**SMARTPHONES: ADAVANTAGES AND DISADVANTAGES**

**HASSAN NAJAATU MUHAMMAD**

**(ST/CS/ND/20/400)**

**A SEMINAR REPRESENTED TO THE DEPARTMENT OF COMPUTER SCIENCE, SCHOOL OF SCIENCE AND TECHNOLOGY, FEDERAL POLYTECHNIC MUBI, ADAMAWA STATE, NIGERIA**

**NOVEMBER, 2022**

**SMARTPHONES: ADAVANTAGES AND DISADVANTAGES**

**HASSAN NAJAATU MUHAMMAD**

**(ST/CS/ND/20/400)**

**A SEMINAR REPRESENTED TO THE DEPARTMENT OF COMPUTER SCIENCE, SCHOOL OF SCIENCE AND TECHNOLOGY, FEDERAL POLYTECHNIC MUBI, ADAMAWA STATE, NIGERIA**

**IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF NATIONAL DIPLOMA (ND) IN COMPUTER SCIENCE**

**NOVEMBER, 2022**

**Abstract**

*The intention of this study is to investigate the effects of Smartphones children and also how Smartphones affects the Educational, Creativeness, Connectivity and security of children. The intention of this seminar paper is to understand all the positive and negative effects of Smartphone on children. The seminar paper will primarily focus on the Advantages and Disadvantages of Smartphone on children and solutions to the disadvantages.* *At the end, the study will summarize the impact and conclude based on wide range of impacts that Smartphones have on children. The seminar paper will also recommend solutions, in order to reduce the negative impacts of Smartphones and realizes more benefits of this exiting technology.*

**Keywords:** Smartphone addiction, Technology addiction, Learning, Academic performance

## Introduction

The convergence of communication and computing for mobile consumer devices is on the evolutionary course to bring interoperability and leverage the services and functions from each and every industry. In this process of convergence, the Smartphones are the leading devices taking the front end and playing the role of universal mobile terminal. As a marketing strategy the Smartphone term was introduced in the market, referring a new class of mobile phones that provides integrated services from communication, computing and mobile sectors including voice communication, messaging, personal information management applications and wireless communication capability. In real sense Smartphone is a mobile phone with advanced features and functionality beyond traditional functionalities like making phone calls and sending text messages. The Smartphone are equipped with the capabilities to display photos, play games, play videos, navigation, built-in camera, audio/video playback and recording, send/receive e-mail, built in apps for social web sites and surf the Web, wireless Internet and much more. Due to same reasons the Smartphones now become a common choice for consumers along with the use in business as it was initially intended for business users only (Susan, 2011).

The latest surveys show that the popularity of Smartphones are increasing in general public with the more paces then it is increasing in Corporations. Initially the Smartphones were only perceived for business use due to their cost and application, but not today, today we are in a frenetic Smartphone society populated with the Smartphones from many vendors providing a range of advanced functionalities and services on a piece of hardware (Nurfit, 2012). Today Smartphones enable consumers, advertisers and publishers how to better engage, socialize using the ubiquitous experience this advanced platform by leveraging it of the firm. The focus of income statement is on the operating revenues and expenses. User groups of financial reports for decision–making require data related to all easy to use and availability characteristic (Brad, 2010). Due to its ubiquitous nature and social acceptance we can find Smartphone in educational institutes, hospitals, public places and shopping malls etc (Nurfit, 2012).

Today’s Smartphones have been around since last 12 years when Apple introduced the Smartphone in mass consumer market, but in reality, the Smartphone has been in market since 1993. The difference between today’s Smartphone and early Smartphone’s is that early Smartphone’s were predominantly meant for corporate users and used as enterprise devices and also those phones were too expensive for the general consumers (Susan, 2011). The Smartphone era is divided into three main phases. First phase was purely meant for enterprises. This era began with the advent of the very first Smartphone ‘The Simon’ from IBM in 1993. Blackberry is considered as the revolutionary device of this era, it introduced many features including Email, Internet, Fax, Web browsing, Camera (Brad, 2010).

This phase was totally based on Smartphone targeting enterprises. The second phase of Smartphone era started with the advent of iPhone, the major breakthrough Smartphone market in 2007. Apple revealed its first smart phone in 2007. This was the time when first time ever industry introduced the Smartphone for general consumers market. End of 2007 Google unveiled its Android Operating System with the intention to approach the consumer Smartphone market. The emphasis during this time period was to introduce features that the general consumer requires and at the same time keep the cost at lower side to attract more and more customers. Feature like, email, social website integration, audio/video, internet access, chatting along with general features of the phone were part of these entire phone. Third phase of Smartphone was mainly closing the gap between enterprise centric and general consumer centric Smartphone and improvement the display quality, display technology and on top of that also aiming to stabilize the mobile operating system, introduce more powerful batteries and enhance the user interface and many more features within these smart devices. This phase logical started in 2008 with the upgrades in the mobile operating system and within last five year there have been several upgrades in Apple iOS, Android and Blackberry OS. The most popular mobile Operating systems (iOS, Android, Blackberry OS, Windows Mobile) and key Smartphone vendors (Apple, Samsung, HTC, Infinix, Motorola, Nokia, LG, Sony etc.) are concentrating to bring features both in operating systems and devices which will provide exciting feature to enterprise and general consumers. The role of Android has been tremendous during this time period as it provided a great opportunity to all vendors to build devices using the great open source Android technology.

