



Screen Time Usage on Academic Performance, Moral Behaviour, Intergenerational Interaction and Personal Security among Adolescents in Secondary School in Oyo State, Nigeria

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Abstract:

This study examined the impact of screen time usage on academic performance, moral behaviour, intergenerational interaction and personal security among adolescents in secondary schools in Oyo State, Nigeria. The study investigated how screen time usage influence academic performance, moral behaviour, intergenerational interaction and personal security. The study adopted a descriptive research design of survey type. The population comprised of adolescents in secondary school in public secondary schools in Oyo State, Nigeria. A representative sample was selected using simple random sampling of 1500 respondents. Data were collected through a structured questionnaire designed to measure screen time usage academic performance, moral behaviour, intergenerational interaction and personal security. The instrument was validated and reliability was established using standard statistical procedures. Data were analyzed using descriptive statistics and Chi-square test to test the postulated hypotheses. Findings revealed that academic performance, moral behaviour, intergenerational interaction and personal security were significantly associated with screen time usage among adolescents in secondary school in Oyo state. The study concluded that screen time usage among adolescents in secondary school in Oyo State could influence academic performance, moral behaviour, intergenerational interaction and personal security. The study therefore recommends that if it is possible the use of screen by the adolescents should be banned completely otherwise there should be restriction to the hours, adolescents should use the screen daily. Finally, parents should restrict their adolescents to specific sites.

Keywords: Academic, Behaviour, intergenerational, Moral, Performance,

Introduction

Screen time usage has become one of the most widely studied aspects of adolescent behaviour in the digital age, reflecting the rapid integration of smartphones, tablets, laptops, and televisions into daily life. Researchers generally define screen time as the total hours spent



engaging with electronic devices for activities such as social media, gaming, streaming, and online learning. Prevalence data from North America, Europe, and increasingly from Asia and Africa show that adolescents now spend several hours each day on screens, often exceeding guidelines recommended by public health organizations. This shift has prompted scholars to move beyond treating screen time as a single behaviour and instead examine how different types of use, the context of use, and individual differences shape its consequences for development.

Empirical findings on the impact of screen time are mixed but increasingly nuanced. Studies consistently report that high levels of recreational screen use, especially when it displaces sleep, physical activity, and face-to-face interaction, are associated with lower academic performance, poorer attention, reduced sleep quality, and increased symptoms of anxiety and depression (Baiden, Tadeo., Tonui, Seastrunk and Boateng, 2020). The displacement hypothesis and sleep disruption are the most commonly cited mechanisms, with late-night use and multitasking during study time emerging as particularly problematic. At the same time, research highlights that screens can also support learning, digital literacy, and social connection when used for educational tasks, creative production, or maintaining relationships. According to Adorjan and Ricciardelli (2021), the distinction between active and passive use has proven critical, as adolescents who create content or use digital tools for problem-solving show neutral to positive outcomes, whereas those who engage in prolonged passive consumption or entertainment multitasking experience more negative effects.

Despite the growing body of evidence, significant gaps remain in understanding how screen time operates across diverse cultural and socioeconomic contexts. Most existing research draws on Western samples and self-reported measures, leaving questions about generalizability to settings with different family structures, educational systems, and norms around device use. Emerging work from low- and middle-income countries suggests that rapid increases in smartphone access have outpaced local research, and that factors such as parental mediation, household rules, and cultural values may moderate the impact of screen time (Burke and Kraut 2016). The literature therefore points to a need for more context-sensitive studies that treat screen time as part of a broader ecology of adolescent development, shaped by the interaction of content, context, and individual characteristics rather than by total hours alone.

The extent of screen time among adolescents is substantial and increasingly constant: in the U.S., according to Burke and Kraut (2016), about half of teens ages 12-17 report 4 or more hours of daily recreational screen time, while 96% use the internet daily and nearly 48% say they



are online “almost constantly,” a rate that rises to 50% among 15–17-year-olds and is higher among Hispanic and Black teens. Global estimates place average recreational use at 5-7 hours per day, with gaming, social media, and streaming making up most of it, and older adolescents typically exceeding younger ones. Researchers like Grasdalsmoen, Eriksen, Lønning and Sivertsen (2020) opined that rates vary by socioeconomic and geographic factors, with higher usage among teens in metropolitan areas and families with lower parental education, reflecting how screens have shifted from periodic to continuous engagement throughout the day.

