DYNAMICS OF ADULT LITERACY FOR CURBING EXCESSIVE DIGITAL SOCIAL MEDIA USE AMONG YOUNG ADULTS: IMPLICATIONS FOR EFFECTIVE TEACHING AND LEARNING

[1]Ajayi, Rachael Adejoke (Ph.D.) and [2]Kadiri Daniel (Ph.D.)

Lagos State University of Education

[1]radejo1965@gmail.com

[2]kadiride@lasued.edu.ng

Abstract

Excessive digital social media among contemporary teenagers has become a hydra-headed monster, leading to social isolation, anxiety, depression, phubbing, and low academic performance. This study investigated the dynamics of adult literacy in curbing excessive digital social media use among young university adults in Epe district, Lagos State. The objective is to explore how the dynamics of adult literacy can be utilised as an effective major instrument for curbing students' misuse and excessive use of digital devices. The study adopted an experimental research design comprising experimental and control groups. The former was given adult literacy education while the latter was not. SPSS 21.0 version was used to compare the before and after excessive digital social media use, social isolation, and phubbing analysis. Also t-test was conducted to compare the differences. Results indicated that the average exccesive digital social media use and social isolation scores of the experimental and control group showed t=4,56, p=0.002 and t-1.24, p=.321 respectively for social isolation and phubbing. This study hence showed that adult literacy education can be effective for curbing excessive social media use. The research thus contributes to the growing body of knowledge by integrating the dynamics of adult literacy into a cohesive framework that has practical implications for psychologists, educators, and policymakers. These are significant as they offer actionable insights for developing targeted adult literacy intervention programmes to support young adults in navigating the digital age. Finally, recommendations aimed at optimizing the benefits of technology while minimizing its negative impacts on the younger generation were offered, thus fulfilling the study's objectives and providing a basis for future policy and educational strategies.

Introduction

The basic need for companionship and social connections amongst human beings are inherently fundamental to human nature. The strength of such social bonds profoundly shapes to a large extent their identity and success in life, with consequences for their psychological overall being. According to Büchi (2024), humans are inherently inclined to live and interact within groups, relying on social connections, communication, and cooperation to thrive and survive. Hence, being socially connected to others can ease stress, anxiety, and depression, boost self-worth, provide comfort and joy, prevent loneliness, and even add years to your life (Bora & Neelakandan, 2023). However, a lack of strong social connections can pose a serious risk to individual mental and psychological well-being, as humans are wired to form relationships and depend on others for our well-being, as opposed to living solitary lives.

Today, many individuals rely on digital social media platforms such as Facebook, X (formerly Twitter), Snapchat, YouTube, TikTok, and Instagram to find and connect with one other. However, while each has its benefits, it will never be a viable substitute for meaningful and authentic in-person human relation, which largely depends on face-to-face interactions with one another. This is essential in relieving stress and promoting overall psychological well-being (Cataldo, Lepri, Neoh & Esposito, 2023).

However, despite the enormous benefits of technology in fostering greater interaction and connections among human beings, excessive use of digital social media has often led to feelings of loneliness, isolation, and worsening psychological issues such as social withdrawal, phone addiction, and phubbing. More importantly, as opined by Ding and Li (2023), continuous engagement and access to digital social media platforms via smartphones or tablets may lead to impulse control issues, as persistent notifications and constant alerts diminish focus, and in the process disturb sleep patterns, thus creating a compulsive reliance on the phone. In addition, the practice of phubbing, generally considered inappropriate behaviour, has become an emerging phenomenon of worldwide interest to researchers. As used in this study, phubbing is a social exclusion and interpersonal neglect that involves the act of snubbing someone in a social setting by looking at one's phone instead of paying attention to the other person. According to Idris, Willya, Wekke, and Mokodenseho (2021), phubbing behaviour has negative consequences on interpersonal communication, to the detriment of the satisfaction of relationships and feelings of personal well-being.

