

Levels of Knowledge and Involvements in Behavioral Problems Associated with Use of Smartphone by In-School Christian Adolescents in North Central Nigeria

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ABSTRACT

This study examined two main variables namely; the levels of knowledge and the levels of involvements in behavioral problems associated with the use of Smartphone by in-school Christian adolescents in North Central Nigeria. The behavioral problems examined were drawn from moral, social and religious. The design of the study was descriptive and the specific type used was survey as data was collected from a sample of 192 adolescents from three states namely, Benue, Kogi and Plateau. The sample was obtained using purposive sampling technique as only the adolescents who qualified on three criteria of being a student, must be a Christian or at best should go to church and also should own a Smartphone were used. The instrument for data collection was a questionnaire designed by the researcher titled "Behavioral problems associated with use of Smartphone Questionnaire (B-PAUS-Q)". B-PAUS-Q was divided into three (3) sections, A, B, and C. and had 24 question items on moral, social and religious behavioral problems. The response option was on a 5-point rating scale. The B-PAUS-Q was administered by the researcher with the help of pastors in the churches visited in the three states. The data collected were analyzed using mean, standard deviation and t-test of dependent means. The results obtained were that: the in-school Christian adolescents had very high knowledge but very low involvements in the moral, social and religious behavioral problems that were measured. In addition, the three null hypotheses that were stated were rejected as there were significant differences between the in-school Christian adolescents' levels of knowledge and levels of involvements in these behavioral problems. Based on these findings, recommendations were put forth to the Christian religious leaders, parents and teachers on the need for more surveillance, internet education, and discipleship classes or training for new converts particularly the adolescents and young adults.

Keywords: Christian, adolescent, behavior problems, Smartphone, social media, level of knowledge, level of involvement

INTRODUCTION

Adolescence has been defined diversely by many psychologists but with a common thread. It is generally considered as the growth and developmental periods that are in between childhood and adulthood, adulthood as defined by the constitution of the land or country in consideration (Omede & Odiba, 2001; Smahel, 2010, & Omede, 2018). In Nigeria for instance, the constitution considers one to be an adult as from age 18 years. What this portends therefore is that an

adolescent should be within the age brackets of 10-17 years. This age bracket corresponds to the age of schooling at the basic and post basic levels. Characteristically, majority of these adolescents are in school and not yet in employment. They are not allowed the right to franchise, cannot be jailed, cannot be issued with driver's license, cannot operate bank accounts, and cannot be forced into marriage or conscripted into the army (Omede, 2018; Baron & Misra, 2014). Again, at this period of adolescence, growth and development are biologically perceived and seen to be rapid both quantitatively and qualitatively. It is a growth spurt where the physical, social, psychological, emotional and cognitive aspects of an individual shoot up sporadically, appreciably and measurably. Little wonder, the American College of Obstetricians and Gynecologists (ACOG) (2016) referred to adolescence as a time of significant developmental changes. It is a developmental landmark that is realistic, visible and undeniable.

The individuals undergoing these developmental landmarks are called adolescents. Therefore, the adolescents between ages 10 and 17 years and who are in school are those considered and referred to in this study as "in-school adolescents." The dramatic transformations that accompany adolescence at this stage of development are not without implications. They get confused sometimes because of certain feelings in their growth characteristics that are alien to their bodies and cognitive comprehensibility as well as their inability to integrate properly with both the children and the adults (Omede, 2016). There is this confusion of adolescents being rated by children as adults and being rated by adults as children while in reality, they are not in any of these categories. They are in a class of their own as relating either with the adults or children does not fit them well. This also is in addition to adolescents exhibiting a limited capacity for self regulation and an increased risk of susceptibility to peer pressure and experimentation (The American College of Obstetricians and Gynecologists (ACOG), 2016) that manifest in behavior problems or issues. The common behavior issues of adolescents according to Mom Junction (2017) included: physical confrontation, listening to loud music, trying new things and taking risks, peer pressure and formation of habits hard to break, lying, changes in dressing, hair styles and fashion, substance abuse, dating, unplanned pregnancy, and sexually transmitted infections, addiction to cyber space, bullying, aggression and violence. These make many adolescents volatile and incorrigible. The period of adolescence is termed abeyance by some psychologists in view of the fact that there are no much officially defined policies to guide this stage of development (Omede, 2016).