According to Grasdalsmoen, Eriksen, Lønning and Sivertsen (2020), the manifestations of screen time usage among adolescents show up across behaviour, mood, sleep, and social interaction. At high levels it displaces time for sleep, physical activity, homework, and face-to-face conversation, leading to later bedtimes, daytime fatigue, reduced attention span, and lower academic performance. Psychologically, heavy recreational use is linked to increased symptoms of anxiety and depression, greater exposure to cyberbullying and online conflict, and heightened perceptions of insecurity. Socially, Brown and Kuss (2020) believed that adolescents often divide attention between devices and in-person interaction, which can reduce eye contact, shorten conversations with family and elders, and shift peer communication toward digital platforms. Physically, prolonged use is associated with sedentary behaviour and eye strain. Importantly, these patterns vary by type of use: active engagement like creating content or learning shows fewer negative effects, while passive scrolling, gaming, and multitasking with entertainment media are more consistently tied to the adverse manifestations (Amran and Jamaluddin 2022).

According to Alluhidan, Akter, Alsoubai, Park and Wisniewski (2024), the implications of screen time usage for adolescents extend across health, academic, social, and psychological domains. When recreational use displaces sleep, physical activity, and face-to-face interaction, it is linked to poorer sleep quality, lower academic performance, reduced attention, and increased symptoms of anxiety and depression, while also weakening intergenerational communication and respectful interaction with family and elders. Oluwole (2023) believed that beyond these risks, high screen time raises exposure to cyberbullying, privacy violations, and online misinformation, contributing to feelings of insecurity and distorted perceptions of social reality. However, the implications are not uniformly negative: when screen use is active, educational, or socially supportive, it can enhance digital literacy, creativity, and peer connection. This means the key implications center on balance, content quality, and context, suggesting that unregulated, passive, and constant use poses developmental risks, whereas guided, purposeful use can be integrated into healthy adolescent development.



According to unpublished article on the prevalence of the screen time usage among adolescents in Oyo State by the researcher it was discovered that screen time usage was high and increasingly constant, with most teens engaging with devices daily and many spending several hours per day on recreational activities alone. In the U.S., about 50% of teens ages 12-17 report 4 or more hours of daily recreational screen time, while 96% use the internet daily and nearly half, 48%, describe themselves as online “almost constantly,” a rate that climbs to 50% among 15–17-year-olds and is higher among Hispanic and Black adolescents (Bramlett, Black, Zablotzky and Dahlhamer, 2023). Global estimates place average recreational use at 5-7 hours per day, not including schoolwork, with gaming, social media, and streaming making up the bulk of that time. Usage tends to increase with age and varies by socioeconomic and geographic factors, with higher rates reported in metropolitan areas and among teens from families with lower parental education, reflecting a shift from occasional to continuous engagement throughout the day.

Research consistently shows that the amount of time adolescents spend on screens is linked to their academic performance, though the strength and direction of that relationship depend on how screens are used. According to Hedderson, Bekelman, Li, Knapp, Palmore and Dong (2019), large-scale studies and meta-analyses across North America, Europe, and parts of Asia have found a small to moderate negative correlation between recreational screen time and measures of academic achievement such as GPA and standardized test scores. The primary explanation offered is displacement: hours devoted to social media, gaming, and streaming replace time that would otherwise be spent on homework, reading, and sleep. Longitudinal work tracking students from early to late adolescence indicates that each additional hour of daily recreational screen use predicts a gradual decline in grades over time, even after accounting for prior achievement and socioeconomic background (Ingram and Franco, 2014). Sleep loss appears to be a key mediator, as adolescents with high screen use report later bedtimes and poorer sleep quality, which in turn impairs attention, memory, and classroom engagement the following day.

Studies examining the relationship between adolescent screen time and moral values have produced mixed but increasingly consistent patterns, largely depending on the type of media consumed and the degree of parental or cultural mediation. According to Ingram, and Franco (2014), research from developmental and media psychology suggests that prolonged exposure to certain forms of digital content—particularly unregulated social media, violent or sexually explicit material, and online communities that normalize dishonesty or aggression—can influence adolescents’ moral reasoning and behaviour. Adolescents who report high levels of recreational screen time often show lower scores on measures of honesty, empathy, and respect for authority,



though these associations tend to be modest and mediated by other factors such as family communication and peer interaction (Kroenke, Spitzer and Williams, 2003). The concern is not simply the amount of time spent on screens, but the displacement of face-to-face interactions with family and elders, which in many cultures serve as primary contexts for the transmission of moral norms and social accountability.