Idris et al (2021) affirmed that digital social media platforms are designed to snare people's attention, keeping them online and prompting them repeatedly to check their phones for updates. And much like a gambling compulsion or an addiction to nicotine, alcohol, or drugs, digital social media use can create psychological cravings that become detrimental to other aspects of our lives. Thus, excessive digital social media use can create a negative, self-perpetuating cycle leading to feelings of inadequacy, dissatisfaction, social isolation, and addiction to phones. According to McCrory, Best & Maddock (2022), such feelings can adversely impact emotional well-being, exacerbating depression, anxiety, and stress-related symptoms. And as these symptoms worsen, individuals may turn to digital social media use even more, thereby creating a continuous circle of psychological distress.

Social isolation is another significant issue linked to the overuse of digital social media, a multi-dimensional construct conceptualised in this study as the inadequate quantity and/or quality of interactions with other people. Research has shown that increased social isolation is associated with decreased life satisfaction, higher levels of depression, and lower levels of psychological well-being (Sujarwoto, Tampubolon & Pierewan, 2023; Rslankara, Demir, Usta & Altıparmak, 2022).

Research also showed that globally, 71% of young people worldwide are internet users, and young people between the age range of 15-24 represent the group with the highest internet usage (Žanić, Miletić & Milak, 2023; Thomas, Choudhari, Gaidhane, & Quazi, 2022). Similarly, in many countries, the use of technology among adolescents is increasing rapidly, with smartphones, mobile applications, and social media platforms becoming integral to the daily routines of many young individuals. Through these digital avenues, the internet offers a range of opportunities for young people, including building and maintaining peer relationships, accessing entertainment such as videos and movies, obtaining academic information, and maintaining instant communications with parents, friends, and others (Orben, 2020). However, despite the enormous benefits, these opportunities come with significant risks as these young people may encounter disturbing materials, fall victim to online harassment or hate, and face threats such as identity theft, inappropriate sexual solicitation, and predatory behaviour (Sujarwoto, Tampubolon, & Pierewan, 2023; Jayman, Ayliffe, & Essau, 2023).

The past decades have continued to witness unprecedented proliferation of digital technologies, with a global increase in internet users that are presenting both opportunities and challenges. The

growth in social media use has come to play an essential role in how the young generation acquires information, connects with friends and family, and enjoys entertainment (Khan, 2020). Accordingly, this has given rise to concerns about the impact it may have on users' psychological well-being. While there are many benefits attainable through the use of digital information and communication technologies (ICTs), excessive digital social media overuse has been found to impair individual well-being (Lee, Kim & Park, 2021).

In a nationally representative survey conducted by Odgers and Jensen (2020), excessive digital social use was found to be negatively associated with psychological well-being. In a related development, a quantitative study found that young adults who used social media more often had worse self-esteem, a more negative body image, higher levels of sadness, and higher levels of anxiety (Holly, Wong, Kessel, Awah, Agrawal & Ndili (2023). The detrimental effects of excessive digital use were underlined by qualitative studies, and the synthesis of the results presents a sophisticated picture of the intricate connection between young adults' excessive social media use and psychological well-being.

Emerging research underscores the negative consequences of overusing digital media, noting that excessive recreational screen time is associated with poor academic performance and a reduced sense of connection within the school environment (Hanebutt, 2023). Similarly, heavy use of digital media and devices according to Gracia, Bohnert and Celik (2023), have been associated with smartphone addiction, depression and isolation and, especially among university undergraduates, who are dealing with an overabundant flow of information and social relationship options throughout the day, and these can be the source of behavioral problems. The users thus become so involved with certain applications or content on the internet that they are no longer able to control their online activity. Inability to control engagement on the internet turned into a compulsive internet use symptom, which in another literature also referred to internet or smartphone addiction (Fersko, 2021). Compulsive internet users will thus exhibit the compulsivity of behaviour characterized by experiencing unpleasant emotions when Internet use is impossible and failing to cut down on the internet use despite having the desire to do so, resulting in conflict with others. Compulsive internet user thus becomes so vulnerable as media occupy a considerable portion of their discretionary leisure time. This often results in social isolation, a condition characterised by the absence of meaningful interaction with others. Those who experience social isolation, according to Ding (2023), are deprived of social relationships and lack contact with

others. Excessive digital social media usage is thus associated with anxiety, loneliness, and depression (Ambike, Rao, Paranjape & Adarkar, 2023) and social isolation (Odgers & Jensen, 2023). Furthermore, Vanden and Nguyen (2022) reported that increased social isolation significantly correlates with higher risks of suicide, particularly when the isolation involves estrangement from close social circles such as family, friends, and family.