**Literature Review**

The smartphone is an indispensable device in the area of mobile learning. The most crucial features of a smartphone are its availability with users, strong battery, touch screen, millions of downloadable applications Nurfit (2012). According to Brad (2010), a “smartphone is a mobile phone with more advanced computing capability and connectivity than a feature phone which has limited functionality”. Smartphones were released in the year 2000. It was first manufactured by Ericsson and the model was called R380 Manoj (2011). Smartphones support learning either offline or online. Offline access enables users of smartphones to store any form of learning materials such as pdf, powerpoint, word, excel, pictures, animations, symbols; irrespective of the geographical location. Internet access is needed for learners like students and teachers to visit websites to meet their information needs. The exploration of the smartphone has changed the dynamic of students learning activities. It is refreshing to note that, students can carry a whole semester’s learning materials on a small smartphone which gives students the latitude to learn in an area which, on a normal circumstance, will require a laptop or other related form of a computer. For instance, a student can access their lecture materials whiles in a car, train, plane, and marketplace to mention but a few. It also enables students to register courses online, take a quiz or semester through the use of an assigned or registered learning management system, and can have a group discussion digitally (Douglas, 2011).

## Advantages of smartphones

### Digital literacy

Digital literacy means understanding and knowing how to use technology. Children spend most of their time using smartphones; they become more tech-savvy and know how to use technology better than parents. Digital literacy does not only mean knowing how to use social media like Facebook, Instagram, Snapchat, and more. It means the ability to find a new information and use it beneficially. Being digitally literate also helps kids know about the risks and limitations of technology and take the precautions required (Manoj, 2011).

1. **Assignment:** It helps kid in term of doing or googling their assignment and home works by their self, without asking there elder once and also in time of creating, developing of knowledge by their own self.
2. **Research:** If kids research a particular topic for their school report by themselves, they will learn the importance of quality data, trustworthiness, and source validity. And your kids will know how to properly acknowledge the source.
3. **Protect their privacy:**Your kids will learn basic internet safety like keeping their profile private, setting strong passwords, and respecting other’s privacy as well. Also, make sure that they do not share their personal information online.
4. **Understand social media: Your** kids should know that whenever they create a profile on social media, everything they post, share, and comment on can be easily seen by others. So, they must know what they are sharing and commenting on.

#### Promotes creativity

Improving a child’s creativity is essential for their development since it helps develop other important skills associated with their intellectual, social interactions, and emotional well-being. Rather than watching endless [YouTube videos](https://shiftedmag.com/how-any-youtube-channel-can-use-story-feature-to-maximize-the-video-reach/) and [playing games](https://shiftedmag.com/f95zone/), you can engage them in other activities like photography, creative writing, and reading a new book (Manoj, 2011).

Smartphones can also be used as a great medium to teach good things to your kids. You can help them promote creativity through the following ways:

1. **Educational, artistic apps:** You can install several educational apps on your kid’s phones to enhance their creativity. Some of the artistic apps are storytelling, music, drawing, and painting. These apps allow children to present their artwork while creating it on virtual paper and share them online. Kids can create their own stories by placing characters and using animations. Musical apps allow kids to learn musical notes and compose songs as well.
2. **Go out and take photos and videos:** If your kids love photography, smartphones can be the best option to enhance their skills. You can assist your kid while taking pictures and videos. You should allow them to explore nature and develop their photography skills. Connecting with the natural environment also enhances emotional and social well-being. These days smartphones have powerful lenses and support various editing apps; as a result, they can also learn editing skills.
3. **Encourage to read and write:** With the help of smartphones, your kids can easily write down their ideas and experiences in an online journal. It will help them to keep their tasks organized and develop their skills. If your kid has a writing hobby, they can enhance their writing skills by finding references online. Your kids can share their blogs, photography, and videos with their friends. They can also improve their reading habit by getting “learn to read” apps.