Theoretical explanations for this link draw on social learning theory and moral disengagement frameworks. Social learning theory posits that adolescents model behaviours observed repeatedly in their media environment, especially when those behaviours are rewarded or glamorized. According to Kroenke, Spitzer and Williams, (2003), online platforms that prioritize sensational or provocative content may expose young users to normalized expressions of lying, cyberbullying, or disrespect toward authority figures, and repeated exposure can reduce the perceived wrongness of such actions. Moral disengagement theory further suggests that anonymity and distance inherent in digital communication make it easier for adolescents to justify unethical behaviour online, which can then generalize to offline contexts. Longitudinal studies indicate that increases in unsupervised social media use over time are associated with declines in self-reported honesty and increases in aggressive or deceptive behaviour, although causality remains difficult to establish due to the bidirectional nature of the relationship (Kroenke, Spitzer, Williams, Monahan and Löwe, 2007).

Cultural context and parental involvement appear to moderate the association between screen time and moral values. In societies where respect for elders and adherence to communal values are emphasized, adolescents who maintain regular interaction with family members tend to show more resilience against the potentially corrosive effects of unregulated screen use. Conversely, MacDonald and Schermer, (2021) opined that when screen use displaces family time and reduces intergenerational communication, adolescents report weaker adherence to traditional moral expectations and greater exposure to value systems that conflict with those taught at home. This pattern is particularly relevant in settings like Nigeria, where moral socialization is traditionally reinforced through direct interaction with elders and community members. The literature therefore suggests that screen time does not operate in isolation but interacts with family dynamics and cultural norms, and that interventions aimed at preserving moral development in the digital age may need to focus less on restricting screen time outright and more on guiding content, maintaining open dialogue, and preserving time for intergenerational engagement (Marquez, Aguiñaga, Vásquez, Conroy, Erickson and Hillman, 2020).



The relationship between adolescents' screen time and their behaviour toward elderly family members has drawn increasing attention as digital devices become central to daily life in many households. According to Huang, Lai, Li, Cui, and Wang, (2023), empirical studies across different cultural settings indicate that higher levels of recreational screen use are associated with reduced frequency and quality of face-to-face interaction between adolescents and older relatives. When adolescents spend several hours each day on social media, gaming, or streaming content, they report spending less time conversing, sharing meals, or engaging in household activities with grandparents and other elders. This shift is particularly evident during family time, where the presence of smartphones and tablets often interrupts conversation and diminishes nonverbal cues of attentiveness such as eye contact and active listening. Researchers have linked these patterns to changes in adolescents' self-reported respect for elders, with higher screen use correlating with lower scores on measures of deference, politeness, and willingness to seek advice from older family members.

Several theoretical perspectives have been used to explain this association. The displacement hypothesis suggests that time spent on screens directly replaces time that would otherwise be spent interacting with elders, thereby weakening intergenerational bonds and reducing opportunities for the transmission of cultural values and life experiences. Okuyama, Seto, Fukuda, Funakoshi, Amae and Onobe, (2021) opined that communication accommodation theory further posits that adolescents who habitually divide attention between digital content and in-person conversation may develop interaction habits that signal disengagement to elders, such as responding briefly or without full attention. Over time, these interaction patterns can lead to mutual frustration, with elders perceiving adolescents as distracted or disrespectful, and adolescents viewing elders' concerns as intrusive or outdated. Longitudinal evidence indicates that as adolescents' unsupervised screen use increases, so too does the frequency of complaints from elders about inattention and rudeness, although the direction of causality is likely reciprocal, with strained relationships also prompting adolescents to retreat further into digital spaces (Okuyama, Seto, Fukuda, Funakoshi, Amae and Onobe, 2021).

