WWW.IJRPR.COM

International Journal of Research Publication and Reviews

Journal homepage: www.ijrpr.com ISSN 2582-7421

The Relationship between Smartphone Use and Psychosocial Wellbeing among the Youth of St. Paul's Parish, Walewale, Navrongo-Bolgatanga Diocese, Ghana

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A B S T R A C T

Smartphones are essential and effective communication tools used by people of various backgrounds, status, and age groups particularly the younger generation. The main objective of the study was to examine the relationship between smartphone use and psychosocial wellbeing among the youth of St. Paul's Parish, Walewale, Navrongo- Bolgatanga Diocese, Ghana. The study was guided by the Cognitive Behavioral Theory of Aaron Temkin Beck and Eric Erickson psychosocial theory of development. The research adopted concurrent method to collect quantitative data from 300 youth using census sampling and qualitative data from eight leaders of the youth using purposive sampling. Smartphone use scale and WHOQOL-Bref, a psychosocial wellbeing scale were used collect quantitative data. Questionnaires were analyzed using SPSS Version 25. The study found that most youths (71.6%) had a moderate level of smartphone use, while 55.6% reported high psychosocial well-being. A very weak negative correlation was observed between smartphone use and psychosocial well-being ($r = -0.016$, $p = .798$) using Pearson Correlation. Effective regulation strategies identified included education on excessive use (82.1%), parental controls (63.4%), and self-regulation practices like mindfulness (68.5%). The study recommends that the government, and other institution as well as parents, might put in place policies on regulating phone use among the youths geared towards promoting their psychosocial wellbeing.

Keywords: Smartphone, Psychosocial Wellbeing, Youth, Cyberbullying, Digital Communication, Social Connections, Depression, Nomophobia

Introduction

The swift rise in smartphone use has become a global phenomenon, especially among youth. This has led to the rise of concerns about its influence on psychosocial well-being. Smartphones provide easy access to information, communication, and social engagement, concerns about their impact on mental health and social connections persist (Columbia University Irving Medical Center, 2024). There are different types of smartphones and the most common among them include iPhone, Android, Windows phone, and Amazon fire phone (Fortune, n.d.). Based on my personal observation having grown among the youth of St. Paul's Parish, android is the most commonly used phone and next is iPhone.

Psychosocial well-being, according to World Health Organisation refers to the dynamic interplay between psychological and social factors, is particularly significant during adolescence and early adulthood (WHO, 2022). The Inter-Agency Network for Education in Emergency (INEE) highlights psychosocial well-being as the interplay between psychological elements like thoughts, emotions, and behaviors and social factors such as relationships, traditions, and culture (INEE, 2016). It defines wellbeing as a holistic state that covers several dimensions, including physical, cognitive, emotional, social, and spiritual health. Additionally, well-being encompasses participating in meaningful social roles, maintaining positive relationships, and having access to supportive services (INEE, 2016). This study explores the psychosocial implications of smartphone use on the youth of St. Paul's Parish in the Navrongo – Bolgatanga Diocese of Ghana, where smartphone adoption is growing fast. To provide a comprehensive understanding of this issue, this works considers global, African, and local contexts, beginning with a review of global trends and finally focusing on local context.

1.1 Literature Review

Adolescents grow up in different environments like their families, friends, and schools. These all work together to influence how they develop. In 2019, Rose, McDonald, Mach, Witherspoon, and Lambert used data from a large national study called the National Survey of American Life-Adolescent (NSAL-A) to look at how Black teenagers connect with others socially and how these connections affect their well-being. They also looked at whether these relationships differ based on ethnic background and gender. The study included 1,170 Black teens aged 13 to 17 of which 69% were African American and 31% were Caribbean Black. About half (52%) were girls, and the average age was 15.3 years. The study points out that theories like

cognitive behavioral theory are not being used enough to explain how smartphone use affects behavior, especially in terms of habit-forming or dependency.

