

# Trapped in the Feed: Social Media Addiction, Problematic Internet Use and Sense of Belonging among College Students

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## Abstract

In the twenty-first century, social media platforms have transformed communication, entertainment, and information dissemination, creating virtual communities that facilitate instant connectivity and real-time engagement. Despite these benefits, there are growing concerns about social media addiction and problematic internet use, particularly its negative association to personal relationships and social interactions. The current study addresses the gap in understanding the association of online engagement with sense of belonging of college students. The study utilized a correlational research design using stratified random sampling to gather responses from 464 college students across disciplines in an institution. Data was gathered using three questionnaires from previously validated studies and were analyzed using descriptive statistics and correlational analysis. The study found that moderate social media addiction and problematic internet use among students negatively impact their sense of belongingness. Significant negative correlations were identified, with higher online engagement linked to decreased feelings of community within the social environment. These findings highlight the need for balanced online and offline interactions to enhance students' social integration and overall well-being.

**Keywords:** belongingness, social media, social media addiction, problematic internet use



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## INTRODUCTION

**Background of the Study.** In the modern era, social media has become an integral part of daily life, profoundly influencing communication, entertainment, and information dissemination (Velasco, 2020; De Guzman, 2022). Social Media platforms have reshaped how individuals connect and interact, creating virtual communities that transcend geographical boundaries. This transformation has allowed people to maintain relationships and share experiences regardless of physical distance, significantly altering traditional social dynamics (Tandoc & Takahashi, 2017; Sandel, 2019; Soriano & Cabañes, 2020). The pervasive nature of social media has facilitated unprecedented access to global networks, enabling users to engage with diverse cultures and ideas. Accordingly, a digital culture has emerged that prioritizes instant connectivity

and real-time engagement, often redefining social norms and behaviours (Casilli, 2017; Dumpit & Fernandez, 2017).

Despite the benefits of enhanced connectivity, the rise of social media and internet use has also raised concerns about its impact on personal relationships and social interactions (Mendoza et al., 2017). *Social media addiction* is a behavioral addiction that is characterized by an unhealthy obsession with social media platforms. People with social media addiction feel a constant urge to check their social media accounts. This behavior can lead to spending excessive time on social media and neglecting other important aspects of life (Sahin, 2018). The phenomenon of social media addiction and problematic internet use has been linked to various negative outcomes, including decreased face-to-face interactions, weakened interpersonal relationships, and a sense of

social isolation (Reyes et al., 2018; Ruckwongpatr et al., 2022). For students at a critical developmental stage, excessive online engagement can interfere with their ability to form meaningful connections within their academic and social environments (Datu et al., 2018). These disruptions can lead to difficulties building a supportive community, potentially impacting academic performance and overall well-being.

Social media addiction becomes problematic when it interferes with students' ability to form and maintain meaningful offline relationships (Reyes et al., 2022). This problem is particularly relevant because while social media platforms can provide a sense of belonging online, they may simultaneously erode offline social connections, leading to a paradox where increased online engagement results in decreased real-world belongingness (Jiao et al., 2017; Domingo et al., 2021). Understanding these correlations is essential for educators to develop strategies that promote healthier social media use and enhance student well-being.

Exploring the relationship between social media addiction, problematic internet use, and student belongingness is paramount for addressing contemporary educational challenges (Dumpit & Fernandez, 2017). The existing gap in knowledge pertains to how excessive online behaviors detract from students' feelings of inclusion and connection within their physical and social communities rather than the belongingness sought online. This study aims to fill this gap by empirically examining how these online habits impact real-world social integration and connection. By statistically analyzing these variables, the research aims to identify patterns that could inform the development of targeted interventions to mitigate the negative effects of excessive social media use.

The study examines the relationships between social media addiction, problematic internet use, and students' sense of belonging within their academic communities. It aims to provide a comprehensive understanding of how digital behaviors influence students' social integration.

**Theoretical Framework.** The study anchors on Maslow's Social Needs Theory (1943), which posits that human behavior is motivated by the need to belong and form social bonds. This theory provides a foundational understanding of why students may be drawn to social media, as their intrinsic desire for connection and acceptance can drive excessive engagement with online platforms, potentially leading to addiction and problematic internet use. The theory is used to explore the extent to which social media fulfils students' needs for belonging and how this satisfaction impacts their overall sense of community and inclusion within their social environments.

Moreover, the study also relies on the Uses and Gratifications Theory by Ruggiero (2000), which explores how individuals actively seek out media to satisfy various psychological and social needs. This theory underpins the study by examining the motivations behind students' social media use and the gratifications they derive from it. It is pertinent to understanding the nuances of social media addiction and problematic internet use, as it highlights the different purposes social media serves, from information seeking to social interaction and entertainment.