Researchers, educators, stakeholders, and policymakers are concerned about the growing concern over psychological risks and addictive potential associated with excessive internet use among young adults. In response to this, prevention efforts have increasingly emphasized the role of adult literacy as a valuable platform for fostering digital literacy skills. These incentives aim to educate parents and teachers about the online risks young people face and to promote responsible digital behaviour, such as kindness and empathy, through targeted social awareness campaigns.

Adult Literacy, according to Afonja (2017), has been a major contributor to national development and education in general. It is no doubt a major tool for peaceful co-existence in any given society, with all things being equal. Again, with increasing interest and exposure of adults who are parents in digital education through adult literacy programmes, the financial gains that usually pull these teenagers into digital fraud will be reduced, as most of the potential victims would have become knowledgeable, thereby shrinking the market. More importantly, when parents through the instrumentality of adult literacy become knowledgeable to a reasonable extent in digital education, it is expected that they will be up and doing in censoring what their wards do on digital devices and social media to the extent that the monster would have been tamed before they enter into their teenage years. This will also help to make the teaching learning process effective in our various schools and institutions where learning takes place. Based on the above understanding therefore, one can infer without any iota of doubt that adult literacy programmes if well-tailored, properly structured, and monitored, would fit as a major instrument for curbing teenagers' misuse and excessive use of digital devices.

In light of this research gap, the primary objective of this paper is to explore the impact of excessive digital social media use and how adult literacy can be utilised to solve the challenges university students in Lagos State are presently experiencing in Epe district, Lagos State.

Statement of the Problem

Advancements in information and communication technologies have profoundly reshaped social interactions. This has led to excessive digital social media use with the attendant consequences for students in terms of social isolation, phubbing, and smartphone addiction. Consequently, this has resulted in anxieties, loneliness, and depression to the extent that university students now frequently engage with their smartphones while interacting face-to-face communication with others, leading to decreased psychological well.

Consequently, excessive digital social media use has been found to harm students' coping style, resulting in their inability to control their emotions, which can lead to social, medical, and psychological harm to people by limiting their ability to make their own choices.

Given the apparent challenges regarding the possible negative impacts associated with excessive digital social media usage particularly on psychological well-being of university students, there is reason to be concerned about the negative impact these constructs have over students' ability to function in the university and to explore how adult literacy can be effectively utilized in addressing the problems.

Objectives of the Study

This research is designed to explore whether the development of adult literacy intervention programmes can positively influence excessive and compulsive use of digital social media use score in terms of social isolation, anxiety, and phubbing among young university adults in Epe community in Lagos State, Nigeria, after administering prevention adult literacy programs. Specifically, the objectives of the study are to:

Specifically, the objectives of the study are to:

i. determine the influence of adult literacy programme on the psychological well-being of university students in Epe District, Lagos State, as it relates to their social isolation.

ii. examine the effect of administering adult literacy intervention programme on phubbing among university students in Epe district, Lagos State Nigeria.

iii. investigate the effect of adult literacy programme on smartphone addiction of university students in Epe district, Lagos State Nigeria.

Research Questions

The following research questions were raised to guide the study

i. To what extent will the influence of adult literacy programme affect the psychological well-being of university students in Epe District, Lagos State, as it relates to their social isolation?

ii. In what ways will the administering of the adult literacy intervention programme affect phubbing among university students in Epe district, Lagos State Nigeria?

iii. how will the implementation of adult literacy programme affect smartphone addiction of university students in Epe district, Lagos State Nigeria?

Research Hypotheses

1. Administering of adult literacy programme has no effect on curbing the social isolation of young university adults in Epe District, Lagos State.
2. Administering of adult literacy programme will not significantly affect phubbing among young university adults in Epe District, Lagos State.
3. There will be no significant difference between university young adults exposed to adult literacy and those who were not in terms of anxiety in Epe district, Lagos State, Nigeria.

Research Methodology

The research methodology explored research design, population of the study, sample size and sampling technique, instruments for data collection, validity and reliability of the instrument, methods of data collection and methods of data presentation and analysis.