**Stay connected**

Nowadays, people have many ways to connect with friends and family, but the most effective and inexpensive way is to use smartphones. With the help of smartphones, your kids can easily communicate with their friends and extended family living in different parts of the world. Your kids will be able to message as well as [call and video chat](https://shiftedmag.com/popular-live-video-call-apis-sdks/) with their dear ones (Manoj, 2011). With advancements in technology, various applications like Viber, Whatsapp, and Skype are available to help users interact with their friends and share files and photos. Your kids can easily share their notes, homework, project files through these apps. If your children have smartphones, they may join social media forums and online groups with similar interests, share their interests and creativity, and learn new things.

**Safety and security**

One of the best things about giving your kids a smartphone is that they can easily contact you in an emergency. Its ability to contact during emergencies can provide a sense of security to both children and parents. For instance, if your child is stuck in traffic or late for their extra classes, you can quickly call or text them to know their whereabouts. You can also use GPS tracking apps or software to monitor the movement of your kids. According to Sam (2012), 33 percent of parents use location tracking software to track their children’s location. Even your kid can use these apps to trace their way back home if they are lost.

**Enhance learning**

There are several applications that support kids to grow their knowledge and creativity. You can install helpful educational-related applications on their phones to reduce [online gaming](https://shiftedmag.com/introduction-to-online-gaming/), watching Youtube videos, and social media usage. Research has shown that more than 3300 apps are designed to help kids make learning easier and more accessible (Manoj, 2011). Here I have mentioned some of the ways that smartphones can help your kid support their learning are:

1. **Access educational apps:**If your child ever comes to you for help with their maths solution or difficult assignments and even you have a hard time solving it, having a smartphone helps your kids get in touch with homework help very quickly. They can easily access free online forums, courses, infographics, and tutorial websites with a few clicks. Learning through smartphones encourages communication and collaboration with them, which helps kids to overcome geographical and economic barriers.
2. **Track their homework and tasks:** As kids carry their phones wherever they go, it is quick and easy to record and check in on daily deadlines and pending due dates.
3. **Setting reminders:** Setting reminders on smartphones is a great way to maintain an ongoing task list. For example, kids can remind themselves to submit a project before a deadline or attend parent-teacher meetings.
4. **Note-taking:**Kids are considerably faster at adding new information to their mobile phones. Evernote and other apps allow youngsters to record thoughts, videos, site URLs, photographs, and other media in their notes.

**Learning responsibility**

Many parents think that giving a smartphone to their kids at an early age is not a good idea, but giving them such a valuable item may increase their ability to be responsible. Giving your kid smartphones can teach your kid a sense of responsibility (Brad, 2010). You can use smartphones as a tool to teach them about money, overspending, and budgeting. For example: After you buy a phone for your kid, you can include them on a mobile plan and inform them of the amount of data they can use each month. If they go above that limit, you can set restrictions such as not being allowed to use a phone for certain days or give them additional duties to compensate for the excess cost.

#### Disadvantages of smartphones

The convenience offered by these modern devices is indeed great, but on the other side also there are major issues associated (Douglas, 2011):

**Damaged eyesight**

Young kids increasingly playing games and watching YouTube videos for hours can severely affect their eyes. Some kids hold their phones too close to their eyes. Staring at mobile phones continuously for a long time in a day can cause eye damage. Though it is currently not proven to cause permanent eye damage, it can cause discomforts like headaches, dry eyes, blurred vision, and pain.

**Disturbed sleep pattern**

Most kids use their mobile phones before going to bed. Children can play games or watch youtube videos during the night. And using any electronic device at night can lead to reduced sleeping time. Any digital device we use emits blue light harmful to our eyes and tricks our brain into thinking it is daytime. A recent study by Walle (2020), shows that lack of quality sleep in kids can affect their physical development, productivity, lack of energy, decreased attention, and obesity. So, make sure that your kid is getting enough sleep. If they have a habit of using their phone late at night, enforce strict rules about using their phone at the mentioned time or 2 to 3 hours before bedtime, or you can also give them books to read.

**Games:** nowadays games has become almost the most attractive daily life activities most especially in time of smart phone games, if we observe clearly we will find out that almost all the kid of this generation are in love with smart phone game, it attract the mind of children and take them away from their school, home, activities and games can stop a kid from helping there parent with some of home activities, if we can consider even to our families and to our junior brothers at home when we give them work and the are still having smart phone, playing game you will find out that they will be angry and not be able to do assignment.

**Health problems**

The overuse of mobile phones not only affects kids’ mental health but also increases the risk of other health problems. Continuous use of smartphones can result in excessive strain on their neck and shoulder. It can cause headaches, neck pain, shoulder strain and affect their posture. As there is no physical movement while using mobile phones, your kids have a high chance of becoming obese and increase the risk of other illnesses like hypertension and diabetes.

The convenience that Smartphone bring in daily life is tremendous, users with a click or simple touch of finger can access the health and related services anytime and anywhere, but along with the convenience it also poses several dangers as well. According to a recent article from CNN (Koh et al., 2011), this convenience of Smartphone access to health resources can be dangerous if patients start avoiding personal interactions with doctors for mandatory tasks.