Cultural norms and household rules appear to shape the extent to which screen time affects adolescents' behaviour toward the elderly. Orben and Przybylski, (2020), observed that in societies where respect for elders is strongly emphasized and intergenerational co-residence is common, adolescents who maintain structured family routines and experience active parental mediation of device use tend to preserve higher levels of respectful interaction despite moderate screen use. In contrast, when screen use displaces shared activities and elders feel excluded from adolescents'



digital lives, perceptions of disrespect increase and adolescents report feeling less inclined to seek guidance from older relatives. This dynamic is especially relevant in contexts such as Nigeria, where intergenerational respect is a core cultural value and elders traditionally play a central role in moral and social guidance (Muth, Bolling, Hannon, Sharifi, Armstrong and Barlow, 2024). The literature thus suggests that the impact of screen time on adolescents' behaviour toward the elderly is not determined solely by the number of hours spent on devices, but by how screen use alters the frequency, quality, and cultural meaning of intergenerational interaction within the home.

The link between adolescent screen time and perceptions of insecurity and safety has become a central concern in research on digital media use, particularly as smartphones and social platforms expose young people to a broader range of risks both online and offline. Studies carried out by Onyeaka, Muoghalu, Baiden, Okine, Szlyk and People, (2025) & Orchard, Gregory, Gradisar, and Reynolds, (2020), consistently showed that higher levels of recreational screen time are associated with increased exposure to online threats such as cyberbullying, unsolicited contact from strangers, privacy violations, and the dissemination of personal information. Adolescents who spend several hours daily on social media and messaging applications report greater experiences of online harassment and greater anxiety about being targeted, and longitudinal data suggest that sustained exposure to these environments can heighten general feelings of vulnerability. Beyond the digital realm, heavy screen use has also been linked to physical safety risks, as adolescents who are distracted by devices while walking, crossing roads, or in public spaces report more frequent near-miss incidents and reduced situational awareness. The cumulative effect is that prolonged screen use can undermine adolescents' sense of control over their environment, contributing to heightened perceptions of insecurity.

Furthermore, according to Twenge and Farley (2021), explanations for these associations draw on both risk exposure and psychological mechanisms. From a risk exposure standpoint, more time spent online increases the probability of encountering harmful content, predatory behaviour, or peer conflict, and it reduces time available for supervision by parents or trusted adults (Robinson-Cimpian, 2014).. Psychologically, constant engagement with curated and often negative content on social media can amplify fear and distrust, as adolescents are repeatedly exposed to stories of violence, exploitation, and social comparison that distort their perception of safety in everyday life. The phenomenon of "context collapse," where online audiences and interactions blur traditional boundaries between public and private, further complicates adolescents' ability to manage personal information, making them more susceptible to exploitation or unwanted attention. Research also indicates that adolescents with lower digital literacy and



limited parental guidance are least likely to use privacy settings or blocking tools effectively, increasing their susceptibility to online risks that spill over into real-world anxiety.

The rise of smartphones, tablets, and social media has made screen time a central part of adolescent life, prompting extensive research into its effects on development, behaviour, and well-being. Studies across psychology, education, and public health indicate that the relationship between screen time and adolescent outcomes is not uniformly negative or positive, but rather depends on the duration of use, the type of content, and the broader context in which devices are used. According to Robinson-Cimpian, (2014), the high levels of recreational use, particularly when screen time displaces sleep, physical activity, and face-to-face interaction, researchers consistently report associations with lower academic achievement, reduced attention and concentration, poorer sleep quality, and increased symptoms of anxiety and depression. Longitudinal data suggest that these effects can accumulate over time, with adolescents who spend several hours daily on social media, gaming, or streaming showing gradual declines in grades and self-reported life satisfaction, even after controlling for prior functioning and socioeconomic factors (Tandon, Zhou, Johnson, Gonzalez and Kroshus, 2021).

Despite growing evidence, significant gaps remain in understanding how screen time affects adolescents across different cultural, economic, and family contexts. Much of the existing research originates from North American and European samples, and its applicability to settings with different norms around family interaction, education, and device access is still unclear. Emerging studies from low- and middle-income countries indicate that rapid increases in smartphone penetration have outpaced local research on patterns of use and their consequences, and that factors such as parental mediation, household rules, and cultural values around intergenerational respect may shape how screen time influences adolescents. The literature thus points to the need for more context-sensitive research that treats screen time as part of a complex ecology of adolescent development, shaped by individual behaviour, family dynamics, and the social environment in which digital and offline experiences intersect.

