



Dr. Hayam Qayyoom¹ & Dr. Qurat-Ul-Ain Malik²

¹Snr. Assistant Professor, Department of Media Studies, Bahria University, Islamabad. Email: drhqpk@gmail.com, hayam.buic@bahria.edu.pk

²Assistant Professor, Department of Media and Communication Studies, International Islamic University, Islamabad

KEYWORDS	ABSTRACT
Active Smartphone Use, Gen Z, Passive Smartphone Use, Screen Time, Social Withdrawal, Uses and Gratification Theory	This study examined how active and passive smartphone use relates to social withdrawal among Generation Z, a cohort that has grown up surrounded by digital technology and for whom smartphones serve as a primary medium of social interaction. Uses and Gratifications Approach was utilized as the theoretical foundation for the research, as it contributes to the understanding of media usage patterns. Based on quantitative survey methodology, the instrument employed for the research was a structured questionnaire. The population of the study was university students, and data were gathered from three universities in Islamabad, Pakistan. The final sample size of the study was 152 respondents, of whom 44% were male while 56% were female. Pearson correlation and regression analyses were used to test relationships among the variables. Findings of the Pearson correlation revealed that there were significant positive correlations between social withdrawal and both active and passive smartphone use. The findings revealed significant positive correlations between social withdrawal and active smartphone use ($r = .666$) and passive smartphone use ($r = .667$). The regression model explained 57.4% of the variance in social withdrawal ($R^2 = .574$). Active smartphone use emerged as a statistically significant positive predictor of social withdrawal ($B = .512$, $p = .02$), whereas passive smartphone use showed a positive but statistically insignificant contribution ($B = .327$, $p = .220$) when both predictors were considered simultaneously. The study underscores the need to encourage balanced smartphone use and face-to-face interaction among young people, and it contributes to understanding the social consequences of digital engagement among Generation Z in Pakistani universities.
ARTICLE HISTORY Date of Submission: 14-09-2026 Date of Acceptance: 16-10-2026 Date of Publication: 19-10-2026	 2026 Journal of Social Sciences Development
Corresponding Author	Dr. Hayam Qayyoom
Email:	drhqpk@gmail.com , hayam.buic@bahria.edu.pk
DOI	https://doi.org/10.59075/jssd.v5i8.392
Volume/Issue	5(8), 2026, 408-423

Introduction

Gen Z is digital and uses smartphones for academic tasks, entertainment, social networking, and instant communication. With the constant development of mobile apps, the amount of time young people spend on the screen each day has drastically increased. Hence, it has become a matter of concern in the context of their social conduct and emotional health (Journals, 2026). Nevertheless, heavy smartphone usage has also been linked with less face-to-face communication and a decrease in interpersonal relationships between peers and family members (Tammisalo, 2022). Researchers claim that long-lasting smartphone use can eliminate physical interaction by gradually introducing social interactions with virtual ones, where people dwell on social networks more than on real social interactions (Tintori,2024). The use of smartphones in active ways such as messaging, video calling, commenting, and content creation can potentially have a positive impact on relationship maintenance and digital social support (Clayborne,2025). However, the growing popularity of passive smartphone use has been one of the primary concerns in the last several years (Marin,2023). Passive usage simply entails scrolling through social media feeds, viewing short videos, and other forms of content online but without interacting directly (Kornienko, 2025). Research indicates that passive use of smartphones tends to elevate social comparison, loneliness, as well as emotional dissatisfaction among young people (Wenz,2035). Social capital withdrawal is decreased interaction with others, absence of social events, and non-involvement of emotions in the interaction with reality (Dickel,2021). Scientists also indicate that overindulgence in smartphone screen time can lead to behavioral isolation and loss of confidence in communication among Gen Z users (Sadauskas,2026).

Moreover, the growing popularity of social media content fed by algorithms promotes extended passive consumption, which could be detrimental to socialization and emotional connectedness (Barzeva,2019). The study examined active and passive smartphone use among 451 young people (mean age is 21) during COVID-19 (Marin-Dragu et al.,2023). Another study related to 1184 college students on smartphone use has examined stress and depression. Social capital withdrawal is a mediating factor between smartphone distraction and depression (Wang et al., 2024). Su et al. (2022), in their longitudinal study of 2100 Dutch high school students to find the difference between active and passive social media engagement, revealed that active usage promotes positive relationships, whereas passive messages are related to isolation.