Youth in the unconnected group showed significantly lower self-esteem and mastery, along with higher depressive symptoms, compared to the minimally connected group. Although no major differences were found between African American and Caribbean Black adolescents, gender differences did emerge; specifically, the relationship between social connection and life satisfaction varied by gender. These findings highlight the importance of fostering connections across multiple life settings to promote psychosocial well-being among Black adolescents and underline the need for targeted strategies to support their healthy development. The increasing pervasiveness of smartphone usage among young people globally has drawn scholarly attention to its psychosocial effects. Several researchers have explored the benefits and drawbacks of smartphone use in relation to mental health, social relationships, academic performance, and overall psychological development. In the United States of America, Arizona to be precise, a study on Short-Term Longitudinal Relationships between Smartphone Use/Dependency and Psychological Well-Being among Late Adolescents was published in 2019 by Lapierre, Zhao and Custer. A two-wave longitudinal survey was used using adolescents between the ages of 17 and 20 years. The interval between wave 1 and wave 2 was between 2.5 and 3 months respectively. Using convenience sampling, the total number of participants who completed both waves of data collection was 346. Validated measures assessed smartphone dependency, smartphone use, depressive symptoms, and loneliness. The longitudinal model was tested using path modeling techniques. The number of participants were 346 participants with 33.6% being male. The response rate was 56.9%. Longitudinal path models revealed that smartphone dependency predicted loneliness ($\beta = .08$, standard error = .05, $p = .043$) and depressive symptoms ($\beta = .11$, SE = .05, $p = .010$) and vice versa, loneliness predicted depressive symptoms ($\beta = .21$, standard error = .05, $p < .001$). Manner of smartphone use predicted smartphone dependency ($\beta = .08$, SE = .05, $p = .011$). The study therefore concluded that the rates of smartphone ownership/use among late adolescents was high (95%). Furthermore, the association between smartphone use and smartphone dependency, and the injurious effects of loneliness and depression within this population is strong.

Ting, Thaichon, Chuah and Tan in 2019 published a study, which investigated the impact of brand, price, usefulness, compatibility, product attachment and social influence on three types of disposition decisions. A quantitative approach using a self-administered survey was taken. The questionnaire was distributed at the universities in Malaysia, and was subsequently collected with an acceptable response rate. Partial least squares structural equation modeling (PLS-SEM) was utilized to perform path-modeling analysis. The results show that usefulness, product attachment, and compatibility have positive effects on students' decisions to keep their smartphones. While low product attachment and social influence affect them to dispose their smartphones temporarily, the depreciation of value causes them to discard smartphones permanently. Remarkably, brand and price have no significant impact on disposition decisions, indicating that the function of the smartphone, rather than the device itself matters more in disposition decisions. The study thus provides more insights into consumer behavior and its implications on sustainable consumption and impact on the life of the user.

In Kenya, Machuki and Mutua (2021) conducted a study to explore how mobile phone use influences the sexual behavior of university students, focusing on Jomo Kenyatta University of Agriculture and Technology. The study specifically examined how users' characteristics, the purposes for which they use mobile phones (uses and gratifications), and how frequently they use them affect students' sexual behaviors. A descriptive research design was used, combining both quantitative and qualitative methods. Questionnaires were used to gather quantitative data, while focus group discussions provided qualitative insights. Stratified random sampling was applied across the university's various faculties, and Fisher's formula was used to determine a scientifically valid sample size of 384 students. Participants were selected through convenience sampling, targeting those willing to participate in surveys and focus groups.

Data was analyzed using both descriptive and inferential statistics with SPSS version 22. The study found that male students were more likely to consistently use protection than female students. Age and relationship status also influenced condom use—students in committed relationships tended to use protection less often due to growing emotional and intimate trust. Furthermore, mobile phone usage was significantly linked to safer sexual practices. Students who had owned a phone since joining university, as well as those who used their phones heavily, were more likely to practice safe sex.