In North Central Nigeria where this study was domiciled, two religious adherents stand out very prominently. These are the Christians and the Muslims. The third religion that ranked next to these two is the traditional one with adherents that are mostly adults found in the hinterlands with little dots of them in the cities. In fact, adherents of traditional religion are rare among the adolescents and even where they are, they hardly identify themselves as practitioners of the religion; they feel shy to identify themselves because it is no longer a popular religion in this region. So, adolescents in this region, largely go to church or mosque. Supposedly, if they are not Muslims, they are Christians even though this supposition or assumption could be misleading.

The focus of this study is the Christian in-school adolescents. It has therefore become pertinent to attempt an explanation or definition of the concept of Christianity or who a Christian is. One of the ways that Christians are largely identified is by their place of worship which is the church. Christians are therefore by popular opinion, worshippers of God who usually congregate in

buildings called church, fellowship or worship centers. This assumption can also be misleading as it takes more than going to church to be a Christian. There are many people that go to church that are not Christians by biblical standard of how one can become a Christian but it takes only God the ultimate justifier to know or say this with utmost correctness. This notwithstanding, there are ways to becoming a Christian that the Bible spells out. According to John 3:16, "For God so loved the world, that he gave his only begotten Son, that whosoever believeth in him should not perish, but have everlasting life" (Success Bible with Notes, King James Version (KJV)). A Christian therefore is that individual that realizes that he/she is a sinner and confesses to the Lordship of Jesus Christ as noted in the book of the Romans 10: 9-10, "That if thou shall confess with thy mouth the Lord Jesus, and shall believe in thine heart that God had raised him from the dead, thou shalt be saved. For with the heart man believeth unto righteousness; and with the mouth confession is made unto salvation" (KJV). Therefore, "this means that anyone who belongs to Christ has become a new person. The old life is gone; a new life has begun" (2 Corinthians 5:17, NLT). A Christian is therefore, a regenerated individual who by the grace of God had put off the old nature that delights and so quickly yields to sin and instead puts on the new nature (Colossians 3:10) that pants after holiness and righteousness in Christ Jesus. Several adolescents in the church are assumed to have accepted Jesus Christ as their personal Lord and Savior. Expectedly, they should turn a new leaf by abhorring evil and sinful practices. They are also expected to be different from other adolescents by being Christians in character and practice as well as in their appetite for and or utilization of the social media (Internet).

Christian in-school adolescents are therefore those "Christian" adolescents that are between ages 10 and 17 and who are in school (the level of education notwithstanding). It may be difficult within the purview of this paper to dissect whether or not these adolescents have accepted Jesus into their lives. But because they go to church, they are all assumed to be Christians and are expected to be guided by the ethics of Christian conduct. Living contrary becomes the aberration. These in-school Christian adolescents largely own and use Smartphone.

A Smartphone is a two-way communication device or equipment that in addition to being used for communication, serves other functional purposes. With this device, oral, textual messages and graphics could be conveyed or shared; audio visual messages could be shared as well as being used as radio, tape recorder and video camera among others (Omede, 2020). These functions coupled with the fact that this device is potable, fanciful, status boosting and relatively affordable (Omede, 2014) endear this device to adults, youths, as well as adolescents who are in and out of schools. A Smartphone, unlike when it was relatively new in Nigeria, is now a common commodity or tool in many hands. It is a technological development that has caught the attention of people, organization, government and the general public. The device is important to people of all ages (Research Clue.com, 2021). The device like any other Information and Communication Technology (ICT) is resourceful. It is applauded for the versatility and performance robustness as well as for making life smooth and easy (Ramli, 2011). There are enormous educational, social, religious and commercial or economic uses that this device could serve. This is because with the Smartphone, users could have limitless access to social media for exploring services that are provided on the media platforms. Some of such social media platforms are the Face book, Twitter, Watts App, Instagram, Snap chart and You-

tube (Asheville Academy, undated, Play by the rules, 2021& Research clue.com, 2021) among others.

The use of Smartphone to access the social media undoubtedly has potential benefits variedly-educationally, economically, technologically as well as socially and religiously. There are opportunities for business growth, economic, technological and educational growth and advancement on its platforms. But in spite of these tremendous benefits and potentials, there are also risks (The American College of Obstetricians and Gynecologists (ACOG), 2016) or ups and downs (Asheville Academy, undated) that are associated with usage. Accordingly, Ramli (2011) noted that its impact is double edged.

