/10.1001/jamanetworkopen.2024.19881>
- Shankar, R. (2023). Loneliness, social isolation, and their effects on physical and mental health. *Missouri Medicine*, 120(2), 106. <https://pmc.ncbi.nlm.nih.gov/articles/PMC10121112/>
- Shannon, H., Bush, K., Villeneuve, P., Hellemans, K., & Guimond, S. (2022). Problematic social media use in adolescents and young adults. *JMIR Mental Health*, 9(4). <https://doi.org/10.2196/33450>
- Smith, J. L., & Duggan, S. (2023). Digital tools and student isolation. *Journal of Adolescence*, 80, 93–105.
- Turkle, S. (2011). *Alone together: Why we expect more from technology and less from each other*. USA, Basic Books.
- Valkenburg, P. M., & Peter, J. (2013). Social consequences of the internet for adolescents. *Current Directions in Psychological Science*, 22(2), 87–92.
- Wang, S., Li, X., & Zhang, Y. (2020). The impact of digital social networking on loneliness among university students. *Cyberpsychology, Behavior, and Social Networking*, 23(9), 664–671.
- Weiss, R. S. (1973). *Loneliness: The experience of emotional and social isolation*. USA, MIT Press.
- Zablotsky, B., Ng, A. E., Black, L. I., Haile, G., Bose, J., Jones, J. R., & Blumberg, S. J. (2025). Associations between screen time use and health outcomes among US teenagers. *Preventing Chronic Disease*, 22, E38. <https://doi.org/10.5888/pcd22.240537>