Lastly, the study incorporates the Self-Determination Theory (Deci & Ryan, 2012), which emphasizes the role of intrinsic and extrinsic motivations in human behavior, focusing on the fulfilment of basic psychological needs. This theory is crucial for analyzing how social media use impacts students' psychological well-being and their sense of belonging. By leveraging the Self-Determination Theory, the study assesses whether social media addiction and problematic internet use undermine students' intrinsic motivations and needs, particularly relatedness, which is closely linked to the sense of belonging. The theory helps elucidate the psychological mechanisms through which excessive internet use might disrupt students' social and academic lives.

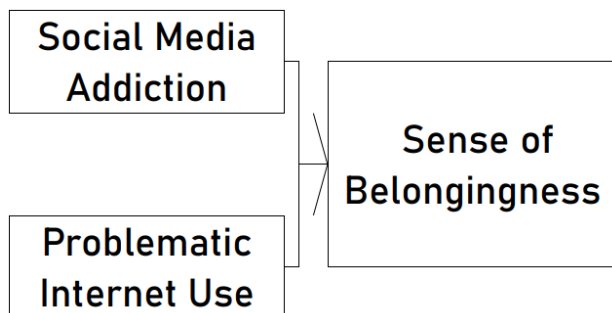


Figure 1  
*Schematic diagram of the study*

The schematic diagram, as presented in Figure 1, connects the relationship between social media addiction and problematic internet use towards belongingness. A strong sense of connection and belonging can significantly influence social media habits (Liu et al., 2018). Users who perceive social media as a source of validation and meaningful connection may be more likely to develop habitual use. Conversely, research suggests a detrimental relationship between problematic social media use and belongingness (Kircaburun et al., 2019). Excessive social media use could negatively impact a user's sense of belonging rather than enhancing it. Studies also indicate that some individuals struggle with self-control regarding social media, leading to problematic use (Kuss & Griffiths, 2017). The diagram highlights the complex interplay between social media use and its impact on a user's sense of belonging.

**Statement of the Problem.** This study delves into the intricate dynamics between social media usage and its social ramifications, particularly among students. Specifically, the study seeks to answer the following questions:

1. What is the level of social media addiction of the students?
2. What is the level of problematic internet use of the students?
3. What is the level of belongingness among the students?
4. Is there a significant relationship between the student's social media addiction and problematic internet towards the students' sense of belongingness?

## LITERATURES

**Social Media and Internet Use.** Social media has fundamentally altered contemporary life, significantly impacting communication, entertainment, and information dissemination (Velasco, 2020; De Guzman, 2022). These platforms have reshaped social interactions by fostering virtual communities that transcend geographical limitations, allowing individuals to maintain relationships and share experiences irrespective of physical distance (Tandoc & Takahashi, 2017; Sandel, 2019; Soriano & Cabañes, 2020). This shift has enabled unprecedented global connectivity, exposing users to diverse cultures and ideas and leading to a digital culture that values instant connectivity and real-time engagement (Casilli, 2017; Dumpit & Fernandez, 2017).

Despite these benefits, the increasing use of social media and the internet has raised concerns about their impact on personal relationships and social interactions (Mendoza et al., 2017). Research indicates a correlation between social media addiction and problematic internet use with adverse outcomes such as decreased face-to-face interactions, weakened interpersonal relationships, and social isolation (Reyes et al., 2018; Ruckwongpatr et al., 2022). Excessive online engagement can hinder the formation of meaningful connections within academic and social environments, complicating the development of supportive communities and potentially affecting academic performance and overall well-being (Datu et al., 2018).

**Sense of Belongingness.** A strong sense of belonging is vital for social well-being and mental health (Holliman et al., 2021). This feeling of being an integral part of a group or community is crucial for positive self-concept and emotional stability (Van Den Eijnden et al., 2016). Individuals who feel they belong are likelier to engage positively with their environment, exhibit higher motivation, and achieve better academic and professional outcomes. Conversely, a lack of belonging can lead to feelings of isolation, depression, and anxiety, negatively impacting overall well-being.

and performance (Kuss & Griffiths, 2017; Liu et al., 2018).

A sense of belonging significantly influences students' experiences and success in academic settings. Students connected to their peers and institutions are more likely to actively participate in academic and extracurricular activities actively, fostering a supportive and collaborative learning environment (Datu et al., 2018; Chatterjee, 2020). This sense of community enhances learning and helps develop resilience and coping strategies during challenging times (Chen & Li, 2017).

**Social Media and Internet Usage on Belongingness.** The relationship between social media/internet use and belongingness is complex and multifaceted. Positively, social media can connect individuals with like-minded people, share experiences, and find support, potentially strengthening their sense of belonging (Barbosa et al., 2020). However, excessive use can lead to social isolation, anxiety, and depression, diminishing that sense of belonging (Van Den Eijnden et al., 2016; Whaite et al., 2018).