Many adolescents seem to be abusing opportunities that these platforms provide. Its use especially among the youths as noted by Onah and Nche (2014) had given rise to social issues in Nigeria. The social media phenomena according to them are overwhelmingly popular among Nigerian youths as well as being one of the major contributors to moral degeneration in the country.

The excessive utilization and abuse of social media by the youths is not just a local or national matter but that of global concern. Lynch (2017a) reported a study that was conducted in United Kingdom that showed that 12- to 15-year-olds in the UK spend an average of 19 hours a week online and also that social media use had capacity to actually influence users' personality and character. A similar report from Asheville Academy (undated) had it that many parents believed popular social media sites such as Face book and Instagram are hindering moral development in youths. And according to Research clue.com (2021), recent studies have shown that teenagers are the age brackets that use the social media most because of its social interaction features. In United States, 90 percent of adolescents have used social media and one third of adolescents visit social media sites multiple times per day (The American College of Obstetricians and Gynecologists (ACOG), 2016). ACOG further reported that among adolescents 12-17 years, 95 percent use the internet and 74 percent have access to mobile internet devices. This situation cannot be far from what obtains in Nigeria in view of the fact that Smartphone is a common tool in most homes as well as in many hands. Some of these adolescents obtain them through their parents, some by their personal efforts as they engage in menial paid jobs while some others obtain theirs by theft or stealing. Incidences of loss and theft of cell phones are common on campuses of learning in Nigeria and in many other public gatherings dominated by adolescents and youths.

It is not the ownership of this tool (Smartphone) by adolescents that makes it bad but what they use it for as there are two sides to its usage-positive and negative. Through the Smartphone they get socially connected online either positively or negatively. Positively, the tool gets them connected with friends and with this they expand their circle of acquaintances, improve socialization skills, and foster creativity as well as using the tool to learn more about health (The American College of Obstetricians and Gynecologists (ACOG), 2016). Parents have reported in a study that they have seen social media contents with positive moral messages such as humor, appreciation of beauty, creativity, kindness, love and courage and that viewing positive online contents could have a positive influence on young people's attitude and behaviors (Lynch, 2017b).

These advantages notwithstanding, there are other sides of this technology that are bad. People are concerned about its dark side especially to younger generations (Ramli, 2011). Through the use of Smartphone, adolescents seem to be running low on moral, social and religious societal approved values. They date illicitly online; tell lies, send sexualized text communication (sexting) (The American College of Obstetricians and Gynecologists (ACOG), 2016). In addition, studies had revealed that adolescents utilizing the social media, conceal their identities and post false information about self and others (Research clue.com, 2021), defraud people and also use the internet to cheat in examinations, hack into peoples' account and embark on cyber bullying (Play by the rules, 2021; Iroanusi, Adimora, Andor, Ube & Audu, 2020; Oxford Learning, 2019 & Mirsky & Omar, 2015). Research clue.com (2021) also noted addiction to the phones and the internet as another behavioral problem exhibited by adolescents. Other behavioral problems noted through research included following wrong models online, kidnapping victims and negotiating ransoms using the phone, sleep deprivation, endless music through the earphones, forwarding of unverified messages and violent videos and messages that are capable of stirring ethnic and religious violence, and pornography (Davies, 2001 & Peter & Valkenburg, 2016). There are studies according to the American College of Obstetricians and Gynecologists (ACOG) (2016) that has shown that use of social media increased early onset of sexual activity.

Socially, adolescents minimize verbal communication with physical contacts as they get engrossed fingering their phones, watching films and listening to music or watching games and playing internet games using the phone. In the classroom, adolescents are silent even before the instructor arrives as students are on their phones, not interacting with their classmates (News wise, 2018). They are physically inactive even when they stay together as a group with plugged in earphones. News wise (2018) citing Caplan said that they are connected to people, but not to the people they are physically with. Many disregard salutations as they do not attempt to greet particularly their elders. And when greeted by elders, they may not respond or when they respond, they sometimes do so flippantly. They hardly greet and answer greetings that are cherished values within the communities where this study was conducted. The dress patterns, the style of hairs is modeled after their acclaimed internet stars and these dress patterns are always alien to the approved societal norms. It is likely too, that while in church, adolescents are also seen to be fondling or fiddling with their phones using them for non-religious purposes as noted by Quora (2018), Techwalla (2019) and Computer Hope (2019). According to them, some of these adolescents who engaged their phones in the classrooms and churches did so to read and send text messages.