There has been a rapid introduction of smartphone technology, which has revolutionized the lifestyle and communication patterns of Generation Z in the global circulation. Younger generations rely on smartphones for academic and entertainment purposes, socialization, as well as feeling connected, raising concerns about their social growth and interactions with others (Sun,2023). Scientists have claimed that too much screen time will eventually diminish the amount of physical interaction and lead to overdependence on the internet in interactions among young adults (Genner,2017). The reasoning of this work is based on the increased worry that Gen Z users are now dedicating their time to smartphones rather than engaging in social interactions in the real world (Kushlev,2015). Researchers indicate that too much time spent on the smartphone

may affect behavioral patterns and lessen face-to-face interaction (Goyal, 2025). Separate usage patterns are significant for understanding their impact on social withdrawal (Ricoy, 2022). Moreover, the literature only covers the issues of smartphone addiction and mental health, and there is little research on how active and passive smartphone use affects social withdrawal among the Gen Z audience, particularly.

Problem statement

Social media and online activities on smartphones limit real-world interaction and socialization (Park, 2012). According to the literature review, smartphones have transformed life of a person from spending time to learning. Utilization of smartphones is done actively and passively. Active users use them for communication and other purposes, whereas passive users use them for scrolling, browsing, and watching content only. The results in both cases affect socialization, isolation, and social withdrawal. However, the relationship between these distinct patterns of smartphone use and social withdrawal requires further empirical investigation within specific social and cultural contexts.

The problem needs to be studied: whether and to what extent active and passive smartphone use predict social withdrawal, especially in cultural contexts. Therefore, this study examines active and passive smartphone use as separate predictors of social withdrawal to determine their individual and combined contributions to explaining variations in social withdrawal. By investigating these relationships, the study aims to contribute to a more nuanced understanding of how different patterns of smartphone use are associated with individuals' social engagement and withdrawal.

RO1: To examine the effect of Active Smartphone Use (messaging, video calling, commenting, and online interaction) on Social Withdrawal among Generation Z.

RO2: To analyze the effect of Passive Smartphone Use (social media scrolling, content consumption, and non-interactive digital engagement) on Social Withdrawal among Generation Z.

Significance of the study

Educational institutions can use this research to develop awareness campaigns that promote balanced smartphone use and participation in healthy activities like social interaction.

Moreover, the research benefits parents, psychologists, counselors, and policymakers by highlighting the potential social dangers of long-term smartphone exposure.

The results can be useful in creating strategies, counseling initiatives, and online wellness policies to minimize social withdrawal and enhance interpersonal interactions among young individuals.

The study adds to the body of knowledge of uses and gratifications, practice, and social consequences in the sense that it offers a deeper understanding of how smartphone screen time impacts socialization behavior among the youths in Generation Z.

Literature Review

The social and behavioral implications of excessive use of smartphones are a focus of today's research due to booming digital technology (Bellini, 2021). According to recent literature, smartphones have drastically transformed the ways of interpersonal communication and social interaction among youth (Oksman, 2022). Researchers also posit that patterns of smartphone use vary depending on active and passive engagement, which has psychological and social effects (Mahmud, 2023). The literature also points out that active smartphone use can help in relationship maintenance and online social support, with passive smartphone use frequently being linked to loneliness, social comparison, and emotional loneliness (Nowland, 2018). Researchers have pointed out that extensive passive smartphone usage can lead to social isolation and deteriorating social engagement (Van Deursen, 2015). Keeping in view the literature, uses and gratifications can identify the users' usage and its effect on the human mind. The theory indicates that the more individuals use smartphones and other online devices, the less time they spend on face-to-face communication in real-world relationships (Nguyen, 2026). Scientists concluded that by spending more time on smartphones, Generation Z can slowly lose social attachment and social connectivity between people (Billieux, 2015). Social participation, interpersonal communication and family bonding, information enrichment, and everyday access to various digital platforms have transformed human life (Verduyn et al., 2017a). According to theorists, social withdrawal involves cutting down or limiting interaction and becoming isolated, as Tateno found in his study of the relationship between young adults and smartphone usage resulting in withdrawal (Tateno et al., 2019). In a meta-analysis including 141 studies, where 145,000 respondents showed active social media usage for creating content as compared to passive usage like doomscrolling and only consuming uploaded content without interaction. More recent evidence, however, indicates that the relationship should not be interpreted as uniformly positive. Context, age, type of interaction, and the nature of the social-media environment can influence outcomes. The authors also found that passive use was associated with worse emotional outcomes in general social-media contexts, although these associations varied according to context and user characteristics (Valkenburg et al., 2024). Active smartphone users are involved in video calling, posting content, messaging, and interacting with others on social media for the sake of information exchange, opinions, and maintaining relationships. This use and gratification of active users is relatable to information sharing and community engagement, and expressing opinions (Whiting & Williams, 2013a).

