Impact of Smartphone Among Postgraduate Students of Manipur University: A Study

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The present study attempted to explore the use of smartphones by Postgraduate students of Manipur University. It is found that the majority of the respondents i.e 73.91% belong to female users and male students accounted for 26.08%, and 88.04% of the respondents belong to the age group of 21-25. Android OS is the most used operating software among the respondents. In general, respondents use smartphones for messaging (93.47%), Internet Browsing (91.30%), Calling (Phone calls, Skype, Viber, and etc.) (84.78%), Checking social media accounts(82.60). The academic purposes of smartphones as revealed by students include, to download class materials (93.47%), joining Online classes(89.13%), reading (86.95%), Up/Download Learning Materials (82.60%), to interact with friends and faculty (78.26%), to prepare Assignments (73.91%), to login to the student portal (67.39%), to share academic websites and links (65.21%) etc. applications (Apps) commonly installed include Pdf reader (88.04%), followed by Dictionary apps (67.39%), in the mean time, Applications for learning activities account for only 8.69% and Online class softwares (google meet, zoom) account for only 2.17%.

Introduction

A smartphone is a sophisticated technological gadget that combines a computer system and a mobile phone. Due to its dual system, it can carry out various tasks in addition to its primary function. Along with its purposes, this gadget has become a popular learning tool among students, particularly in the medical area(Changazi et al., 2019). It has become an integral part of our lives. It is a significant discovery that allows various functions beyond the traditional function of mobile phones as communication devices which has potential applications in many areas, including education(Wirjawan et al., 2020). People of all ages use these gadgets in various ways for various purposes (Shah et al., 2020). Smartphones are used for socializing, and students use them to perform tasks like sending and receiving messages, following the news, communicating, chatting, making friends, finding specific information, finding general information, creating discussion groups, playing games, finishing assignments, checking course materials, conducting business, looking for jobs, watching movies, listening to music, and using library services. These activities are crucial to student's academic success (Mansour, 2016). Today, the smartphone is the most desired device among the youthful generation. The increased availability of Wifi and mobile data makes it easier to use smartphones to access the Internet (Mubassira & Das, 2019).

2. Literature Review

The literature review based on the given topic is as follow:

Mansour(2016) studied the ownership and usage trends of smartphone apps among students at South Valley University (SVU), Egypt, and discovered that the majority of smartphone users (82.7%) were junior girls. Additionally, he discovered that most users had between 21 and 25 applications in their smartphone and that students primarily utilized their cell phones for communication rather than learning.

Sbrissa & Roso (2020) investigate how Brazilian university students who live in hostels use their smartphones to connect with one another. In 2020, Tayhan Kartal and Yabanc Ayhan (2020) studied the connection between eating disorders and internet and smartphone use among college students. Elkholy et al. (2020) studied the prevalence of alexithymia (difficulties expressing feelings) and its relationship with smartphone addiction at an Egyptian university and discovered that 22% of students had alexithymia. They also discovered that almost one-third of the respondents fit the criteria for smartphone addiction and that there is a strong link between alexithymia and smartphone addiction.

Ifeanyi and Chukwuere (2018) evaluated the influence of smartphone use on academic performance of North-West University undergraduate students. Wang and Zheng (2020) investigated the association between smartphone use time and college students' mental health. Qudah et al. (2019) investigated smartphone addiction (SA) and cyberbullying among university students. Alanoglu and Karabatak (2020) investigated students' smartphone usage during lectures and discovered that most students sometimes use their phones to communicate, study lecture topics, and connect to social networks. The primary purpose for utilizing smartphones during lectures is to conduct research on the lecture subject and to utilize them during emergencies.

Wan Ismail et al. (2020) investigated the cyber-psychological correlates of depression, anxiety, stress, and suicidality among public university students in Klang Valley, Malaysia, and discovered that internet and smartphone addictions had significant positive correlations with depression, anxiety, stress, and suicidality. Only internet addiction appeared as a constant considerable predictor of depression, anxiety, stress, and suicidality at the multivariate level.

Taha and Dahabiyeh (2020) investigated the differences in students' awareness of information security using smartphones. While students were well-versed in several information security concepts, they responded differently when it came to safeguarding their smartphones vs desktop computers.

Changazi et al. (2019) discovered that 95 percent of students had smartphones in their survey, with the Android phone being the most prevalent device and being most commonly used for social networking and academic reasons. They also indicated that 79 percent of students said cellphones increased their grasp of the subject matter; yet, 71 percent believed smartphones were a distraction from the subject matter.

There are finding that indicates the positive impact of smartphones among students. Mansour (2016) revealed that there is a favorable attitude toward the use of smartphone apps, and students concur that

these applications facilitate the easy dissemination of information, provide information, speed up information search times, provide communication aid, are convenient, secure, help build confidence, and minimize the use of paper. Ahmed et al. (2020) studied how university students in Pakistan performed academically and discovered that smartphone functionalities had a substantial impact. Additionally, moderating and mediating variables had a significant effect on exogenous and endogenous variables as well. Soomro et al. (2019) analyzed the influence of smartphones on university students, and they discovered no significant variations in the students' smartphone addiction levels based on their gender or the academic subjects they study. Darko-Adjei (2019), in his study, found that distance learning students prefer to utilize a smartphone for learning activities. The studies also found that smartphones played essential roles in academic activities for distance learning students at the University of Ghana.