Afful and Boaten in their study examined mobile learning behaviour of university students in Ghana. This study was planned to investigate the effect of distance education students' attitudinal, social, and control beliefs on their mobile learning usage at the University of Ghana and the University of Education, Winneba. The Decomposed Theory of Planned Behaviour (DTPB) was modified to explain how students' attitude, subjective norms, and behavioural control of mobile learning influenced their current mobile learning usage. The study used an explanatory sequential mixed-method approach. Congruent to that, structured questionnaires were administered to 400 distance learners selected by multi-stage sampling technique, and 20 distance learners selected by random sampling technique were interviewed via phone to collect data. Using correlation and multiple linear regression analysis, as well as hypothesis testing, the findings showed that, the university students' attitudes towards mobile learning, subjective norms, and behavioral control insignificantly influenced their ongoing mobile usage thus providing meek support for the research model. However, it was found that university students' mobile learning innovativeness, peer influence, and self-efficacy significantly affect their attitudes, subjective norms, and behavioral control respectively of their mobile learning usage. This supports the research model and can be inferred that university students' mobile learning innovativeness, peer influence, and self-efficacy indirectly influence their mobile learning usage. The results of this study may enable educational institutions to engage in better strategic planning and implementation of mobile learning on a wider scale focusing on students' behavioral, social, and control factors.

1.2 Methodology

The study used a concurrent research design, a type of mixed-methods approach, to explore both statistical patterns and personal experiences related to smartphone use and youth psychosocial wellbeing. Quantitative data was collected through structured questionnaires, while qualitative insights were

gathered via interviews. This combined approach provided a more comprehensive understanding of the issue by integrating numerical analysis with personal narratives, allowing for richer data interpretation and stronger conclusions (Creswell & Creswell, 2017) The study targeted youth aged 18 to 35 who were registered members of St. Paul's Parish, Walewale. This age group was chosen due to its high engagement with smartphones and its critical stage of psychosocial development. With a total youth population of approximately 300, a census sampling method was used, involving all members to ensure inclusiveness and minimize sampling bias. For qualitative insights, purposive sampling was used to select eight youth leaders for interviews.

Table 1 – Sample Matrix

Category (18 to 40years)	Target	Sample Size	Technique	Percentage (%)
Youth (Quantitative)	292	292	Census	97.33
Youth Leaders (Qualitative)	8	8	Purposive	2.67
Total	300	300		100

Data collection involved two main tools: a structured questionnaire and a semi-structured interview guide. The questionnaire, administered via KoboToolbox, (Mukherjee & Dasgupta, 2020), psychosocial wellbeing (using the WHOQOL-BREF scale), Qualitative interviews with youth leaders and parish executives were conducted through Google Meet. Ethical approval was obtained from the Psycho-Spiritual Institute, and authorization letters were secured from both the Bishop of the Diocese and Parish Priest in –charge. To establish the relationship between smartphone use and psychosocial wellbeing, a Pearson's correlation was employed. On the other hand, qualitative data gathered through interviews was transcribed, coded, and analyzed thematically. The findings were presented in narrative form, using direct quotations from participants where appropriate to provide illustrative context and to support the quantitative data.

1.3 Results and Discussions

Pearson's correlation was used to determine the relationship between smartphone use and psychosocial wellbeing among the youth of St. Paul's Parish, Walewale, Navrongo-Bolgatanga Diocese. Summary of finding are indicated in Table 2.

Table 2-

Table 1 – 2 Relationship between Smartphone Use and Psychosocial Wellbeing

		Smartphone Use	Psychosocial Wellbeing
Smartphone Use	Pearson Correlation	1	-.016
	Sig. (2-tailed)		.798
	N	257	257
Psychosocial Wellbeing	Pearson Correlation	-.016	1
	Sig. (2-tailed)	.798	
	N	257	257