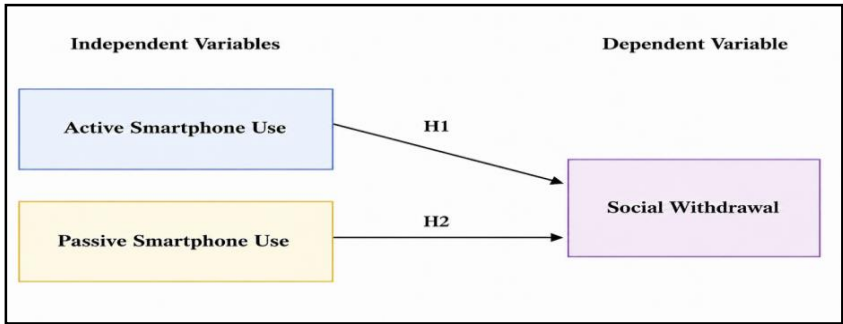
The relationship between active digital engagement and social connectedness is nevertheless complex. Verduyn et al. argued that active social-network-site use can facilitate social capital and connectedness because users directly communicate and interact with members of their social networks. In contrast to merely observing others, active participation provides opportunities for

reciprocal communication and interpersonal exchange. This suggests that active smartphone use may, under some circumstances, provide users with an additional channel for maintaining social relationships rather than necessarily encouraging withdrawal (2017b). Valkenburg et al. (2024a) describe passive social-media use as consumption of social-media content without direct interaction, such as scrolling through newsfeeds without commenting or otherwise engaging with posts. Yue et al. (2022) found that passive social-media use was associated with social comparison, particularly comparisons involving other users' self-presentations. Their findings indicate that the psychological consequences of passive browsing can depend on the type of content encountered and the way users interpret it.

The present study is theoretically grounded in Uses and Gratifications Theory (UGT). The theory originated in research on why audiences select media and the gratifications they obtain from media use. Katz, Blumler, and Gurevitch (1973) conceptualized audiences as active participants whose media choices are connected to social and psychological needs. UGT is particularly appropriate for this study because smartphones are a multifunctional medium through which individuals can satisfy a variety of needs. Rather than using smartphones for a single purpose, Generation Z users may employ them for interpersonal communication, entertainment, information seeking, relaxation, self-expression, social interaction, and maintaining awareness of other people. Whiting and Williams (2013a) identified ten major uses and gratifications associated with social-media use: social interaction, information seeking, pass time, entertainment, relaxation, communicatory utility, convenience utility, expression of opinion, information sharing, and surveillance or knowledge about others. Within this theoretical framework, active smartphone use can be understood as a form of gratification-seeking behavior in which users directly communicate with others to satisfy needs for social interaction, communication, self-expression, and relationship maintenance.

By contrast, passive smartphone use can also be interpreted through UGT because users may deliberately consume digital content to satisfy needs for entertainment, relaxation, information, curiosity, and surveillance of others. Scrolling through social-media feeds, watching videos, and reading online content are therefore not necessarily purposeless behaviours. They may represent deliberate attempts to obtain gratifications.

Research Framework



Similarly, Lee et al. (2024) examined the relationship between smartphones and negative relationships among 2230 Korean adolescents. Findings revealed that social withdrawal is reciprocal to smartphone use. Kim and Kim (2021) found that a relationship existed between active and passive smartphone usage and social capital.

Research Questions

To what extent does active smartphone use have a strong, significant effect on social withdrawal among Generation Z?

To what extent does passive smartphone use have a strong, significant effect on social withdrawal among Generation Z?

Hypotheses of the study

H1: Active smartphone use has a strong, significant effect on social withdrawal among Generation Z.

According to Bhatiasavi's uses and gratifications related to social interaction, social connectivity, and interpersonal gratification (2024a), the research question is: To what extent does Active Smartphone Use (messaging, video calling, commenting, and online interaction) influence social withdrawal among Generation Z?

H2: Passive smartphone use has a strong, significant effect on social withdrawal among Generation Z.

As Bhatiasavi (2024) described passive usage for relaxation and entertainment gratification, the research question is related to: To what extent does Passive Smartphone Use (social-media scrolling, content consumption, and non-interactive digital engagement) influence social withdrawal among Generation Z?

Methodology

Research Design

A quantitative research approach is used to examine the relationship between smartphone use and social withdrawal among Gen Z. Respondents are selected randomly. Data are collected through a structured questionnaire. Respondents were selected from three universities in Islamabad: Bahria University, NDU, and Air University. A total of 152 respondents participated.

The scale used in this study will have five categories of responses: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree. Close-ended questions were used in the questionnaire with regard to the behaviors of smartphones and their smart phone usage,

involving social interactions. For Screen Time, Twenge & Campbell (2018) were used to develop questions. Active Smartphone Use, the Burke & Kraut (2016) scale was used. Passive Smartphone Use scale was developed from Frison & Eggermont (2017). For Social Withdrawal, the Valkenburg & Keijsers (2021) scale was used in the questionnaire.

Data Analysis

The results have shown that the majority of the sample comprised female respondents, who were 85 participants (56% of the total), whereas male respondents were 67 participants (44% of the total). This indicates that female Generation Z smartphone users were slightly more active in answering the survey.