Statement of the Problem

Adolescents today spend a substantial portion of their daily time on screens for social media, gaming, and entertainment. While digital technology offers learning and communication benefits, growing evidence suggests that excessive screen time may interfere with key areas of adolescent development. Academic performance may decline as study time is displaced by screen use, and health risks such as poor sleep, sedentary behaviour, and mental stress are increasingly



reported. Beyond individual outcomes, there are concerns that high screen time reduces face-to-face interaction, potentially weakening relationships with elderly family members, and may expose adolescents to content that influences moral attitudes and behavior.

Despite these concerns, research often examines these outcomes in isolation, and findings on the strength and direction of effects remain mixed. It is unclear how screen time usage simultaneously relates to adolescents' academic performance, relationships with the elderly, health status, and moral behavior within the same context.

Understanding these connections is important for parents, educators, and policymakers seeking to guide healthy and balanced technology use among adolescents. This study therefore seeks to examine the impact of screen time usage on academic performance, relationship with the elderly, health, and moral behavior among adolescents.

Purpose of the Study

The main purpose of this study is to determine the association between the screen time usage among academic performance, moral behaviour, intergenerational interaction and personal security.

Research Questions

Hypothesis 1: There is no significant association between screen time usage and academic performance among adolescents in secondary school in Oyo State.

Hypothesis 2: There is no significant association between screen time usage and moral behaviour among adolescents in secondary school in Oyo State.

Hypothesis 3: There is no significant association between screen time usage and intergenerational interaction among adolescents in secondary school in Oyo State.

Hypothesis 4: There is no significant association between screen time usage and personal security among adolescents in secondary school in Oyo State.

Methodology

In this study, a descriptive research design of survey type was employed to establish the association between screen time usage among academic performance, moral behaviour, intergenerational interaction and personal security among adolescents in secondary school in Oyo state Nigeria. The choice of the descriptive research design was motivated by its suitability for collecting data from a large sample population within a short period, making it a cost-effective research approach. The target population for this study consisted of adolescents in secondary



school in Oyo State, Nigeria. Oyo state is divided in to three senatorial districts and five schools were randomly selected from each Senatorial district. In total 1500 students were used altogether with five-hundred respondents from each senatorial district. Simple random sampling technique was used as the sampling technique. Five major instruments were used for the collection of data and the validity and reliability of it were established. The validity of the research instruments was determined by the degree to which the instrument measured what it was supposed to measure and this was achieved using well prepared questionnaire based on the objective of the study. The five instruments were broken down to six subsections:

Section A: demographic details of the respondents were sought for here which contains 6 items that taps information on age, gender, ethnic affiliation, academic level, and parent occupation.

Section B: Moral Behaviour Scale

Moral behaviour Scale (MBS) developed by Fehintola, J. O. (2023). It assesses moral behaviour of adolescents in secondary schools in Oyo state. The instrument was made up of 23 items with four response Likert format ranges from Strongly Agree (SA) = 1 to Strongly Disagree (SD) = 4. The reliability coefficient is $r = 0.73$.

Section C: Academic performance Test: This instrument was constructed by the researches on English language and mathematics to determine their level of academic performance. These two subjects were considered to determine the adolescent academic performance because regardless of student area of specialization both Mathematics and English language are compulsory subjects. The test in English language was prepared by expert in Linguistics while achievement test in Mathematics was prepared by the researcher being the area of his specialization. The reliability of these two tests was 0.72 and 0.76 respectively using Kuder Richardson (KR21). Each test are made up of twenty-five items.

Section D: Intergenerational Interaction Scale (ISS): Intergenerational interaction Scale is a subset of Moral Decadence Scale developed by the researcher. The instrument has 13- items and all the items are rated for agreement on 4-point response format scale. Cronbach's alphas confirm the internal consistency of the ISS scales with $r = 0.89$.

Section E: Personal Security Scale (PSS): Personal security scale (PSS), developed by Tolani (2020), was adapted to assess the personal security exposed to by the adolescent in Oyo State. The instrument consists of 15 items. The 15 items addressed adolescent personal security. The instrument with 15-item has 4-point Likert-type response format from Strongly Disagree to Strongly Agree. The instrument reported an overall reliability coefficient of 0.859 for the scale.