In North Central Nigeria like any other zone within the country, there are acceptable moral, social and religious values by the society. Values such as honesty, integrity, truthfulness, hard work, respect for one another and constituted authority are priced highly over and above immorality, lying, kidnapping, defamatory statements, wrong accusations, armed robbery, and deceit to mention these few. Some of these highly cherished values tend to be underrated by the adolescents of this generation especially as they engage the Internet using their phones. The majority of literature reviewed in a study undertaken by Ramli (2011) agreed that Internet was reputed to be one of the reasons for social and ethical problems among students. Technology can be used in ways that magnify a lot of social problems (News wise, 2018). If adolescents use their phones in a wrong way to follow wrong models, tell lies, cheat, steal, bully, plagiarize answers to assignments, date heterosexually and illicitly and use vulgar and abusive languages without due respect to age, will Christian in-school adolescents utilize their phones relatively

differently? Or they engage in these behavior problems using their phone? This is why this study examined the “Levels of knowledge and involvements in behavioral problems associated with use of Smartphone by in-school Christian adolescents in North Central Nigeria.”

AIM AND OBJECTIVES OF THE STUDY

The aim of this study was to examine the levels of knowledge and involvements in behavioral problems associated with use of Smartphone by in-school Christian adolescents in North Central Nigeria.” Specifically, the study examined the:

1. Level of knowledge of in-school Christian adolescents about the moral behavioral problems associated with the use of Smartphone
2. Level of knowledge of in-school Christian adolescents about the social behavioral problems associated with the use of Smartphone
3. Level of knowledge of in-school Christian adolescents about the religious behavioral problems associated with the use of Smartphone
4. Extent of involvement of in-school Christian adolescents in the moral behavioral problems associated with the use of Smartphone
5. Extent of involvement of in-school Christian adolescents in the social behavioral problems associated with the use of Smartphone
6. Extent of involvement of in-school Christian adolescents in the religious behavioral problems associated with the use of Smartphone
7. Difference between the level of knowledge and level of involvement of in-school Christian adolescents in the moral, social and religious behavioral problems associated with use of Smartphone

RESEARCH QUESTIONS

The following research questions were answered in the study:

1. What is the level of knowledge of in-school Christian adolescents about the moral behavioral problems associated with the use of Smartphone?
2. What is the level of knowledge of in-school Christian adolescents about the social behavioral problems associated with the use of Smartphone?
3. What is the level of knowledge of in-school Christian adolescents about the religious behavioral problems associated with the use of Smartphone?
4. What is the extent of involvement in moral behavioral problems associated with the use of Smartphone by in-school Christian adolescents?
5. What is the extent of involvement in social behavioral problems associated with the use of Smartphone by in-school Christian adolescents?
6. What is the extent of involvement in religious behavioral problems associated with the use of Smartphone by in-school Christian adolescents?

HYPOTHESES

The following null hypotheses were raised and tested at 0.05 level of significance

- H01: The level of knowledge and level of involvement in moral behavioral problems associated with the use of Smartphone by in-school Christian adolescents will not differ significantly

- HO2: The level of knowledge and level of involvement in social behavioral problems associated with the use of Smartphone will not differ significantly for the in-school Christian adolescents
- HO3: The level of knowledge and level of involvement in religious behavioral problems associated with the use of Smartphone will not differ significantly for the in-school Christian adolescents.