Current research has explored how social media can facilitate communication and relationships but also contributes to "phubbing" (ignoring someone in person for one's phone), weakening interpersonal bonds (Jiao et al., 2017; Choi & Noh, 2019; Chatterjee, 2020). Problematic internet use, especially when excessive, hinders meaningful offline interactions, harming the sense of belonging (Datu et al., 2018; Perna, 2020; Reyes et al., 2022). This overdependence on virtual interaction can reduce feelings of peer integration and acceptance (Dumpit & Fernandez, 2017; Ruckwongpatr et al., 2022).

The existing literature provides a substantial understanding of social media's impact on personal relationships and social dynamics. However, there is a gap in understanding the effects of social media addiction and problematic internet use on adolescents' sense of belonging in offline settings. Addressing this gap is essential as it could inform the

development of strategies to mitigate negative impacts and enhance adolescents' social integration and well-being.

## METHODOLOGY

**Research Design.** The study employed a correlational design (Cohen et al., 2013) to explore the relationships between the variables. The design allowed the researchers to describe the current state of social media addiction and problematic internet use among students and to statistically examine their correlation with students' sense of belongingness. The method allowed the study to identify and quantify the strength and direction of these relationships, providing valuable insights.

**Sample and Sampling Technique.** The study used a stratified random sampling technique (Koyuncu & Kadilar, 2009) to select its participants, grouping students according to their courses. The method ensures that all courses are proportionally represented in the sample, providing a comprehensive view of the student body.

Table 1  
*Demographic profile of the respondents (N=464)*

Demographic Profile		f	%
Sex	Male	158	34.1
	Female	306	65.9
Year Level	First Year	211	45.5
	Second Year	104	22.4
	Third Year	89	19.2
	Fourth Year	60	12.9
Age	18-20	254	54.7
	21-23	179	38.6
	24-26	21	4.5
	27 and Older	10	2.2
Course	AB	30	6.5
	BEEd	20	4.3
	BSEd	60	12.9
	BSA	19	4.1
	BSBA/BSOA	46	9.9
	BSCE	70	15.1
	BSIT	26	5.6
	BSN/BSM	193	41.6

The method enhances the representativeness of the sample and increases the precision of the results, reducing sampling bias and ensuring that the findings are more generalizable to the entire college population.

The sample consisted, as presented in Table 1, of 464 respondents, ranging from first year to fourth-year college students aged 18 to 27 and older, from various courses at an institution. This diverse age range and inclusion of different academic years ensure a broad representation of the student population, allowing for a more thorough examination of the relationships between social media addiction, problematic internet use, and a sense of belongingness.

**Research Instrument.** The study utilized three (3) main questionnaires to measure social media addiction, problematic internet use, and sense of belongingness among students. Each questionnaire covered distinct variables to provide a comprehensive assessment of the respective constructs. The Social Media Addiction Questionnaire, adopted from Sahin (2018), evaluated four variables: virtual tolerance, which measures the need for increased time on social media to achieve satisfaction; virtual communication, assessing reliance on social media for interactions; virtual problem, identifying issues arising from excessive use, such as neglecting responsibilities and experiencing negative emotions when offline; and virtual information, measuring the dependency on social media for information. This questionnaire uses a five-point Likert scale and has a Cronbach's alpha of 0.852, indicating high reliability.

The Problematic Internet Use Questionnaire, adopted from Demetrovics et al. (2008), focuses on three (3) variables: obsession, which measures preoccupation with internet use; neglect, which assesses the interference of internet use with daily responsibilities; and control disorder, which examines difficulties in controlling internet usage. These variables collectively provide a detailed assessment of problematic internet behaviors and their impact on students' lives. The instrument also uses a

five-point Likert scale and has a Cronbach's alpha of 0.791, demonstrating good reliability.

The General Belongingness Scale, developed by Malone et al. (2012), measures students' sense of belongingness through items capturing the feeling of acceptance and value within a community. This scale uses a five-point Likert scale and has a Cronbach's alpha of 0.788, indicating reliable consistency. Together, these instruments offer reliable and valid measures for examining the relationships between social media addiction, problematic internet use, and students' sense of belongingness, facilitating a thorough evaluation of these constructs within the study.

**Data Gathering.** The researchers obtained the student registry from the institution's registrar's office. This registry provided a comprehensive list of potential participants, ensuring that the sample was representative of the entire student body. Once the list was secured, the researchers employed stratified random sampling to select respondents, ensuring proportional representation from various courses. The study adhered to all necessary ethical standards. The researchers designed an online survey platform (Van Selm & Jankowski, 2006) to facilitate the data collection process.