In terms of age distribution, the age was divided into three categories: 18-20, 21-23, and 24-26. 73 respondents (48%) were in the 21- 23 age group. Respondents in the 24- 26 age group were 57 (37.5%). Respondents between 18 and 20 years old were only 18 (11.8).

Regarding the education demographic, respondents with a bachelor's degree were 97 respondents (63.8%), followed by master's degree holders were 31 respondents (20.4%), and intermediate level were 24 respondents, that is (15.8).

The internal consistency reliability of the questionnaire is Cronbach's alpha.

Table 1 Reliability

Variable	Cronbach's Alpha	Items
Active Smartphone Use	.736	5
Passive Smartphone Use	.784	5
Social Withdrawal	.785	5

The results show that Active Smartphone Use had a Cronbach's Alpha of 0.736 for 5 items, indicating acceptable reliability. Passive Smartphone Use had a Cronbach's Alpha of 0.784 for 5 items, indicating good internal consistency. Social Withdrawal had the highest reliability value of 0.785 for 5 items, which shows that there is a strong degree of consistency among the statements used in the questionnaire.

Table 2. Correlation Analysis

Variables		Active Smartphone Use	Passive Smartphone Use	Sig. (2-tailed)
Social Withdrawal	Pearson Correlation	$r = .666^{**}$	$r = .667^{**}$	<.001
	Sig. (2-tailed)	($p = 0.03$)	($p = .04$)	

N=152

Correlation is significant at the 0.01 level (2-tailed).

The results have shown all variables to be positively and statistically significant at the 0.01 level of significance (2-tailed). There is a positive association between Active Smartphone Use and Social Withdrawal, and their correlation is positive and significant, $r = 0.666^{**}$. It showed that the more the use of smart phones more the social withdrawal among Gen Z users. That is significant at the .03 level.

Passive Smartphone Use has the strongest positive correlation with Social Withdrawal; that is $r = 0.667^{**}$. It means that passive smartphone activities, including scrolling through social media and watching online content with no interaction with family and friends, are strongly related to the feeling of isolation and social withdrawal, which is significant at the .04 level.

Thus, the results justify that there are significant relationships between smartphone usage activities and social withdrawal among Generation Z.

Table 3. Regression Analysis Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.758 ^a	0.574	0.514	0.5876

Predictors: (Constant), Passive Smartphone Use, Active Smartphone Use

Dependent Variable:

Social Withdrawal

The value of $R = 0.758$ indicates a strong positive relationship between the dependent variable (Social Withdrawal) and the independent variables (Active Smartphone Use and Passive Smartphone Use). This means smartphone use has strong correlation with social withdrawal among Gen Z. The R-squared of 0.574 shows relationship between Active Smartphone Use and Passive Smartphone Use explains 57.4 percent of the variance in Social Withdrawal.

The value of the Standard Error Estimate of 0.5876 indicates the average error of prediction of the regression model. In general, the results indicate that Active and Passive Smartphone Use are significant predictors of Social Withdrawal amongst Generation Z.

Passive Smartphone Use, on the contrary, has a positive though insignificant impact on Social Withdrawal. The value of the coefficient ($B = 0.327$) indicates a positive correlation, but the value of significance (0.220) is also greater than the acceptable level of 0.05. Also, it has a confidence interval of -0.210 to 0.865 that includes the value of zero, further illustrating the fact that Passive Smartphone Use is not a significant predictor of Social Withdrawal in the model.

Generally, Active Smartphone Use was found to be a better predictor of Social Withdrawal in the respondents of Generation Z.

H1: Active smartphone use has a strong significant effect on social withdrawal among Generation Z individuals.

This research confirms Hypothesis 1, which is that active use of smartphones leads to a strong impact on social withdrawal among Generation Z. The correlation analysis showed that there was a significant positive correlation between Active Smartphone Use and Social Withdrawal at 0.666*, showing that as the level of active smartphone use increases, the level of social withdrawal also increases among the respondents. The significance value was given as below 0.001, and hence there was a statistically significant relationship between the variables.

This hypothesis was also supported with the help of regression analysis. The regression coefficient of Active Smartphone Use, which was not standardized, was $B = 0.512$, meaning that an increase of one unit in Active Smartphone Use will raise Social Withdrawal by 0.512. This value of the standardized beta coefficient of 0.448 reflected a moderate positive relationship between Active Smartphone Use and Social Withdrawal. Moreover, the t-value of 2.518 and significance value of 0.020 indicated that the effect is statistically significant since the p-value is less than the acceptable value of 0.05.

The results of the ANOVA further reinforced the results, as the regression model shows that the F-value is 9.446 with a significance value of less than 0.001, which shows that the entire model is significant.

The results can be used to conclude that face-to-face communication is less popular, and social withdrawal is more prevalent among Generation Z members because of excessive active smartphone use. Thus, Hypothesis 1 is accepted.