METHODS

This study employed the descriptive research design. Specifically, it was a survey that sought information on the levels of knowledge and involvement on the behavioral problems associated with the use of Smartphone by in-school Christian adolescents from sampled respondents considered to be true representatives of the population. In-school Christian adolescents with Smartphone made up the population for the study. This population was obtained from the various local church denominations located within Ankpa, Makurdi and Jos in Kogi, Benue and Plateau states, respectively. But through purposive sampling, 3 church denominations with large populations were sampled for the study from each of these three areas given a total of 9 local church denominations. In all, a sample of 192 respondents was used for the study from the three states. The instrument for data collection was a questionnaire designed by the researcher. It was titled "Behavioral problems associated with use of Smartphone Questionnaire (B-PAUS-Q)". The instrument was divided into three (3) sections, A, B, and C. Section A, introduced the B-PAUS-Q to the respondents. Sections B, asked 24 questions on the level of knowledge of respondents about the moral, social and religious behavioral problems associated with the use of Smartphone by in-school Christian adolescents while section C reframed the 24 questions in section B to find out their level of involvement in the said moral, social and religious behavioral problems. The response option in section B and C was on a 5 point rating scale of 1-5 indicating very low knowledge to very high knowledge. Same applied in section C, very low level of involvement to very high level of involvement. The B-PAUS-Q was administered in 3 weeks, 1 week in each of the states by the researcher with the help of the resident pastors of the local churches sampled for the study. The researcher visited the local churches and with the help of the pastor caused an announcement to be made for in-school adolescents with phone that uses the social media facilities to rise to their feet. Based on this, B-PAUS-Q that was self explanatory was distributed to them by the church ushers/protocol to fill after the service and return to the church pastor. The same procedures were repeated in other states. The data were analyzed using mean, standard deviation and t-test of dependent mean statistical tools. The mean, standard deviations answered the research questions while t-test of dependent means tested the significance of each of the three hypotheses at 0.05 levels. The decision rule was 3.00. Any mean from 3.0 and above indicated high level of knowledge in section B and high level of involvement in section C in the behavioral problem being measured while less than 3.0 indicated a rejection or low knowledge or involvement.

RESULTS

The analysis of data collected was done according to the research questions asked and hypotheses formulated thus:

Research Question 1: What is the level of knowledge of in-school Christian adolescents about the moral behavioral problems associated with the use of Smartphone? The answer to this question is shown on Table 1.

Table 1: Knowledge of in-school Christian adolescents about moral behavioral problems associated with use of Smartphone

S/N	Moral behavioral issues: I know that some Adolescents:	X	SD
1	Tell lies using their Smartphone	4.2	0.9
2	Post false information about self using their Smartphone	4.1	1.0
3	Post false information about others using their Smartphone	3.9	1.0
4	Use their Smartphone to cheat in examinations	3.9	1.3
5	Use their Smartphone to plagiarize (cut and paste answers to assignments/projects from online resources verbatim)	4.2	1.0
6	Use their Smartphone for vulgar comments/expressions online	3.6	1.1
7	Use their Smartphone to forward unverified messages/video clips	3.9	1.0
8	Use their Smartphone to send/read inappropriate contents	3.8	1.1
9	Use their Smartphone to make defamatory statements about others online	3.7	1.1
10	Use their Smartphone to view pornographic videos/pictures	4.2	1.1
Grand X		4.0	1.1

Source: Field Survey, 2022, N = 192

Analysis of data on Table 1 showed that the in-school Christian adolescents have very high knowledge about the moral behavioral issues or problems that adolescents engage in using their Smartphone. All the ten (10) items or moral behavioral problems were scored above the acceptable criterion mean of 3.0.

Research Question 2: What is the level of knowledge of in-school Christian adolescents about the social behavioral problems associated with the use of Smartphone? Table 2, provided the answer to this question.

Table 2: Knowledge of in-school Christian adolescents about social behavioral problems associated with use of Smartphone

S/N	Social behavioral issues: I know that some Adolescents:	X	SD
11	Are addicted to the internet using their Smartphone	4.4	0.9
12	Use their Smartphone to date illicitly online	4.0	1.0
13	Follow wrong models online using their Smartphone	4.0	1.0
14	Use their Smartphone for cyber bullying	3.8	1.2
15	Use their Smartphone to send sexualized text messages	4.0	1.1
16	Have less time for people around them when engrossed with their phone	4.0	1.0
17	Use their Smartphone to listen to music, watch and play games endlessly	4.3	1.1
Grand X		4.1	1.0

Source: Field Survey, 2022, N = 192

The analyzed data on Table 3 showed that the in-school Christian adolescents also have high knowledge of the social behavioral problems that adolescents promote with the use of their Smartphone. The grand mean of 4.1 is higher than the criterion means of 3.0. In addition, each of the seven (7) items included on the Table all scored above the criterion mean.

Research Question 3: What is the level of knowledge of in-school Christian adolescents about the religious behavioral problems associated with the use of Smartphone? Table 3, provided the answer to this question.