Participants were invited to take part in the study via email, which included a detailed description of the study's purpose, the voluntary nature of participation, and assurances regarding data privacy and confidentiality. Informed consent was obtained before participants could proceed with the survey. The survey was accessible for two months, allowing ample time for students to complete it at their convenience. The researchers implemented robust data security measures to protect the participants' information, adhering to data privacy laws and institutional guidelines. Throughout the data collection period, regular reminders were sent to increase response rates, and technical support was provided to address any issues participants might encounter.



Analysis of Data. As presented in Table 2 below, the Shapiro-Wilk test was performed for the social media addiction ( $W=0.995$ ,  $O=0.123$ ), problematic internet use ( $W=0.976$ ,  $O=0.069$ ), and general belongingness scale ( $W=0.993$ ,  $p=0.071$ ) and did not show evidence of non-normality. Based on the result, the researchers opted to use the parametric test.

Table 2  
*Test for Normality (Shapiro-Wilk)*

Variable	W	p
Social Media Addiction	0.995	0.123
Problematic Internet Use	0.976	0.069
General Belongingness Scale	0.993	0.071

Based on the result of Table 2, the study employed descriptive statistics to summarize the baseline characteristics of the participants, providing an overview of the demographic and behavioral data. Measures such as means and standard deviations were used to describe the levels of social media addiction, problematic internet use, and sense of belongingness among the students. To identify the relationships between these variables, the study utilized correlation and regression analyses. Correlation analysis was used to determine the strength and direction of the relationships between pairs of variables, while regression analysis helped to identify the predictive power of social media addiction and problematic internet use on students' sense of belongingness.

**Limitation of the Study.** The study is limited to a single institution in Malaybalay City, Bukidnon and focuses exclusively on its college student population. This narrow scope may not capture the full spectrum of social media addiction, problematic internet use, and sense of belongingness as experienced by students in different educational settings or cultural contexts. Consequently, the findings may need more generalizability to other institutions or populations (Akanle et al., 2020). Future research could consider including multiple institutions and diverse demographics to

validate and extend the results, providing a more comprehensive understanding of these phenomena.

## RESULTS

The study analyzed the relationship between social media addiction, problematic internet use, and students' sense of belonging. Data were collected on these three variables, allowing for an examination of how social media addiction and problematic internet use might influence students' belongingness.

Table 3 presents the mean score, standard deviation, and qualitative interpretation on the level of social media addiction of the respondents.

Table 3  
*Level of social media addiction of college students.*

Variable	Mean	Std. Dev.	Qual. Int
Virtual Tolerance	3.19	0.856	Moderate Virtual Tolerance
Virtual Communication	3.14	0.867	Moderate Virtual Communication
Virtual Problem	3.34	0.852	Moderate Virtual Problem
Virtual Information	3.28	0.730	Moderate Virtual Information
Social Media Addiction	3.24	0.671	Moderate Social Media Addiction

Table 3 presents the results regarding the respondents' levels of social media addiction across different variables. The mean score for virtual tolerance was 3.19 ( $SD=0.856$ ), indicating a moderate level of tolerance to virtual activities. Similarly, virtual communication had a mean score of 3.14 ( $SD=0.867$ ), reflecting a moderate reliance on social media for communication. The mean score for virtual problems was slightly higher at 3.34 ( $SD=0.852$ ), suggesting a moderate degree of issues arising from social media use. Virtual information had a mean score of 3.28 ( $SD=0.730$ ), also indicating a moderate level of dependence on social media for information. Overall, the respondents' level of social media addiction was moderate, with a mean score of 3.24 ( $SD=0.671$ ). These results highlight a consistent, moderate engagement

with social media across various dimensions among the respondents.

Table 4 presents the mean score, standard deviation, and qualitative interpretation on the level of problematic internet use of the respondents.

Table 4  
*Level of problematic internet use by college students*

Variable	Mean	Std. Dev.	Qual. Int
Obsession	3.18	0.804	Moderate Obsession
Neglect	2.87	0.927	Moderate Neglect
Control Disorder	3.41	0.656	High Control Disorder
Problematic Internet Use	3.15	0.625	Moderate Problematic Internet Use

Table 4 illustrates the respondents' levels of problematic internet use. The mean score for obsession was 3.18 (SD=0.804), indicating a moderate level of preoccupation with internet use. Neglect had a mean score of 2.87 (SD=0.927), which also falls within the moderate range, showing some interference with daily responsibilities due to internet use. Control disorder had a mean score of 3.41 (SD=0.656), suggesting a high level of difficulty in regulating internet use. Overall, the problematic internet use level was moderate, with a mean score of 3.15 (SD=0.625). These findings indicate that while respondents exhibit moderate problematic behaviors related to internet use, the control disorder aspect is particularly pronounced.

Table 5 presents the mean score, standard deviation, and qualitative interpretation on the sense of belongingness of the respondents.