Research Design

The research design is a semi-experimental study with a pre–test–post–test control group to determine the effect of adult literacy programme on reducing excessive digital social media use among young university adults in Epe district, Lagos State. In this study experimental research design was used in conducting the study and collecting comprehensive data on the influence of excessive digital media use on the psychological well-being of university students in Epe district, Lagos State. The combination of quantitative and qualitative methods provided a more holistic understanding of the phenomenon, allowing for a deeper exploration of students' experiences and

perspectives. This study used **purposive sampling techniques** to select participants from the three universities in Epe district. The sample consisted of students aged 18 to 24 who actively use social media platforms.

Table 1. Format for Experimental research

	Pre-test	Treatment	Post-test
Experimental	0	X	0
Control Group	0	__	0

X11= Preventive adult literacy programme

O11, O21 = social isolation, Phubbing, smartphone addiction in the pre-field

O12, O22= social isolation, Phubbing, smartphone addiction in the post-field

The Study Area- was Epe, a suburb in the metropolitan city of Lagos State located on the Northern side of the Lekki Lagoon, with a population of 181, 409 (Nigeria Population Commission, 2013). Epe was selected as it has a large concentration of university students from three universities. The

Sample Size and Sampling Techniques

The research was conducted at the Lagos State University of Education, Epe campus, targeting a specific university's young adult students. Using a significance level of 0.005, a statistical power 0.80, and an effect size of 0.70, the sample size of the study was determined through power G*Power 3.1 software. The required sample size for conducting an independent t-test was calculated to be 958 students, accounting for potential dropouts in both the experimental and control groups. Participants were eligibale if they met the following requirements

1). Age between 18 and 24 years (2) Had not previously received adult literacy education aimed at reducing excessive digital social media use, and (3) Posses the ability to communicate, understand the study, and voluntarily consent to participate

Based on this criteria 497 were assigned to the experimental group and 461 to the control group, resulting in a total of 958 participants at the conclusion of the experiment.

Instruments

Excessive digital social media use- a test with 15 questions of standardized excessive digital social media use was used. This is a self-developed diagnostic scale (S-Scale) developed by the researcher to assess problematic digital social media use. The scale comprises three key dimensions: **difficulty in daily living, withdrawal, and tolerance**. Each item was rated on a 4-point Likert scale, ranging from 1 (Not at all) to 4 (Very true), with higher scores indicating a greater level of problematic use. The internal consistency of the scale was found to be high, with Cronbach alpha coefficient of 0.92 in the current study, demonstrating strong reliability.

To measure **social isolation**, a 20-item questionnaire was developed by the researchers. Two lecturers in the measurement and evaluation department assessed the test to confirm its validity and alignment with study objectives. Each correct answer on the test was awarded one point, while incorrect answers received zero. The total scores range from 0 -20, with higher scores indicating greater levels of social isolation. The internal consistency of test was strong, with Cronbach alpha of 0.91 in the current study.

To measure phubbing, the researcher developed 15-item questions to align with the objectives of the study from review of literature on phubbing was reviewed by two qualified experts in the counselling department. Participants with lower scores were considered to have better adjustments and fewer symptoms. Cronbach's was .89 in the current study.

Procedure

The Adult literacy programme was structured into eight sessions, each lasting 45 minutes. The content covered during these sessions included topics such as self-discipline in smartphone use, physical, emotional, and social impacts of smartphone overuse, the negative consequences of excessive smartphone dependence, and strategies to reduce screen time. These topics were delivered through a combination of video lectures and group discussions to enhance engagement and comprehension.

During the session on measurement instruction development, two sets of assessment tools were on excessive digital social media use, phubbing, and smartphone addiction using the developed instruments. Post-intervention scores were then compared with their baseline (pre-intervention) scores to evaluate the effectiveness of the programme.

Analysis of data

Data was analysed using the Statistical Package for the Social Sciences (SPSS), version 21.0. Descriptive statistics, including mean and standard deviation, were employed to summarise the data.

To assess the effectiveness of the adult literacy intervention programme, comparisons were made between pre- and post-scores on excessive digital social media use, phubbing, and social media addiction. The average scores for each variable were calculated for both periods to ensure data symmetry.