Table 3: Knowledge of in-school Christian adolescents about religious behavioral problems associated with use of Smartphone

S/N	Religious behavioral issues: I know that some Adolescents:	X	SD
18	Are addicted to cyberspace more than they have personal time with God	4.1	0.9
19	Read text messages on their Smartphone while church service is on	4.2	0.9
20	Write and send text messages while church service is on	4.1	1.0
21	Listen to music using the earpiece while church service is on	3.6	1.2
22	Take selfie using their Smartphone while church service is on	3.6	1.2
23	Use their Smartphone doing Watts App while church service is on	4.1	1.2
24	Play mobile games on their Smartphone while church service is on	3.8	1.2
Grand X		3.9	1.1

Source: Field Survey, 2022, N = 192

Table 3 analyzed data on the level of knowledge of in-school Christian adolescents about the religious behavioral problems that are associated with the use of Smartphone by adolescents. Seven (7) items were identified as constituting religious behavioral problems of using the Smartphone. The in-school Christian adolescents reported having knowledge that adolescents engage in promoting these behaviors using their Smartphone. Each of the items including the grand mean were scored above the criterion mean of 3.0

Research Question 4: What is the extent of involvement in moral behavioral problems associated with the use of Smartphone by in-school Christian adolescents?

Table 4: Extent of involvement in moral behavioral problems associated with use of Smartphone by in-school Christian adolescents

S/N	Moral behavioral issues: I use my Smartphone sometimes to:	X	SD
25	Tell lies online	2.9	1.4
26	Post false information about myself	2.2	1.3
27	Post false information about others	1.8	1.3
28	Cheat in examinations	2.0	1.4
29	Plagiarize (cut and paste answers to assignments/projects from online resources verbatim)	2.8	1.5
30	Make vulgar comments/expressions online	2.2	1.3
31	Forward unverified messages/video clips	2.0	1.4
32	Send/read inappropriate contents	2.3	1.4
33	Make defamatory statements about others online	1.9	1.3
34	View pornographic videos/pictures	2.0	1.5
Grand X		2.2	1.4

Source: Field Survey, 2022, N = 192

The items on Table 4 sought to know the extent to which the in-school Christian adolescents are involved in the identified moral behavioral problems as they use their Smartphone. The grand mean of 2.2 showed that the in-school Christian adolescents are very minimally involved in promoting the identified moral behavioral problems. Each of the ten (10) items scored below the criterion mean score of 3.0.

Research Question 5: What is the extent of involvement in social behavioral problems associated with the use of Smartphone by in-school Christian adolescents?

Table 5: Extent of involvement in social behavioral problems associated with use of Smartphone by in-school Christian adolescents

S/N	Social behavioral issues:	X	SD
35	I am addicted to my Smartphone	2.8	1.3
36	I use my Smartphone sometimes to date illicitly online	2.1	1.4
37	I use my Smartphone sometimes to follow wrong models online	2.0	1.2
38	I use my Smartphone sometimes for cyber bullying	1.8	1.3
39	I use my Smartphone sometimes to send sexualized text messages	1.7	1.2
40	I sometimes have less time for people when I am using my Smartphone	2.9	1.5
41	I use my Smartphone for music, watching and playing games frequently	3.5	1.5
Grand X		2.4	1.3

Source: Field Survey, 2022, N = 192

The analysis on Table 5 showed that the in-school Christian adolescents engage only in one out of the seven (7) items identified as social behavioral issues or problems. It is only item number 41 that scored above 3.0 that is the acceptable mean mark; they declined being involved in the rest six.

Research Question 6: What is the extent of involvement in religious behavioral problems associated with the use of Smartphone by in-school Christian adolescents?

Table 6: Extent of involvement in religious behavioral problems associated with use of Smartphone by in-school Christian adolescents

S/N	Religious behavioral issues:	X	SD
42	I am addicted to cyberspace more using my Smartphone than I have personal time with God	2.2	1.2
43	I sometimes read text messages on my Smartphone while church service is on	2.4	1.4
44	I sometimes send text messages while church service is on	2.4	1.4
45	I sometimes listen to music on my Smartphone using the earpiece while church service is on	1.7	1.2
46	I sometimes take selfie using my Smartphone while church service is on	1.8	1.1
47	I use my Smartphone to do Watts App while church service is on	2.2	1.3
48	I use my Smartphone to play mobile games while church service is on	1.6	1.2
Grand X		2.0	1.3

Source: Field Survey, 2022, N = 192

On Table 6, seven (7) items were identified as constituting religious behavioral problems that adolescents promote as they use their Smartphone. The in-school Christian adolescents declined engaging in anyone of these religious problems using the Smartphone. All the items including the grand mean of 2.0 scored below the acceptable mean of 3.0

H01: The level of knowledge and level of involvement in moral behavioral problems associated with the use of Smartphone by in-school Christian adolescents will not differ significantly
Table 7 provided the analyses of data that tested this hypothesis.