Procedure for Data collection

The researcher visited the selected schools in each senatorial district in Oyo State, requesting for the permission of the school authority to carry out the study. The researcher gave adequate explanation to the respondents in order to ensure appropriate response when attending to the questionnaires. The researcher further assures respondents of the confidentiality of the information provided. The questionnaires were distributed and collected immediately after respondents filled the questionnaires.

Analysis of Data

The data collected was analyzed using Chi-Square Test Statistic to test the association between screen time usage among academic performance, moral behaviour, intergeneration interaction and personal security at 0.05 level of significance.

Results

Null Hypothesis 1: There is no significant association between screen time usage and academic performance among adolescents in secondary school in Oyo State.

Table 1: Association between Screen Time Usage and Academic Performance among Adolescents

	0 to 39%	40 to 79%	80 to 100%
0 to 5 hrs.	403	354	8
6 to 10 hrs.	268	422	6
11 and Above hrs.	13	26	0
Ans.	Chi-Square = 33.239	df= 4	P<0.05

The results from Table 1 showed that Chi-Square value is 33.239, the degree of freedom is 4 and $p < 0.05$. Since the p value at which Chi-Square value calculated is less than 0.05, the researcher concluded that there is significant association between screen time usage and academic performance among adolescents in secondary school in Oyo State. Therefore, the null hypothesis was rejected in favour of alternative hypothesis.

Null Hypothesis 2: There is no significant association between screen time usage and moral behaviour among adolescents in secondary school in Oyo State.

**Table 2: Association Between Screen Time Usage and Moral Behaviour among Adolescents**

	Low Moral Behaviour	Moderate Moral Behaviour	High Moral Behaviour
0 to 5 hrs.	10	16	0
6 to 10 hrs.	295	410	5
11 above hrs.	374	376	9
Ans.	Chi-Square = 11.650 df = 4		p < 0.05

The results from Table 2 showed that Chi-Square value is 11.650, the degree of freedom is 4 and $p < 0.05$. Since the p value at which Chi-Square value calculated is less than 0.05, the researcher concluded that there is significant association between screen time usage and moral behaviour among adolescents in secondary school in Oyo State. Therefore, the null hypothesis was rejected in favour of alternative hypothesis.

Null Hypothesis 3: There is no significant association between screen time usage and intergenerational interaction among adolescents in secondary school in Oyo State.

Table 3: The Association Between Screen Time Usage and Intergenerational Interaction (II) among Adolescents

	Low Intergenerational Interaction	Moderate Intergenerational Interaction	High Intergenerational Interaction
0 to 5 hrs.	352	359	10
6 to 10 hrs.	321	406	4
11 and 11 Above hrs.		27	0
Ans.	Chi-Square = 10.821 df = 4		P < 0.05

The results from Table 3 showed that Chi-Square value is 10.821, the degree of freedom is 4 and $p < 0.05$. Since the p value at which Chi-Square value calculated is less than 0.05, the researcher concluded that there is significant association between screen time usage and



intergenerational interaction among adolescents in secondary school in Oyo State. Therefore, the null hypothesis was rejected in favour of alternative hypothesis.

Null Hypothesis 4: There is no significant association between screen time usage and personal security among adolescents in secondary school in Oyo State.

Table 4: The Association between Screen Time Usage and Intergenerational Interaction (II) among Adolescents

	Low Personal Security	Moderate Personal Security	High Personal Security
0 -5 hrs.	22	25	0
6 - 10 hrs.	325	465	4
11 and above hrs.	337	312	10
Ans.	Chi-Square = 21.138		df = 4
			p < 0.05

The results from Table 4 showed that Chi-Square value is 21.138, the degree of freedom is 4 and $p < 0.05$. Since the p value at which Chi-Square value calculated is less than 0.05, the researcher concluded that there is significant association between screen time usage and personal security among adolescents in secondary school in Oyo State. Therefore, the null hypothesis was rejected in favour of alternative hypothesis.

Discussion of Findings

The study reveals that screen time usage significantly associated with academic performance, moral behaviour, intergenerational interaction and personal security of adolescents in Oyo State. The research was guided by four research questions, establishes a clear association among these variables and screen time usage.