H2: Passive smartphone use has a strong significant effect on social withdrawal among Generation Z individuals.

This research confirms and supports Hypothesis 2, which argues that passive smartphones are significantly influential in the social withdrawal of Generation Z individuals. Correlation analysis showed a strong positive correlation between Passive Smartphone Use and Social Withdrawal among the respondents, with a Pearson correlation value of 0.667, thereby strongly showing that more passive smartphone use goes along with an increase in social withdrawal. The significance was less than 0.001, which corresponds to a statistically significant relationship between the variables.

The regression analysis also revealed that Passive Smartphone Use has a positive relationship with Social Withdrawal. The value of the unstandardized coefficient ($B = 0.327$) implied that an increase in one-unit in Passive Smartphone Use leads to a 0.327-unit increase in Social

Withdrawal. The value of the standardized beta coefficient (0.309) indicated a moderately positive impact of passive smartphone behavior on social withdrawal. Though the effect size was smaller in comparison to Active Smartphone Use, the fact that the relationship was positive and significant was achieved.

Moreover, for the regression model as a whole, the F-value of 9.446 and significance level of less than 0.001 were statistically significant, meaning that the behaviors of smartphone usage play a significant role in explaining the differences in social withdrawal among Generation Z people. In general, the results indicate that the over-indulgence in passive smartphone activities like scrolling on social media and consumption of online material leads to decreased face-to-face interaction and social withdrawal among Gen Z users.

Discussion

The current research analyzed the impact of Active Smartphone Use and Passive Smartphone Use on Social Withdrawal among the representatives of Generation Z. The study made it clear that the behavior of smartphone use is important in determining social withdrawal, which argues in favor of the Gratification Theory assumptions. The theory indicates that overindulgence in digital activities supplants real-life communication and lowers interpersonal communication. The study findings revealed that both active and passive smartphone use is positively associated with social withdrawal in Gen Z users.

The results of Hypothesis 1 showed that active smartphone use has a positive and significant impact on Social Withdrawal. Correlation analysis revealed a strong positive relationship ($r = 0.666$) and regression analysis proved the significant impact with $B = 0.512$ and $p = 0.020$. These results indicate that despite the active use of smartphones being accompanied by communication processes, including messaging, commenting, posting, and video calling, overuse could lead to a decrease in direct physical interaction and an increase in addiction to virtual communication. Such findings are congruent with other studies that were conducted in 2021-2025. In a survey about digital interaction and social behavior, the authors found that the overuse of smartphones harms the effectiveness of face-to-face communication and is a factor that leads to the development of social isolation amongst youths. The study highlights that high smartphone usage by young adults is linked with social isolation, emotional imbalance, and deteriorated communication. Moreover, recent research on Gen Z digital well-being discovered that extended use of smartphones contributes to psychological dependence and impacts relationships among adolescents and young adults.

The findings of Hypothesis 2 revealed that Passive Smartphone Use has a positive effect on Social Withdrawal. Correlation analysis showed a strong positive relationship ($r = 0.667$), whereas regression analysis revealed value to coefficient ($B = 0.327$). These outcomes suggest that scrolling social media feeds, watching videos, and going through online material in the absence of personal interaction are some of the behaviors that cause levels of loneliness and social withdrawal among people belonging to Generation Z. These findings are well reinforced by prior

research on the topic that was researched between 2021 and 2025, which established that passive social media use enhances emotional dissatisfaction, fear of missing out, and social fatigue in young groups of people.

The recent literature indicates that passive involvement in social media sources increases social comparison and lowers emotional health, and thus real-life socialization on the part of adolescents. Research also found that the overuse of passive smartphone use is a cause of anxiety, loneliness, and loss of social interaction due to people investing more time in consuming online content, as opposed to engaging in social interactions.

Conclusion

This study investigated the behavior of smartphone users on the social withdrawal of Generation Z. The focus in past studies was on smartphone addiction, psychological health, and mental disorders, and little focus had been made on the specific relation between the habits of using the smartphone and the social withdrawal. The paper thus attempted to examine the possibility that active and passive use of smartphones leads to social withdrawal in Generation Z.

The research questions were to investigate the impact of Active Smartphone Use on Social Withdrawal, evaluate the impact of Passive Smartphone Use on Social Withdrawal, and compare the overall relationship between smartphone use behaviors and social withdrawal in Gen Z. The literature review has pointed out that too much smartphone use can substitute physical connection with online communication, and it supports the hypotheses of the Gratification Theory. Past studies further showed that spending more time using the smartphone screen could be one of the causes of loneliness, social isolation, and less social interaction in real-life settings.

The research results indicated that Active Smartphone Use plays a statistically significant positive role in the Social Withdrawal of Generation Z people. The correlation analysis revealed that there was a strong positive relationship between Active Smartphone Use and Social Withdrawal. The regression analysis proved that there was a significant effect, too.