The analysis in table six revealed a very weak negative correlation between smartphone use and psychosocial well-being, r = -0.016, with a p-value of .798. The negative sign of the correlation coefficient indicates that as smartphone use increases, psychosocial well-being tends to slightly decrease. However, the strength of this relationship is very weak and statistically not much significant since the p-value is much greater than the conventional alpha level of 0.05. This suggests that, based on the current data, smartphone use does not have a meaningful or statistically significant relationship with psychosocial well-being of the youth in St. Paul's Parish. The findings imply that other factors might be more influential in determining psychosocial well-being, or that the nature of smartphone use may need further examination. It is also possible that psychosocial well-being is maintained or influenced by various protective factors that moderate the impact of smartphone usage. From the cognitive behavioral theory standpoint, this weak association may suggest that while maladaptive thought patterns and behaviors linked to excessive use exist, they are not prevalent or severe enough within this group to significantly impair psychosocial functioning. Erikson's theory similarly supports this interpretation, suggesting that many of the youth may still be progressing through psychosocial tasks such as intimacy and identity formation without major disruptions. The weak correlation implies that other moderating variables, such as the type of smartphone use, individual self-regulation skills, and social support networks, may safeguard the potential negative impacts.

Qualitative findings on the relationship between smartphone use and psychosocial wellbeing highlighted the contrary. Smartphone use impacted negatively on the psychological wellbeing by isolating users and cyberbullying. The following are some of the excerpts from the findings:

Smartphone really has an influence on the relationships we have with people because now, most of the time, when you're sitting with a colleague, a friend, or even a family member and you are about to discuss something very important, the person is busy on their smartphone. So, they are not going to be concentrating much on whatever you are discussing (Speaker 1, 8th May, 2025).

On the impact of smartphone on our relationships, even as peers. We sometimes use smartphones to cyberbully and, you know, use them to harass our colleagues online. So your colleague posts something online, and you see, as youth, we are quick to go and then be in the comment section, passing all kinds of comments. You post something about your colleague, and you pass something to body shame the fellow, which, of course, sometimes goes to reduce the confidence of other youths (Speaker 4, 8th May, 2025).

The current findings are further supported by previous related studies. For instance, in a study conducted by Herrero et al. (2019) published on their study titled 'Socially Connected but Still Isolated. The results showed that social support can lead to later smartphone addiction, but smartphone addiction can also reduce social support over time. The analysis showed that users who had more smartphone addiction at the start of the study experienced a bigger decrease in social support during the year. Similarly, in South Africa, specifically in Soweto and Durban a study by Kagwiria looked at how cellphone use and depression are linked among young people in those areas. The study found that young people who used their phones for eight or more hours each day were more likely to show signs of depression. These findings further underscores the negative relationship between smartphone use and psychosocial wellbeing of the youths.

2. Conclusion

The study investigated the relationship between smartphone use and psychosocial wellbeing among youth aged 18 to 35 in St. Paul's Parish, Walewale. Guided by both Cognitive Behavioral Theory and Erikson's Psychosocial Theory of Development, the research adopted a concurrent mixed-methods design to provide a multidimensional understanding of the issue. Quantitative findings indicated a very weak and statistically insignificant negative correlation between smartphone use and psychosocial well-being. While increased smartphone use was marginally associated with lower psychosocial health, the relationship was not strong enough to draw conclusive implications.

The qualitative data, however, enriched the analysis by highlighting nuanced experiences related to social connectivity, emotional resilience, and the role of smartphones in daily life. These insights suggest that psychosocial wellbeing is not solely determined by smartphone usage levels but also shaped by factors such as individual purpose of use, peer influence, emotional regulation, and community support. The weak correlation from the lens of cognitive behavioral theory could indicate that maladaptive behaviors and thought patterns related to smartphone dependency are not dominant among this population. Similarly, Erikson's theory suggests that the majority of the youth are still navigating key psychosocial tasks such as identity formation and intimacy development without substantial disruption.

Therefore, while smartphone use is a relevant factor in youth development, it does not independently predict psychosocial well-being within this context. This highlights the need for future research to consider the quality, purpose, and context of smartphone engagement. Interventions aimed at promoting psychosocial health should thus focus on fostering digital literacy, self-regulation, and supportive peer and community environments, rather than simply limiting smartphone usage.