A paired t-test was then conducted to ensure to determine whether there were statistically significant differences in participants behaviours before and after the intervention. The analysis helped evaluate the impact of the programme on reducing problematic digital media use and associated behaviours.

Ethical Consideration

This research study certified all ethical considerations without any infringement on both human or animal rights as well as complying with all regulations guiding the ethics of research in the three universities.

Result

The participants in this study were undergraduate students from Lagos State University of Education (LASUED). A total of 958 students were involved and divided into two groups: an experimental group (n = 497), which received the adult literacy intervention programme, and a control group (n = 461), which received no intervention.

The general characteristics of the participants are presented below:

- Age Range: All participants were between 18 and 24 years of age.

- Gender Distribution: [Insert gender distribution here, e.g., 55% female, 45% male – if available]
- Educational Level: All participants were enrolled in undergraduate degree programmes.
- Eligibility Criteria: Participants were selected based on the following conditions:
  1. They had not previously received any adult literacy education focused on digital media use.
  2. They were able to communicate effectively, comprehend the nature of the study, and voluntarily consent to participate.

This stratification ensured that the groups were comparable and met the inclusion criteria for the intervention study.

Table 2: Sociodemographic Variables of students

characteristics	Categories	total	Exp. Group	Control Gp
Gender		(n=958)	(n=497)	(n=461)
Age	18-19years	250(26%)	132(26%)	124(26%)
	20-21years	215(23%)	145(29%)	111(24%)
	22-23years	245(26%)	121(24%)	116(25%)
	24-25 years	248(26%)	99(19%)	110(23%)
Purpose of using	searching	219(22%)	98(19%)	135(29%)
Smartphone	learning	300(31%)	80(16%)	84(19%)
	game	439(45%)	319(64%)	242(52%)
Time of using smart	<1Hr	240(25%)	116(23%)	112(24%)
Per day	2-4hrs	348(36%)	119(23%)	119(25%)
	4-10hrs	370(38%)	262(52%)	230(49%)

Source: Researchers' field Survey, 2025

Table 3: Cross tabulation results of social media platforms and frequency of consumption

(Number of hours use on social media on a daily basis)

SOCIAL MEDIA CONSUMPTION

SOCIAL MEDIAL PLATFORMS (SMP)	<1hour	1-3hrs	-6hrs	7-9hrs	10hrs and above	Total
WhatsApp Count	21	62	46	36	0	165
% within SMP	12.5%	37.5%	28.1%	21.9%	0.0%	100.0%
Facebook Count	20	123	46	84	0	273
% within SMP	7.5%	45.3%	17.0%	30.2%	0.0%	100.0%
Instagram Count	21	51	72	62	15	221
% within SMP	9.3%	23.3%	32.6%	27.9%	7.0%	100.0%
Twitter Count	0	15	21	26	5	67
% within SMP	0.0%	23.1%	30.8%	38.5%	7.7%	100.0%
Tiktok Count	10	31	31	47	5	124
% within SMP	8.3%	25.0%	25.0%	37.5%	4.2%	100.0%
Snapchat Count	5	16	10	10	0	41
% within SMP	12.5%	37.5%	25.0%	25.0%	0.0%	100.0%
Telegram Count	5	21	5	31	0	62
% within SMP	8.3%	33.3%	8.3%	50.0%	0.0%	100.0%
Others Count	0	0	0	5	0	5
% within SMP	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Total Count	83	319	236	295	25	**958**
% within SMP	8.7%	33.3%	24.6%	30.8%	2.6%	100.0%

Source: Researcher's field Survey, 2025

The crosstabulation result in table 2 above showed the association between different social media platforms and the corresponding consumption patterns among the surveyed participants. For instance, among participants who use WhatsApp, the highest proportion (37.5%) falls within the 1-3 hours consumption bracket, followed by 28.1% in the 4-6 hours bracket, and so on. This pattern provides a glimpse of how WhatsApp users allocate their time on the platform across varying consumption ranges. A similar analysis can be made for other social media platforms such as Facebook, Instagram, Twitter, Tiktok, Snapchat, Telegram, Pinterest, and "Others." Overall, the

total distribution across all social media platforms reveals that the largest proportion (33.3%) of participants spend 1-3 hours on social media daily. This is followed by 30.8% of participants in the 7-9 hours consumption range, and 24.6% in the 4-6 hours range. The data also suggests that a smaller percentage of participants (8.7%) spend less than 1 hour, and an even smaller proportion (2.6%) spend 10 hours or more on social media. However, the crosstabulation shows the relationship between social media consumption patterns and the specific platforms used by the participants. It provides a comprehensive snapshot of how individuals allocate their time across various platforms in terms of daily social media engagement.