Passive Smartphone Use is positively related to Social Withdrawal, and results suggest that compared to the other behavior groups, more scrolling, content consumption, and non-interactive behavior of the smartphone make respondents feel isolated and less sociable. Additionally, the regression model revealed that an important percentage of variability in Social Withdrawal of Gen Z is accounted for by the jointly affected smartphone usage behaviors. Active Smartphone Use and Passive Smartphone Use both lead to less face-to-face communication and more dependence on digital communication.

Findings of the regression analysis showed that though active smartphone use was a statistically significant positive predictor of social withdrawal, passive smartphone use showed a positive but non-significant contribution.

Conflict of Interest Statement: The authors declare that they have no conflicts of interest related to the research, authorship, or publication of this manuscript. **Funding Statement:** This research received no external funding. All activities, including study design, data collection, analysis, and manuscript preparation, were carried out independently by the authors.

Authors Contributions:

Dr. Hayam Qayyoun contributed to the study conception, data collection, primary analysis, study design, data analysis, and drafting of the manuscript.

Dr. Qurat-ul-Ain assisted in refining the study design, contributed to interpretation, and led the critical revision of the manuscript.

Both authors reviewed and approved the final version and agree to be accountable for all aspects of the work.

References

- Barzeva, S. A., Meeus, W. H., & Oldehinkel, A. J. (2019). Social withdrawal in adolescence and early adulthood: Measurement issues, normative development, and distinct trajectories. *Journal of abnormal child psychology*, 47(5), 865–879.
- Bellini, D., Mascia, M. L., Conti, R., & Penna, M. P. (2025). Smartphone overuse and distraction: which relationship with general well-being across different generations?. *BMC Public Health*, 25(1), 427.
- Billieux, J., Philippot, P., Schmid, C., Maurage, P., De Mol, J., & Van der Linden, M. (2015). Is dysfunctional use of the mobile phone a behavioural addiction? Confronting symptom-based versus process-based approaches. *Clinical psychology & psychotherapy*, 22(5), 460–468.
- Boer, M., Stevens, G. W. J. M., Boniel-Nissim, M., van den Eijnden, R. J. J. M., & de Looze, M. E. (2025). Adolescents' intense social media use and psychological health outcomes. *Journal of Adolescent Health*, 76(1), 55–63.
- Burke, M., & Kraut, R. (2016). The relationship between Facebook use and well-being depends on communication type and tie strength. *Journal of Computer-Mediated Communication*, 21(4), 265–281.
- Bhatiasevi, V. V. (2024). The uses and gratifications of social media and their impact on social relationships and psychological well-being. *Frontiers in Psychiatry*, 15, 1260565. <https://doi.org/10.3389/fpsyg.2024.1260565>
- Chou, W. P., & Lin, C. Y. (2025). Social media addiction and loneliness among university students. *Current Psychology*, 44(6), 5231–5245.
- Clayborne, Z. M., Capaldi, C. A., & Mehra, V. M. (2025). Associations between digital media use behaviours, screen time and positive mental health in youth: results from the 2019 Canadian Health Survey on Children and Youth. *BMC Public Health*, 25(1), 2303.