Table 7: t-test analysis of level of knowledge and level of involvement in moral behavioral problems of using Smartphone by in-school Christian adolescents

S/N	Variables	No	- X	SD	t- calculated	t- critical	DF	Decision
1	Level of knowledge in moral behavioral problems using the Smartphone	192	4.2	1.1	3.250	1.645	191	Rejected
2	Level of involvement in moral behavioral problems using the Smartphone	192	2.2	1.4				

Table 7 tested the null hypothesis of no significance difference between the level of knowledge and the level of involvement of in-school Christian adolescents in the moral behavioral problems that are associated with the use of Smartphone. This hypothesis was rejected as the t-calculated of 3.250 was greater than the critical-t of 1.645 at the degree of freedom (DF) of 191.

H02: There is no significant difference between the level of knowledge and the level of involvement in social behavioral problems associated with the use of Smartphone by the in-school Christian adolescents

Table 8: t-test analysis of level of knowledge and level of involvement in social behavioral problems of using Smartphone by in-school Christian adolescents

S/N	Variables	No	- X	SD	t- calculated	t- critical	DF	Decision
1	Level of knowledge in social behavioral problems using the Smartphone	192	4.1	1.0	2.539	1.645	191	Rejected
2	Level of involvement in social behavioral problems using the Smartphone	192	2.4	1.3				

The analyses of data on Table 8 also showed a rejection of the null hypothesis of no significance difference between what the in-school Christian adolescents know about the social behavioral problems of using Smartphone and their being actually involved or engaged in these social behavioral problems as they use their Smartphone. The critical-t of 1.645 was less than the calculated-t of 2.539 at the Df of 191.

H03: The level of knowledge and level of involvement in religious behavioral problems associated with the use of Smartphone will not differ significantly for the in-school Christian adolescents

Table 9: t-test analysis of level of knowledge and level of involvement in religious behavioral problems of using Smartphone by in-school Christian adolescents

S/N	Variables	No	- X	SD	t- calculated	t- critical	DF	Decision
1	Level of knowledge in religious behavioral problems using the Smartphone	192	3.9	1.1	2.904	1.645	191	Rejected
2	Level of involvement in religious behavioral problems using the Smartphone	192	2.0	1.3				

Table 9 tested the null hypothesis of no significant difference between the level of knowledge of in-school Christian adolescents on the religious behavioral problems associated with the use of Smartphone and their involvement in the said behavioral problems as they use their Smartphone. The calculated-t of 2.904 was higher than the critical-t of 1.645 at the DF of 191 implying a rejection of the null hypothesis for the alternate one.

DISCUSSION

Two (2) main dimensions were examined in this study namely, the level of knowledge of in-school Christian adolescents about the behavioral problems associated with the use of Smartphone and the level or extent that they are involved in these identified behavioral problems as they engage their Smartphone. The behavioral problems considered in this study were put under three (3) categories namely, moral, social and religion. Tables 1, 2 and 3 reported analyses of data on the respondents' levels of knowledge on the variables of moral, social and religious behavioral problems of using Smartphone. In order words, these three tables provided answers to the question of how sufficiently the in-school Christian adolescents know or are aware that the identified items on these tables are behavior problems that adolescents generally promote online as they make use of their Smartphone. The grand mean of 4.0, 4.1 and 3.9 for Tables 1, 2 and 3, respectively were higher than the criterion or acceptable mean of 3.0. This therefore, implied that the in-school Christian adolescents were highly aware that the identified moral, social and religious behavioral problems were being promoted by adolescents as they use their Smartphone. This finding is in agreement with the findings of previous studies by Ramli (2011) and News wise (2081). According to Ramli, Internet was reputed to be one of the reasons for social and ethical problems among students while in a similar view, News wise, noted that technology can be used in ways that magnify a lot of social problems. Adolescents use their Smartphone to send sexualized text communication, tell lies, date illicitly, conceal their identities and post false information about self and others in addition to defrauding people, cheating in examinations, engaging in cyber bullying and social media addiction (Mirsky & Omar, 2015, The American College of Obstetricians and Gynecologists (ACOG), 2016, Oxford Learning, 2019, Iroanusi, Adimora, Andor, Ube & Audu, 2020, Effanga, Ejoh, & Udumukwu, 2020, Research clue.com, 2021 & Play by the rules, 2021). These are in addition to other behavioral problems such as forwarding of unverified messages and violent

videos that could stir ethnic, religious and political strives as well as pornography and early exposure to illicit sex (Davis, 2001; Bryant, 2009 & Hornor, 2020).