Table 5  
*Sense of belongingness of the college students*

Variable	Mean	Std. Dev.	Qual. Int
Belongingness	2.43	0.413	Low Sense of Belongingness

Table 5 presents the respondents' sense of belongingness, with a mean score of 2.43 (SD=0.413), indicating a low level of belongingness among the respondents. This result suggests that the majority of

respondents feel they need a stronger sense of connection or acceptance within their academic community. The low sense of belongingness could be a significant area of concern, potentially impacting respondents' overall well-being and academic performance.

Table 6 presents the extent of association between the respondents' level of social media addiction and sense of belongingness.

Table 6  
*Relationship between social media addiction and sense of belongingness*

Variable	Mean	r	Ext. of Rel.	p
Social Media Addiction	3.24	-0.515	Moderate	0.000**
Sense of Belongingness	2.43		Negative Correlation	

NOTE: \*\*p<0.01

Table 6 reveals the results of the Pearson correlation analysis between social media addiction and sense of belongingness. The analysis showed a negative correlation between the two variables,  $r(461) = -0.515$ ,  $p = 0.000$ . This significant negative correlation indicates that higher levels of social media addiction are associated with lower levels of sense of belongingness among the respondents. The strong inverse relationship suggests that excessive social media use may detract from respondents' feelings of community and inclusion in their academic environment.

Table 7  
*Relationship between problematic internet use and sense of belongingness*

Variable	Mean	r	Ext. of Rel.	p
Problematic Internet Use	3.15	-0.532	Moderate Negative Correlation	0.000**
Sense of Belongingness	2.43			

NOTE: \*\*p<0.01

Table 7 presents the Pearson correlation analysis between problematic internet use and a sense of belongingness. The results indicated a negative correlation between these variables,  $r(461) = -0.532$ ,  $p = 0.000$ . This significant negative correlation demonstrates that higher levels of problematic internet use are linked to lower

levels of sense of belongingness. The findings suggest that respondents who exhibit more problematic internet behaviors tend to feel less connected and integrated into their college community, highlighting the adverse impact of excessive internet use on social integration.

## DISCUSSION

**Social Media Addiction.** The respondents' levels of social media addiction across various dimensions revealed a moderate engagement with social media activities. The mean scores, as presented in Table 3, indicate moderate levels of reliance and issues associated with social media use. The overall mean score for social media addiction suggests a consistently moderate level of social media addiction among the respondents. These findings highlight the prevalence of moderate social media use and suggest that respondents engage with social media in a balanced manner, without extreme addiction. The consistent moderate scores across different dimensions of social media use indicate a uniform pattern of engagement rather than extremes of addiction or negligible use.

The moderate levels of social media addiction suggests that individuals engage in social media to fulfil inherent social needs such as belongingness and validation (Reyes et al., 2018). The moderate scores indicate that students are moderately engaged in these online activities to satisfy their social needs but may also be experiencing some negative consequences (Dumpit & Fernandez, 2017; Reyes et al., 2022). Moreover, individuals actively seek out media to satisfy specific needs. Moderate engagement suggests that students are using social media to fulfil communication, information, and social interaction needs, but this usage is balanced and reasonable (Tandoc & Takahashi, 2017; Soriano & Cabañes, 2020; Velasco, 2020).

A moderate level of social media addiction implies that while students are using social media to feel connected and informed, their usage does not necessarily hinder their autonomy or competence significantly (Roberts

& David, 2020). However, the presence of moderate virtual problems indicates some level of disruption in their lives (Mendoza et al., 2017; Ruckwongpatr et al., 2022). Overall, these moderate levels of social media addiction suggest that while students are using social media to meet various needs, they are also experiencing some negative impacts, which the study needs to address to understand how these affect their overall well-being (Van Den Eijnden et al., 2016; Jiao et al., 2017; Reer et al., 2019).

**Problematic Internet Use.** The respondents' levels of problematic internet use, as presented in Table 4, indicated moderate overall problematic behaviors. The mean scores for obsession and neglect suggest moderate preoccupation and interference with daily responsibilities due to internet use. However, the mean score for control disorder is notably higher, highlighting a significant difficulty in regulating internet use. The overall mean score for problematic internet use suggests moderate issues, but the pronounced difficulty in control disorder is a novel finding. The result indicates that while respondents generally exhibit moderate problematic behaviors, the challenge of controlling internet use is particularly intense, suggesting a need for targeted interventions in this specific area.

The respondents' levels of problematic internet use highlight significant concerns. The moderate obsession with the internet may be driven by the need for social interaction and connection, indicating a reliance on online activities to fulfil these needs (Domingo et al., 2021). Students may be seeking the Internet for information, entertainment, and social interaction, which explains the moderate to high levels of engagement and control disorder (Dumpit & Fernandez, 2017; Reyes et al., 2018; Velasco, 2020).