Acknowledgement

First, I thank the almighty God for granting me wisdom, strength, and perseverance throughout the course of this research proposal. I extend my heartfelt appreciation to my supervisors Sr. Dr. Elizabeth Ngozi Okpalaenwe and Dr. Ann Rita Njageh whose unrelenting guidance, constructive feedback, and support have been invaluable in shaping this work. Your mentorship has been a beacon throughout this academic endeavor. I am deeply grateful my Bishop, Most Rev. Alfred Agyenta for the opportunity of pursuing this course and to Aid to Church for funding the cost of my training. My heartfelt gratitude to the Director, Rev. Dr. Joyzy Egunjobi and administration staff of Psycho-Spiritual Institute, Marist International University College for creating an enabling environment for academic growth. My profound gratitude to the Parish Staff, Parish Council and the youth of St. Paul's Parish, Walewale, for their immense contribution in making this work a success. Lastly, to my friends and colleagues in school, especially those who contributed in various ways through discussions or shared insights, thank you for your contributions and companionship. May our almighty God bless and keep you all.

References

Afful, D., & Boateng, J. K. (2023). Mobile learning behaviour of university students in Ghana. Cogent Social Sciences, 9(1), Article 2204712.

Beck, A. T. (1976). Cognitive therapy and the emotional disorders. London: International Universities Press.

Bhandari, P. (2021, October 18). Ethical considerations in research | Types & examples. Scribbr. https://www.scribbr.com/methodology/ethical-considerations-in-research/

Creswell, J. W., & Creswell, J. D. (2017). Research design: Qualitative, quantitative, and mixed methods approaches (5th ed.). SAGE Publications.

Columbia University Irving Medical Center. (2024). Smartphone use and mental health: What parents should know. https://www.cuimc.columbia.edu/news

Herrero, J., Urueña, A., Torres, A., & Hidalgo, A. (2019). Socially connected but still isolated: Smartphone addiction decreases social support over time. Social Science Computer Review, 37(1), 73–88. https://doi.org/10.1177/0894439317742610

INEE (Inter-Agency Network for Education in Emergencies). (2016). Psychosocial support and social and emotional learning for children and youth in emergency settings. https://inee.org

Lapierre, M. A., Zhao, P., & Custer, B. E. (2019). Short-term longitudinal relationships between smartphone use/dependency and psychological well-being among late adolescents. Journal of Adolescent Health, 65(5), 607–612. https://doi.org/10.1016/j.jadohealth.2019.06.001

Machuki, O., & Mutua, J. (2021). Mobile phone influence on sexual behaviour of undergraduate students: A case study of Jomo Kenyatta University of Agriculture and Technology, Kenya. International Journal of Communication and Public Relation, 6(2), 17–41. https://doi.org/10.47604/ijcpr.1344

Mukherjee, S., & Dasgupta, P. (2020). Smartphone use scale: Development and validation. International Journal of Psychological Research, 13(1), 23–31. https://doi.org/10.21500/20112084.4367

Rose, McDonald, Von Mach, Witherspoon, & Lambert, S. (2019). Patterns of social connectedness and psychosocial wellbeing among African American and Caribbean Black adolescents. Journal of Youth and Adolescence, 48(12), 2271–2291. https://doi.org/10.1007/s10964-019-01135-7

Ting, H., Thaichon, P., Chuah, F., & Tan, M. (2019). Disposition decisions of university students toward smartphones: Impact of usefulness, attachment, and social influence. Journal of Retailing and Consumer Services, 50, 195–203. https://doi.org/10.1016/j.jretconser.2019.05.006

World Health Organization. (2022). WHOQOL-BREF: Introduction, administration, scoring and generic version of the assessment. https://www.who.int/tools/whoqol

World Health Organization. (2022). Adolescents and mental health. https://www.who.int/news-room/fact-sheets/detail/adolescents-mental-health