**Poor academic performance**

Kids are addicted to smartphones, and they carry them everywhere they go. Most kids carry phones along with them, even in school. As smartphones are capable of storing all the educational information, some kids may also use them to cheat during examinations. Many kids have been found cheating with the help of notes, photographs, and other reference sites during examinations. These kinds of activities not only lower their grades but also decrease their brain learning capacity.

**Habit of listing to worldly music**

As kids become more addicted to smartphones, they will be less curious about what is happening around them. Even in public places, kids are using mobile phones. For example, if you go to restaurants or malls, you will see kids are so focused on their phones and listing to music they do not notice anything happening around them.

Continuous use of smartphones can increase children’s social isolation and encourage them to spend time alone, leading to depression and loneliness. They will also lack social skills, become more aggressive, and easily irritable.

**Social Media**

As the usage of smartphones is increasing among children, there is a lot of chance they might surf the internet. Your kids can come across inappropriate messages, adult and explicit content, and abusive language. It can also stop from religious activities because you will find out that some kid has the character of watching serial films, and when the film didn’t yet finish, they cannot stop their self from watching that film and to prayers. Spending too much time online can make kids surf the dark side of the web called the “Deep Web,” where all kinds of illegal activities occur. Also, kids can easily find their way to pornography at an early age. Being exposed to such material at a young age can change their thought processes, increase curiosity, and be addicted to them (Daantje et al., 2012).

Other Disadvantages of smartphones on children include the following

1. Smart phone stop children from some religious activities
2. Smart phones stop children from doing their assignments and home activities because their mind have been taken away by playing and watching videos in their phone.
3. Smart phone stop kid, children from helping their parent at home with some work.
4. Smart phone destroys the life of kid, children, because of watching sexy videos on net.

## Conclusion

Smartphones have become both a benefit and a burden for today’s youngsters. Smartphones may provide tools that allow children of all ages to study in a fun and engaging way, express their creativity, and stay connected with friends and family. With the help of smartphones, you can contact your child to know their whereabouts. They will be able to learn new things and will learn to use technology in a responsible way. On the other hand, overuse of mobile phones might have a negative impact on children’s development process. Smartphones emit blue light and radiation that are harmful to our eyes and brain. Excessive use of mobile phones can damage their eyes and alter their thought process.

**Recommendations**

1. You can always set parental control applications like [MobileSpy](https://mobilespy.io/" \t "_blank), Qustodio, mSpy, on their phones if you are concerned that they may use mobile phones against your rules and restrictions. With the Parental Control apps, you can limit their screen time, block inappropriate websites, and monitor their online activities.
2. Before giving smartphones to your kids, make clear rules about using smartphones only at the mentioned times. And also, avoid giving phones to your children that are under the age of 12. Increased phone usage reduces parent-child interaction, so make sure you and your kids don’t use mobile phones during mealtime.
3. We all know that physical activities are the most important factor in a child’s development process. Encourage your kids to do activities that include physical movement like going for a walk and playing outdoor games. Playing outdoor games is an important factor that supports a child’s development. You can also encourage them to do household work so that they gain some sense of responsibility.

## References

Brad, R. (2010). Revisiting the global market for higher education. *Asia Pacific Journal of Marketing and Logistics*, 24(5), 717-737.

Daantje, D., Lieke L., Brummelhuis, Z., & Arnold, B. (2012). Switching on and off: Does smartphone use obstruct the possibility to engage in recovery activities? *European Journal of Work and Organization Psychology*, *7*(4), 34-56.

Douglas, I. (2011). Using smartphones as essential tools for learning: A call to place schools on the right side of the 21st century. *Educational Technology*, 51(3), 18-25.

Koh, C., Law, Y., Lee Y., Leong Z., & Justin, L. (2011). *An Investigation into the Positive and Negative Health Effects of Usage of Smartphones on Raffles Institution Year 1 Students,* 12(2), 23-56.

Manoj, K. (2011). Impact of the Evolution of Smart Phones in Education Technology and its Application in Technical and Professional Studies*: Indian Perspective*, *International Journal of Managing Information Technology (IJMIT), 3*(3), 33-47.

Nurfit, L. (2012). Effect of different sitting posture on pulmonary function in students*. Journal of Physiology and Pathophysiology*, 2(3):29-33.

Sam, L. (2012). Ubiquitous learning: Determinants impacting learners’ satisfaction and performance with smartphones. *Language Learning & Technology,* 18(3), 97– 119.

Susan, W. (2011). Smartphones usage among university students: Najran University case. *International Journal of Academic Research Part B*, 6(2), 321-326.

Walle, J. (2020). The impact of using smartphones on the academic performance of undergraduate students. *Knowledge Management & E-Learning,* 10(3), 290–308.