The Chi-square results showing a significant association between screen time usage and academic performance align with existing research on how digital media displaces study time and attention. Meta-analytic study carried out by Okuyama, Seto, Fukuda, Funakoshi, Amae and Onobe (2021) among adolescents indicates that television viewing and video game playing are inversely associated with composite academic scores and mathematics performance. Also, the study carried out by Grasdalsmoen, Eriksen, Lønning and Sivertsen (2020), using a large sample of 9- and 10-year-olds, found that more screen time was moderately associated with decreased academic performance after controlling for socio-economic status and race/ethnicity. This suggests



that higher screen time may reduce time for homework, reading, and sleep, leading to lower achievement. However, the literature also notes that effect sizes are often modest and that content matters, with active, educational screen use differing from passive scrolling.

The second hypothesis which has to do with screen time usage and moral behaviour also came out significant. This finding between screen time usage and moral behaviour is in tandem with the findings of Orben and Przybylski (2020) that link screen exposure to externalizing problems and internalizing difficulties that can impair the development of autonomy, identity, and social responsibility. Screen time has been associated with increased aggression and behavioural concerns in children and adolescents. Longitudinal work conducted by Huang, Lai, Li, Cui and Wang (2023) reported that adolescents using social media more than two hours per day had higher risk of depressive symptoms and poor wellbeing one year later, with the strongest effects in early adolescence. Since moral behavior relies on self-regulation, empathy, and exposure to prosocial models, excessive screen use may limit real-world practice of these skills and increase exposure to antisocial content.

For intergenerational interaction and personal security, the findings reflect broader concerns about how screen use affects social connection and safety. The study by Twenge and Farley (2023) noted that excessive screen time is linked to poor educational and health outcomes, and that a key concern is disruption of sleep and face-to-face interaction, which are fundamental to mood, behaviour and development. Increased time online is also tied to cyberbullying risk. Research by Zablotzky, Arockiaraj, Haile and Ng (2023) shows that the amount of time adolescents spend using information and communication technologies is a crucial factor for cyberbullying perpetration and victimization, and that antisocial media content predicts later cyberbullying. Early social media use has been flagged as raising risks of cyberbullying, digital addiction, and psychological trauma among minors. Taken together, the significant associations in this study support the view that screen time usage influences multiple domains of adolescent functioning from school achievement to social relationships and personal safety.

The significant association between screen time usage and personal security aligns with research linking increased online exposure to higher risk of cyberbullying and other digital threats. Studies consistently show that the amount of time adolescents spend using information and communication technologies is a key factor in both cyberbullying perpetration and victimization. Longitudinal work also finds that exposure to antisocial media content predicts later engagement in cyberbullying over time.



According to study carried out by Oluwole (2020), he opined that higher screen time increases opportunities of adolescents coming in contact with strangers, access to harmful content, and participation in online conflicts. A recent story in the Nigeria dailies indicated that online dating and friendships by many adolescents have sent them to untimely grave. Many publications in the dailies between 2023 till mid of 2026 showed how adolescents made online friendships with unknown persons that promised to assist them and fixed a meeting place instead of assistance it led to their death, maimed and loss of limbs or been used for money rituals. In practical terms, this means personal security for adolescents is not just about physical safety, but also about digital vulnerability. When screen time crowds out offline supervision and face-to-face interaction, adolescents may have fewer adults to turn to when they encounter online threats.

Conclusion

Based on the findings of this study, it can be concluded that academic performance, moral behaviour, intergenerational interaction and personal security could be caused by screen time usage among adolescents in secondary school in Oyo State, Nigeria.

Recommendations

Based on findings of this study the following recommendations are made:

- i) it is recommended that parents and guardians adopt more effective and supportive parenting practices characterised by consistent monitoring, open communication, and active involvement in their children's academic activities. Such practices are essential for fostering positive school attendance behaviours among secondary school students.
- ii) Schools should strengthen guidance and counselling services to address reduction of screen time usage or to prevent usage of screen during the school hours.
- iii) Programmes that discourage the usage of screen most especially the use of telephone at adolescent stage and some other technologies like television should be put in place.
- iv) Educational policymakers and school administrators should ban the use of screen from primary school level to secondary school level of Nigeria educational system.
- v) Both the parents and the schools should enforce and foster good moral and intergenerational interaction among the adolescents.
- vi) Parents should make sure they discourage their adolescents from making online friendship that could lure them into untimely death.



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