- Dickel, C. (2021). *Examining the Relationship Between Children's Screen Use and Externalising Behaviours* (Doctoral dissertation, University of Southampton).
- Elhai, J. D., Dvorak, R. D., Levine, J. C., & Hall, B. J. (2017). Problematic smartphone use: A conceptual overview and systematic review of relations with anxiety and depression psychopathology. *Journal of Affective Disorders*, 207, 251–259.
- Frison, E., & Eggermont, S. (2017). Browsing, posting, and liking on Instagram: The reciprocal relationships between different types of Instagram use and adolescents' depressed mood. *Cyberpsychology, Behavior, and Social Networking*, 20(10), 603–609.
- Genner, S., & Süss, D. (2017). Socialization as media effect. *The International Encyclopedia of Media Effects*. John Wiley & Sons, 1–2.
- Goyal, H. (2025). Scroll, Sleep, Repeat: Negative Impacts of Smartphone Use on Adolescent. *Psychology of Media Influence: Shaping Thoughts, Behavior and Society*, 140.
- Journals, A. (2026). Youth and Digital Habits-The Consequences of Screen time on Mental Health and Social Well-being: A Review. Bhartiya Krishi Anusandhan Patrika, Volume 41 Issue 1 (March 2026). <https://doi.org/10.18805/BKAP859>
- Katz, E., Blumler, J. G., & Gurevitch, M. (1973). Uses and gratifications research. *Public Opinion Quarterly*, 37(4), 509–523. <https://doi.org/10.1086/268109>
- Kim, J., & Park, E. (2023). Social comparison and emotional distress in social media environments. *Current Psychology*, 42(9), 7341–7352. <https://doi.org/10.1007/s12144-021-02172-1>
- Kim, Y., & Kim, B. (2021). Effects of young adults' smartphone use for social media on communication network heterogeneity, social capital and civic engagement. *Online Information Review*, 46(3), 616–638. <https://doi.org/10.1108/OIR-08-2020-0332>
- Kircaburun, K., Griffiths, M. D., & Billieux, J. (2024). Problematic smartphone use and social withdrawal tendencies. *Psychiatry Research*, 332, 115670.
- Kornienko, D., Rudnova, N. A., Veraksa, A., Torralbas Oslé, J. E., Chursina, A., & Corcho Rosales, E. (2025). Screen time and adolescent well-being: a comparative study of Russia and Cuba. *Frontiers in Public Health*, 13, 1587475.
- Kushlev, K. (2015). *Digitally connected, socially disconnected: can smartphones compromise the benefits of interacting with others?* (Doctoral dissertation, University of British Columbia).
- Marin-Dragu, Silvia & Forbes, Alyssa & Sheikh, Sana & Iyer, Ravishankar & Santos, Davi & Alda, Martin & Hajek, Tomas & Uher, Rudolf & Wozney, Lori & Paulovich, Fernando & Campbell, Leslie & Yakovenko, Igor & Stewart, Sherry & Corkum, Penny & Bagnell, Alexa & Orji, Rita & Meier, Sandra. (2023). Associations of active and passive smartphone use with measures of youth mental health during the COVID-19 pandemic. *Psychiatry Research*. 326. 115298. [10.1016/j.psychres.2023.115298](https://doi.org/10.1016/j.psychres.2023.115298).
- Marin-Dragu, S., Forbes, A., Sheikh, S., Iyer, R. S., dos Santos, D. P., Alda, M., Hajek, T., Uher, R., Wozney, L., Paulovich, F. V., Campbell, L. A., Yakovenko, I., Stewart, S. H., Corkum, P., Bagnell, A., Orji, R., & Meier, S. (2023). Associations of active and passive smartphone use with measures of youth mental health during the COVID-19 pandemic. *Psychiatry Research*, 326, 115298. <https://doi.org/10.1016/j.psychres.2023.115298>

- Marino, C., Gini, G., Vieno, A., & Spada, M. M. (2024). Social media addiction and emotional well-being among adolescents. *Computers in Human Behavior*, 148, 107928.
- Montag, C., Wegmann, E., Sariyska, R., Demetrovics, Z., & Brand, M. (2019). How to overcome taxonomical problems in the study of smartphone use and problematic smartphone use. *Journal of Behavioral Addictions*, 9(4), 908–914.
- Mahmud, A., Islam, M.R. (2023). *Smartphone and Social Capital: Changing Lives and Lifestyles of the Youth*. In: The Palgrave Handbook of Global Social Change. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-030-87624-1_124-1
- Nguyen, T. B. T., Truong, D. D., Duong, D. T., Vi, T. H., Nguyen, C. D., Tran, M. D., ... & Pham, V. M. (2026). The relationship between smartphone usage, problematic use, life satisfaction, and academic performance during the COVID-19 pandemic in Vietnamese university students. *Discover Psychology*.
- Nowland, R., Necka, E. A., & Cacioppo, J. T. (2018). Loneliness and social internet use: pathways to reconnection in a digital world?. *Perspectives on psychological science*, 13(1), 70–87.
- Odgers, C. L., & Jensen, M. R. (2020). Annual research review: Adolescent mental health in the digital age. *Journal of Child Psychology and Psychiatry*, 61(3), 336–348.
- Oksman, V., & Turtiainen, J. (2004). Mobile communication as a social stage: Meanings of mobile communication in everyday life among teenagers in Finland. *New media & society*, 6(3), 319–339.
- Park, N., & Lee, H. (2012). Social implications of smartphone use: Korean college students' smartphone use and psychological well-being. *Cyberpsychology, Behavior, and Social Networking*, 15(9), 491–497.
- Park, Y. J., & Lee, H. (2025). Digital communication dependency and interpersonal relationship decline. *Telematics and Informatics*, 87, 102145.
- Rahman, M. M., Islam, M. S., & Hossain, M. A. (2025). Smartphone overuse and psychological isolation among youth populations. *Journal of Behavioral Addictions*, 14(2), 245–259.
- Ricoy, M. C., Martinez-Carrera, S., & Martinez-Carrera, I. (2022). Social overview of smartphone use by teenagers. *International journal of environmental research and public health*, 19(22), 15068.
- Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. Creswell, J. W., & Creswell, J. D. (2022). *Research design: Qualitative, quantitative, and mixed methods approaches* (6th ed.). SAGE Publications.
- Sadauskas, J., & Jesa, B. I. (2026). Digital Technologies in Social Work with Children and Youth: The Experiences of Social Workers. In *The Interplay Between Social Work Education and Practice: Bridging Borders* (pp. 113–132). Cham: Springer Nature Switzerland.
- Su, S., Larsen, H., Cousijn, J., Wiers, R. W., & Van Den Eijnden, R. J. J. M. (2022). Problematic smartphone use and the quantity and quality of peer engagement among adolescents: A longitudinal study. *Computers in Human Behavior*, 126, 107025. <https://doi.org/10.1016/j.chb.2021.107025>
- Sun, S., Wang, X., & Wang, D. (2023). Smartphone usage patterns and social capital among university students: The moderating effect of sociability. *Children and Youth Services Review*, 155, 107276.