Test of Hypothesis

Table 4. The Comparison of Social Isolation, phubbing and Smartphone Addiction scores on Pre-test and Post-test

	Social isolation	39.32±3.15	37.71±2.86	-2.41	.01
Exp.	**Phubbing**	11.17±4.28	15.13±3.21	4.56	.002
Group	**smartphone addiction**	9.36±4.21	10.73±2.63	1.24	.321
(n=497)					
	Social Isolation	39.75±4.26	39.63±3.27	-0.38	.689
Conrl	**Phubbing**	11.89±3.62	12.04±2.94	0.77	.378
Group	**smartphone addiction**	9.71±3.93	9.83±2.72	0.69	0.407
(n=461)					

Source: Researcher's Field Survey, 2025

Discussion

The research was conducted to examine whether an adult literacy intervention education programme could have an educational effect on excessive digital social media use and its overbearing consequences on social isolation, phubbing, and smartphone addiction of university students in Epe community. The findings revealed significant changes in several measured variables within the experimental group following adult literacy preventive education programme. Specifically, there was a statistically significant reduction in social isolation scores (t=-2.41, p=0.0016) and a significant change in phubbing scores (t=4.56, p=0.002). However, change in

smartphones addiction scores (t=1.24,p=0.321) was not significantly, the overall trend points towards programmes' positive influence.

These findings are consistent with previous research by Gracia et al (2023), who demonstrated similar outcomes among young adults using a group counselling intervention. Therefore, the results of this study underscore the importance and potential impact of integrating adult literacy as a preventive strategy for managing problematic digital media use among young adults

Conclusion

This study examined the impact of adult literacy preventive programme on excessive use of digital social media among university students in Epe community, Lagos State. A total of 958 participants were involved in the study. 497 in the experimental group and 461 in the control group.

Data were analysed using SPSS WIN VER. 21.0. Findings of the study are summarized as follows:

Hypothesis 1: "There will be significant differences between the pre-test and post-test social isolation scores of students in the experimental group treated with the adult literacy intervention programme compared to the control group." This hypothesis was supported, with results showing a significant reduction in social isolation in the experimental group ($t = -2.41$, $p = .016$).

Hypothesis 2: "There will be significant differences in phubbing scores between the pre-test and post-test for students in the experimental group treated with the adult literacy intervention programme compared to the control group." *This* hypothesis was also supported ($t = 4.56$, $p = .002$), indicating a meaningful reduction in phubbing behavior.

Hypothesis 3: "There will be significant differences in smartphone addiction scores between the pre-test and post-test for the experimental group compared to the control group." This hypothesis was **not supported**, as the difference was not statistically significant ($t = 1.24$, $p = .321$).

These findings suggest that the adult literacy intervention programme was effective in reducing social isolation and phubbing, although it did not result in a statistically significant change in smartphone addiction. Nevertheless, the overall trend supports the value of adult literacy education as a preventive strategy against the excessive and compulsive use of social media through mobile devices.

Recommendations

1. Future research should explore the mechanism of adult literacy as a strategic tool for addressing excessive smartphone use among students. This could involve integrating digital self-regulation, critical thinking, and time management components into adult literacy programmes to assess their impact on reducing problematic digital behaviours.

2. Subsequent studies should involve larger and more diverse sample sizes to enhance the generalizability of findings across different student populations, institutions, and regions.

3. Adult education needs to be given appropriate recognition in fashioning out modalities to help cushion the effects of psychological challenges of social isolation, phubbing, anxiety, smartphone addiction, and other social vices exhibited by the students

References

Afonja, A. F. (2017). Family-friendly workplace policies as predictors of sustainable workforce in the service industry. *Journal of Educational Psychology*, *19*, 27–45.