A high score in control disorder signifies a substantial challenge to students' autonomy as they struggle to regulate their internet use (Ruckwongpatr et al., 2022). This lack of control can undermine their sense of competence and autonomy, leading to potential academic and



personal issues (Kuss & Griffiths, 2017; Datu et al., 2018). The moderate levels of obsession and neglect further indicate that while students are moderately engaged online, it does interfere with their daily responsibilities, impacting their ability to manage tasks effectively (Chatterjee, 2020).

**Sense of Belongingness.** The respondents' sense of belongingness, as presented in Table 5, indicates a low level of belonging. This result suggests that most respondents need more connection or acceptance within their social and academic communities. The low sense of belongingness is a significant concern, as it can negatively impact overall well-being and academic performance. The respondents identified a low sense of belongingness as a prevalent issue, emphasizing the need for initiatives to strengthen community ties and support systems within the academic environment.

The low sense of belongingness among the respondents posits that a strong sense of belongingness is crucial for individuals' social well-being and mental health (Holliman et al., 2021). The low scores suggest that students feel they need to be more adequately connected and accepted within their academic community, which could adversely affect their overall well-being (Van Den Eijnden et al., 2016). Students who are not finding adequate social support and interaction within their immediate environment may turn to alternative sources, such as social media or the internet, to fulfil these needs (Chen & Li, 2017). A low sense of belonging indicates that this need needs to be met, potentially impacting students' motivation and engagement in academic activities (Kuss & Griffiths, 2017; Liu et al., 2018). This lack of connection could lead to feelings of isolation and decreased academic performance (Datu et al., 2018; Chatterjee, 2020).

**Relationship between Social Media Addiction and Problematic Internet Use on the Sense of Belongingness.** The correlation analysis between social media addiction and sense of belongingness, as presented in Table 6, shows a significant negative correlation. The result

indicates that higher levels of social media addiction are associated with lower levels of belongingness among the respondents. The strong inverse relationship suggests that excessive social media use may detract from feelings of community and inclusion in the academic environment. The statistically significant evidence of how social media addiction can negatively impact a sense of belonging highlights the importance of addressing social media use to foster better social integration among students.

The negative correlation between social media addiction and a sense of belongingness underscores a significant inverse relationship. The result suggests that higher levels of social media addiction might be compensating for unmet social needs within the physical environment, leading to a decreased sense of belongingness (Bais & Reyes, 2020; Reyes et al., 2022). Students might be turning to social media to fulfil their needs for interaction, validation, and information, which they need to receive from their academic community (Perna, 2020; Domingo et al., 2021). As students become more reliant on virtual interactions, their ability to form meaningful, in-person connections within their academic environment diminishes (Reer et al., 2019). This reliance can decrease their sense of belongingness, as they feel they need to be more integrated and accepted by their peers (Jiao et al., 2017).

Furthermore, the correlation analysis between problematic internet use and a sense of belongingness, as presented in Table 7, indicates a significant negative correlation. The result shows that higher levels of problematic internet use are linked to lower levels of belongingness. The findings suggest that respondents with more problematic internet behaviors feel less connected and integrated into their community. The strong evidence of the adverse impact of excessive internet use on social integration underscores the critical need for strategies to manage internet use to enhance students' sense of belonging and community in academic settings.

The result indicates that students with higher problematic internet use might be using the internet as a substitute for real-life social interactions, leading to a decreased sense of connection within their academic community (Datu et al., 2018; Perna, 2020; Reyes et al., 2022). The behavior of students seeking out the Internet to meet their needs for social interaction, entertainment, and information, which may need to be adequately met in their offline lives (Dumpit & Fernandez, 2017). The struggle with control disorder and neglect related to internet use reduces their ability to engage meaningfully with their academic community, leading to a lower sense of belongingness (Chatterjee, 2020; Ruckwongpatr et al., 2022).

Based on the findings, it is recommended that interventions could be developed to help students manage their social media and internet use more effectively. Programs that promote balanced online and offline interactions could enhance students' sense of belongingness within their social community. Additionally, future studies could explore these relationships in multiple institutions to improve the generalizability of the results and consider longitudinal designs to assess the long-term impact of social media and internet use on students' sense of belongingness and well-being.