- Tammissalo, K., & Rotkirch, A. (2022). Effects of information and communication technology on the quality of family relationships: A systematic review. *Journal of social and personal relationships*, 39(9), 2724–2765.
- Tateno, M., Teo, A. R., Ukai, W., Kanazawa, J., Katsuki, R., Kubo, H., & Kato, T. A. (2019). Internet addiction, smartphone addiction, and hikikomori trait in Japanese young adult: Social isolation and social network. *Frontiers in Psychiatry*, 10, 455. <https://doi.org/10.3389/fpsy.2019.00455>
- Tintori, A., Ciancimino, G., & Cerbara, L. (2024). How screen time and social media hyperconnection have harmed adolescents' relational and psychological well-being since the COVID-19 pandemic. *Social Sciences*, 13(9), 470.
- Twenge, J. M., Martin, G. N., & Campbell, W. K. (2018). Decreases in psychological well-being among adolescents after smartphone adoption and increased screen time. *Emotion*, 18(6), 765–780.
- Valkenburg, P. M., Beyens, I., Pouwels, J. L., van Driel, I. I., & Keijsers, L. (2021). Social media use and adolescents' self-esteem: Heading for a person-specific media effects paradigm. *Nature Human Behaviour*, 5(5), 601–609.
- Valkenburg, P. M., et al. (2024b). Are active and passive social media use related to mental health, wellbeing, and social support outcomes? A meta-analysis of 141 studies. *Journal of Computer-Mediated Communication*, 29(1), zmad055. <https://doi.org/10.1093/jcmc/zmad055>
- Van Deursen, A. J., Bolle, C. L., Hegner, S. M., & Kommers, P. A. (2015). Modeling habitual and addictive smartphone behavior: The role of smartphone usage types, emotional intelligence, social stress, self-regulation, age, and gender. *Computers in human behavior*, 45, 411–420.
- Verduyn, P., Ybarra, O., Résibois, M., Jonides, J., & Kross, E. (2017b). Do social network sites enhance or undermine subjective well-being? A critical review. *Social Issues and Policy Review*, 11(1), 274–302.
- Verduyn, P., Ybarra, O., Résibois, M., Jonides, J., & Kross, E. (2017a). Do social network sites enhance or undermine subjective well-being? A critical review. *Social Issues and Policy Review*, 11(1), 274–302. <https://doi.org/10.1111/sipr.12033>
- Wang et al. (2024). Understanding the relationship between smartphone distraction, social withdrawal, digital stress, and depression among college students: A cross-sectional study in
- Whiting, A., & Williams, D. (2013a). Why people use social media: A uses and gratifications approach. *Qualitative Market Research: An International Journal*, 16(4), 362–369. <https://doi.org/10.1108/QMR-06-2013-0041>
- Whiting, A., & Williams, D. (2013b). Why people use social media: A uses and gratifications approach. *Qualitative Market Research: An International Journal*, 16(4), 362–369. <https://doi.org/10.1108/QMR-06-2013-0041>
- Wuhan, China. *Heliyon*, 10(15), e35465. <https://doi.org/10.1016/j.heliyon.2024.e35465>
- Wang, P., Zhao, M., Wang, X., Xie, X., Wang, Y., & Lei, L. (2023). Peer relationship and adolescent smartphone dependence. *Children and Youth Services Review*, 145, 106763.

- Wenz, A., & Keusch, F. (2023). The second-level smartphone divide: A typology of smartphone use based on frequency of use, skills, and types of activities. *Mobile Media & Communication*, 11(3), 459-483. <https://doi.org/10.1177/20501579221140761>
- Yang, C. C., Holden, S. M., & Carter, M. D. K. (2024). Social media engagement and adolescent psychosocial adjustment. *Journal of Youth and Adolescence*, 53(2), 314-328.
- Yue, Z., Zhang, R., & Xiao, J. (2022). Passive social media use and psychological well-being during the COVID-19 pandemic: The role of social comparison and emotion regulation. *Computers in Human Behavior*, 127, 107050. <https://doi.org/10.1016/j.chb.2021.107050>
- Zhao, L., Wang, T., & Li, J. (2025). Online engagement and reduced face-to-face interaction among adolescents. *Computers in Human Behavior Reports*, 11, 100342.