Ambike, A., Rao, S., Paranjape, R., & Adarkar, S. (2023). Knowledge, attitude and practices regarding digital well-being features and their association with screen time and smartphone addiction in Maharashtra, India. *International Journal of Research in Medical Sciences, 11*(10), 3734–3739.

Bora, S., & Neelakandan, R. (2023). Digital well-being. *International Journal of Research in Education Humanities and Commerce, 4*(2), 63–67. https://doi.org/10.37602/ijrehc.2023.4208

Büchi, M. (2024). Digital well-being theory and research. *New Media and Society, 26*(1), 172–189.

Cataldo, I., Lepri, B., Neoh, M. J., & Esposito, G. (2023). Social media usage and development of psychiatric disorders in childhood and adolescence: A review. *Review*, *13*, 1–12.

Ding, K., & Li, H. (2023). Digital addiction intervention for children and adolescents: A scoping review. *International Journal of Environmental Research and Public Health, 20*(6), 4777.

Fersko, H. (2021). Is social media bad for teens' mental health? The influence of social media on depression, anxiety and psychological distress in adolescents. *International Journal of Adolescence and Youth, 25*(1), 79–93.

Gracia, P., Bohnert, M., & Celik, S. (2023). Digital inequalities and adolescent mental health: The role of socioeconomic background, gender, and national context. In *Adolescent Mental Health Studies* (pp. 328–347).

Hanebutt, R. (2023). Adolescent digital wellbeing definitions, frameworks & research: A scoping review.

Holly, L., Wong, B. L. H., van Kessel, R., Awah, I., Agrawal, A., & Ndili, N. (2023). Optimising adolescent wellbeing in a digital age. *BMJ (Clinical Research Ed.), 380*.

Idris, M., Willya, E., Wekke, I., & Mokodenseho, S. (2021). Peace resolution in education and application on information and communication technology. *Journal of Peace Education and Development, 29*(6), 213–234.

Jayman, M., Ayliffe, J., & Essau, C. (2023). Adaptation, innovation and co-production: Meeting the mental wellbeing needs of a digital generation. *Youth, 3*(1), 447–464.

Khan, R. A. (2020). Digital well-being. *Health Professions Educator Journal, 3*(2), 9. https://doi.org/10.53708/hpej.v3i2.1059

Lee, Y. E., Kim, E., & Park, S. E. (2021). Effect of self-esteem, emotional intelligence and psychological well-being on smartphone addiction. *Journal of Mental Health Studies, 23*(3), 385–393.

McCrory, A., Best, P., & Maddock, A. (2022). The relationship between highly digital social media and young people's psychological well-being: A scoping review. *Journal of Youth Research, 115*, 66–68.

Odgers, C. L., & Jensen, M. R. (2020). Annual research review: Adolescent mental health in the digital age: Facts, fears, and future directions. *Journal of Child Psychology and Psychiatry, 61*(3), 336–348.

Orben, A. (2020). Teenagers, screens and social media: A narrative review of reviews and key studies. *Social Psychiatry and Psychiatric Epidemiology, 55*(4), 407–414.

Rslankara, V. B., Demir, A., Öztaş, Ö., Usta, E., & Altıparmak, A. A. (2022). Digital well-being scale validity and reliability study. *Journal of Teacher Education and Lifelong Learning (TELL), 4*(2), 263–274.

Sujarwoto, S., Tampubolon, G., & Pierewan, A. (2023). A tool to help or harm? Online social media use and adult mental health in Indonesia. *Journal of Mental Health and Society, 17*, 1–18. https://doi.org/10.1007/s11469-019-00069-2

Thomas, N. M., Choudhari, S. G., Gaidhane, A. M., & Quazi, S. Z. (2022). Digital wellbeing: The need of the hour in today's digitalized and technology-driven world. *Cureus, 14*(8), e123–e136.

Vanden, A. M., & Nguyen, M. H. (2022). Digital well-being in an age of mobile connectivity: An introduction to the special issue. *Mobile Media and Communication, 10*(2), 174–189.

Žanić, M., Miletić, G.-M., & Milak, M. (2023). The impact of digital technology use on youth sense of community: A case study from Croatia. *Journal of Community Positive Practices, 1*, 67–83.