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## REFERENCES

- Akanle, O., Ademuson, A. O., & Shittu, O. S. (2020). *Scope and limitation of study in social research*. In: Contemporary issues in social research. Ibadan: Ibadan University Press. 105-114.
- Bais, D. M., & Reyes, M. E. S. (2020). Psychological predictors of Facebook addiction tendencies among Filipino millennials in Metro Manila. *IAFOR Journal of Psychology & the Behavioral Sciences*, 5(2), 37-56.
- Barbosa, B., Chkoniya, V., Simoes, D., Filipe, S., and Santos, C. A. (2020). Always connected: generation Y smartphone use and social capital. *Rev. Ibérica Sist. Tecnol. Inf. E* 35, 152-166.
- Casilli, A. A. (2017). Global digital culture| Digital labor studies go global: Toward a digital decolonial turn. *International Journal of Communication*, 11(2017), 3934-3954.
- Chatterjee, S. (2020). Antecedents of phubbing: from technological and psychological perspectives. *J. Syst. Inf. Technol.* 22, 161-118. <https://doi.org/10.1108/JSIT-05-2019-0089>
- Chen, H.T., and Li, X. (2017). The contribution of mobile social media to social capital and psychological well-being: examining the role of communicative use, friending, and self-disclosure. *Comput. Hum. Behav.* 75, 958-965. <https://doi.org/10.1016/j.chb.2017.06.011>
- Choi, D.H., & Noh, G.Y. (2019). The influence of social media use on attitude toward suicide through psychological well-being, social isolation, and social support. *Inf. Commun. Soc.* 23, 1-17. <https://doi.org/10.1080/1369118X.2019.1574860>
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2013). *Applied multiple regression/correlation analysis for the behavioral sciences*. Routledge. <https://doi.org/10.4324/9780203774441>
- Datu, J. A. D., Yang, W., Valdez, J. P. M., & Chu, S. K. W. (2018). Is facebook involvement associated with academic engagement among Filipino university students? A cross-sectional study. *Computers & Education*, 125, 246-253. <https://doi.org/10.1016/j.compedu.2018.06.010>
- De Guzman, E. V. (2022). Social media: the 'form of life' of the post-millennial generation in

- the Philippines. *International Journal of Humanities, Philosophy and Language*, 5(19), 24-34. <https://doi.org/10.35631/IJHPL.519003>
- Deci, E. L., & Ryan, R. M. (2012). *Self-determination theory*. In Handbook of theories of social psychology, 1(20), 416-436.
- Demetrovics, Z., Szeredi, B. & Rózsa, S. The three-factor model of Internet addiction: The development of the Problematic Internet Use Questionnaire. *Behavior Research Methods*, 40, 563-574 (2008). <https://doi.org/10.3758/BRM.40.2.563>
- Domingo, R. L. A. A., Fullante, J. J. N., Lara, A. X. V., & Lim, N. R. E. (2021). *Internet Addiction Among Students of a Private University in Manila, Philippines: Positional Variations and Psychosocial Wellbeing Outcomes*. In: 3rd DLSU Senior High School Research Congress. 220-223
- Dumpit, D. Z., & Fernandez, C. J. (2017). Analysis of the use of social media in Higher Education Institutions (HEIs) using the Technology Acceptance Model. *International Journal of Educational Technology in Higher Education*, 14, 1-16. <https://doi.org/10.1186/s41239-017-0045-2>
- Holliman, A. J., Waldeck, D., Jay, B., Murphy, S., Atkinson, E., Collie, R. J., et al. (2021). Adaptability and social support: examining links with psychological wellbeing among UK students and non-students. *Fron. Psychol.* 12:636520. <https://doi.org/10.3389/fpsyg.2021.636520>
- Jiao, Y., Jo, M.S., & Sarigöllü, E. (2017). Social value and content value in social media: two paths to psychological well-being. *J. Org. Comput. Electr. Commer.* 27, 3-24. <https://doi.org/10.1080/10919392.2016.1264762>
- Kircaburun, K., Kokkinos, C. M., Demetrovics, Z., Király, O., Griffiths, M. D., & Çolak, T. S. (2019). Problematic online behaviors among adolescents and emerging adults: Associations between cyberbullying perpetration, problematic social media use, and psychosocial factors. *International Journal of Mental Health and Addiction*, 17, 891-908. <https://doi.org/10.1007/s11469-018-9894-8>
- Koyuncu, N., & Kadilar, C. (2009). Ratio and product estimators in stratified random sampling. *Journal of statistical planning and inference*, 139(8), 2552-2558. <https://doi.org/10.1016/j.jspi.2008.11.009>
- 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>
- Leong, L.Y., Hew, T.S., Ooi, K.B., Lee, V.H., & Hew, J.J. (2019). A hybrid SEM-neutral network analysis of social media addiction. *Expert Syst. Appl.* 133, 296-316. <https://doi.org/10.1016/j.eswa.2019.05.024>
- Liu, Q., Shao, Z., & Fan, W. (2018). The impact of users' sense of belonging on social media habit formation: Empirical evidence from social networking and microblogging websites in China. *International Journal of Information Management*, 43, 209-223 <https://doi.org/10.1016/j.ijinfomgt.2018.08.005>
- Malone, G. P., Pillow, D. R., & Osman, A. (2012). The General Belongingness Scale (GBS): Assessing achieved belongingness. *Personality and Individual Differences*, 52(3), 311-316. <https://doi.org/10.1016/j.paid.2011.10.027>
- Maslow, A. H. (1943). A theory of human motivation. *Psychological review*, 50(4), 370-396. <https://doi.org/10.1037/h0054346>
- Mendoza, N. B., Mordeno, I. G., Latkin, C. A., & Hall, B. J. (2017). Evidence of the paradoxical effect of social network support: A study among Filipino domestic workers in China. *Psychiatry research*, 255, 263-271. <https://doi.org/10.1016/j.psychres.2017.05.037>