The second dimension of this study was to find out the extent or level of involvement of these in-school Christian adolescents in these behavioral problems as they use their Smartphone. The analyses on Tables 4, 5 and 6 provided the answers. The grand mean of $X = 2.2, 2.4$ and 2.0 for Tables 4, 5, and 6 respectively were lower than the criterion mean of $X = 3.0$. This implied that the involvement of in-school Christian adolescents in the moral, social and religious behavioral problems associated with use of Smartphone was very low and minimal. This finding is in agreement with the earlier finding by Omede (2018) that examined the outcome of growth and developmental challenges on the behavioral dispositions of in-school Christian adolescents in Nigeria. One of the findings of the study was that the in-school Christian adolescents in spite of the known acclaimed challenges of this stage pass through them with little or no stress because of how their knowledge of the word of God in the Bible had prepared them ahead before the arrival of this time. Almost all the identified behavioral problems that are promoted by the use of Smartphone are called and known by Christians as sin. And if they are sinful, then a Christian, whether adolescent, youth or adult is to abhor and resist them especially as Christians are called to a lifestyle of holy living. The fact that some in-school Christian adolescents reported being involved in some of these behavior problems even though they are not many shows that churches and parents still have some works to do as this had suggested that not all that come or go to church are Christians or are actually born again added to the fact that the levels of Christian maturity of members are also not always the same.

Three (3) null hypotheses that were formulated were rejected as the test of hypotheses revealed significance difference between the knowledge of in-school Christian adolescents and the level of their involvement in the said moral, social and religious behavioral problems as shown on Tables 7, 8 and 9. On each of these Tables, the calculated t was higher than the critical t at the DF of 191. The in-school Christian adolescents have very high knowledge of what adolescents do with their Smartphone but their own involvement was too low or small to be of any significance. This finding aligned with the assertion of Bright (2000) that if Christians identify their identity as citizens of Christ's kingdom, they will live differently here on earth. They must and should be different from other adolescents who are not Christians in the utilization of their Smartphone and in every other aspect of their life endeavors.

CONCLUSION

There are two sides to the use of a Smartphone like is typical of any other technological and or communication device. With it, there are varied benefits or advantages as there are also varied disadvantages socially, economically, educationally as well as religiously. There are behavioral problems such as cyber bullying, lying, posting of negative and abusive comments that could stir up political, ethnic or religious crises as well as cheating in examinations, dating and viewing of pornographic films and pictures among many others that are linked to adolescents as they engage their Smartphone. The findings of this study were basically two, one, that the in-school Christian adolescents have high knowledge that adolescents promote the said behavioral problems and two, that they are not involved in the promotion of the said behavioral problems. The test of significance between these levels of knowledge and levels of involvement on each of the three variables of moral, social and religious behavioral problems proved to be statistically insignificant.

RECOMMENDATIONS

Based on the findings of the study, recommendations were put forth to the following, namely, Christian religious leaders, parents and teachers, thus:

1. It is a fact that not all those that come to church are Christians as well as that their levels of growth and development in the Christian faith may not be the same. This could be a possible explanation for the identified behavioral problems to have scores even though minimally on the scale that measured their level of involvement. This has therefore put responsibility on the Christian religious leaders to consistently and deliberately emphasize and preach gospel or salvation messages that could get unbelievers convicted to be born again as well as to mandatorily organize discipleship training for such newly born-again brethren. This is very necessary because one needs to be born again and study the word of God to be able to know the mind of God about sin and living a life of holiness.
2. Parents need to step up surveillance to monitor the contents of what their adolescent children watch, sites they patronize as well as contents and types of messages they send out for the public view of other online users as they use their Smartphone. In fact, periodic education on why adolescents must take precautions online is necessary to come from their parents.
3. The onus of periodic internet education also lies on teachers particularly; teachers at the basic education level where these adolescents are found in their great numbers, irrespective of the subject or topic that is being taught.
4. In addition, school administrators and teachers should ensure that stricter measures or penalties such as seizing the phone for a day or two if brought into an examination hall should be enforced after this rule is made known to the students.

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