- Perna, L. K. (2020). *Need to belong, fear of missing out, and social media use: Predictors of perceived social rejection* (Doctoral dissertation, Walden University).
- Reer, F., Tang, W. Y., & Quandt, T. (2019). Psychosocial well-being and social media engagement: the mediating roles of social comparison orientation and fear of missing out. *New Media Soc.* 21, 1486–1505. <https://doi.org/10.1177/1461444818823719>
- Reyes, M. E. S., Marasigan, J. P., Gonzales, H. J. Q., Hernandez, K. L. M., Medios, M. A. O., & Cayubit, R. F. O. (2018). Fear of Missing Out and its Link with Social Media and Problematic Internet Use Among Filipinos. *North American Journal of Psychology*, 20(3), 503–518.
- Reyes, M. E. S., Morales, B. C. C., Javier, G. E., Ng, R. A. E., & Zsila, Á. (2022). Social networking use across gender: its association with social connectedness and happiness amidst the COVID-19 pandemic. *Journal of Technology in Behavioral Science*, 7(3), 396–405. <https://doi.org/10.1007/s41347-022-00262-6>
- Roberts, J. A., & David, M. E. (2020). The social media party: fear of missing out (FoMO), social media intensity, connection, and well-being. *Int. J. Hum. Comput. Interact.* 36, 386–392. <https://doi.org/10.1080/10447318.2019.1646517>
- Ruckwongpatr, K., Chirawat, P., Ghavifekr, S., Gan, W. Y., Tung, S. E., Nurmala, I., ... & Lin, C. Y. (2022). Problematic internet use (PIU) in youth: a brief literature review of selected topics. *Current Opinion in Behavioral Sciences*, 46, 101150. <https://doi.org/10.1016/j.cobeha.2022.101150>
- Ruggiero, T. E. (2000). Uses and gratifications theory in the 21st century. *Mass communication & society*, 3(1), 3–37. [https://doi.org/10.1207/S15327825MCS0301\\_02](https://doi.org/10.1207/S15327825MCS0301_02)
- Sahin, C. (2018). Social media addiction scale-student form: the reliability and validity study. *Turkish Online Journal of Educational Technology*, 17(1), 169–182.
- Sandel, T. L. (2019). *Social media, culture, and communication*. In Oxford research encyclopedia of communication. <https://doi.org/10.1093/acrefore/9780190228613.013.758>
- Soriano, C. R. R., & Cabañes, J. V. A. (2020). Entrepreneurial Solidarities: Social Media Collectives and Filipino Digital Platform Workers. *Social Media + Society*, 6(2). <https://doi.org/10.1177/2056305120926484>
- Swar, B., & Hameed, T. (2017). *Fear of missing out, social media engagement, smartphone addiction, and distraction: moderating role of self-help mobile apps-based interventions in the youth*, Paper presented at the 10th International Conference on Health Informatics (Porto).
- Tandoc Jr, E. C., & Takahashi, B. (2017). Log in if you survived: Collective coping on social media in the aftermath of Typhoon Haiyan in the Philippines. *New Media & Society*, 19(11), 1778–1793. <https://doi.org/10.1177/1461444816642755>
- Van Den Eijnden, R. J., Lemmens, J. S., & Valkenburg, P. M. (2016). The social media disorder scale. *Comput. Hum. Behav.* 61, 478–487. <https://doi.org/10.1016/j.chb.2016.03.038>
- Van Selm, M., & Jankowski, N. W. (2006). Conducting online surveys. *Quality and quantity*, 40, 435–456. <https://doi.org/10.1007/s11135-005-8081-8>
- Velasco, J. C. (2020). Millennials as digital natives: examining the social media activities of the Philippine Y-generation. *Pertanika Journal of Social Sciences and Humanities*, 28(3), 1939–1957.
- Whaite, E. O., Shensa, A., Sidani, J. E., Colditz, J. B., & Primack, B. A. (2018). Social media use, personality characteristics, and social isolation among young adults in the United

States. *Pers. Indiv. Differ.* 124, 45–50.  
<https://doi.org/10.1016/j.paid.2017.10.030>