Smartphone has negative impacts as well. Mahmud et al. (2020) studied how smartphone addiction affected university students' bonds. They discovered that smartphone addiction decreases bonding to their family, close friends, and relatives despite the benefits of having more communication and interaction links. Darko-Adjei, (2019) also indicated that smartphones had a negative impact on distance learning students and exposed some factors that prevented learning, such as freezing during crucial learning moments, unstable internet connectivity, intrusive calls during class hours and smaller screens and keys on smartphones compared to laptops. Taha & Dahabiyeh (2020) pointed out that Pupils are increasingly taking their cellphones to school, which has serious security repercussions, especially when students are less aware of the risks to smartphone information security. Social media use in class, such as texting, tweeting, and snapchatting, is a huge disturbance that makes for a challenging learning environment (Prof & Prof, 2019). Soomro et al. (2019) revealed that a student's smartphone addiction stops them from forming relationships with other pupils in the classroom. Additionally, a cooperative and encouraging learning atmosphere is hampered by smartphone addiction.

Some of the negative effect mention by researchers are like: mental health of college students(Wang & Zheng, 2020), high levels o stress and poor sleep quality(Zhai et al., 2020) sleep problems (Huang et al., 2020), time consuming, intimidating, addictive, violate privacy, harmful and frustrating(Mansour, 2016), causes tensions between sociability networks and generates anxiety (Sbrissa & Roso, 2020), Students' performance may deteriorate (Mubassira & Das, 2019), Causing distraction (Alanoglu & Karabatak, 2020) the same is also mentioned by(Ifeanyi & Chukwuere, 2018), depression, anxiety, self-disclosure, impaired academic performance, family life and human relationships (Gligor & Mozo', 2019), reduces emotional sharing, interior intimacy, and responsibility toward the nearest one, feeling panic and anxious without a smartphone (Mahmud et al., 2020).

3. Significance of the Study

The rapid technological developments associated with the decreased cost of smartphones made the latter more accessible and convenient to use (Taha & Dahabiyeh, 2020). It is a small size computer, that replaced digital cameras, watches, video recorders, and other devices. A smartphone is essentially a pocket-sized

computer (Kanagavalli et al., 2019). Eventually, smartphones gradually become an effective learning tool used to improve teaching and to learn in distance education. Its use provides flexible course delivery and allows learners to access online learning platforms and course resources and engage digitally (Darko-Adjei, 2019). Hence, the present study attempt to study the impact of smartphone on postgraduate students of Manipur University.

4. Objective

The main objectives of the study are to:

(a) Identify the use of smartphones by Post Graduate students daily.

(b) To find out the Academic use of smartphones.

(c) To find out the students' opinion on using Smartphone.

(c) Ascertain the use of Mobile devices for accessing library resources and services, and

(d) Find out the risks and problems associated with Mobile devices.

5. Data Analysis and Interpretation

5.1 Demographics Detail

The demographic details enlisted include data about Genders, age distribution, and semester of the respondent belongs. The target population of this current study was the Post Graduate students of Manipur University. Table 1 shows that about 92 students across different semesters participate in the study. Of the total respondents, about 24 (26.08%) participants are males and 68 (73.91%) females. About 81(88.04%) of the participants belong to the age group of 21-25, 11(11.95%) fall in the age group of 26-30, and they mostly belong to Semester I 50(54.34%) and semester III 36(39.13%).

Table 1 below shows the demographic data of the population sample under study.

Table 1: Demographics

Status	**Number (%)**
Gender	
Male	24(26.08)
Female	68(73.91)
Age Distribution	
Below 20	
21-25	81(88.04%)

26-30	11(11.95%)
31-35	
35 above	
Semester	
Semester I	50(54.34%)
Semester II	36(39.13%)
Semester III	
Semester IV	6(6.53%)

5.2 Use of Smartphones

Smartphones are becoming available to most students. With technological development, the types of smartphones vary accordingly. Students use these devices to access their everyday information needs and academic needs. They have become an indispensable part of human life.

Table 2 reveals that all respondents who participated in the research have Smartphones, and Android is the primary OS used, with 100% of the respondent using it. This is obvious for reasons like its open-source in nature and affordability-wise. In the meantime, about 40(43.50%) use Smartphones for the period of about 6 years, 20(21.73) of the respondents have been using it for 5-6 years, 24(26.08%) used it for 3-4 and about 8(8.69) have been using it for 1-2 years.

Table 2: Use of Mobile

Particulars	**Number (%)**
Smartphones	
Yes	92(100%)
No	
Types	
Android	92(100%)
IOS	
Windows	
Symbian	
35 above	
Period of Using	
Less than a year	
1-2	8(8.69%)
3-4	24(26.08%)
5-6	20(21.73%)
More than 6 years	40(43.50%)

5.3 General Purposes

The general purposes of Smartphones include all those activities that users perform in their everyday daily life using Smartphones. Participants were asked about their intentions for using smartphones; their responses are shown in table 3.

The majority of participants stated that they use their smartphones for ordinary tasks such as messaging (93.47%), Internet Browsing (91.30%), Calling (Phone calls, Skype, Viber, etc.)(84.78%), Checking social media accounts(82.60%), Listening to music (82.60%), Checking news (82.60%), Taking photo/Recording video (78.26%). Less than 50% of the participants stated that they use their smartphones for setting up memos, playing games, editing photos, and doing bank transactions. Lastly, 20.3% of the participants use their smartphones to set up meetings or activities, and only 17.8% use them for shopping. Less than 50% of the students used it for Playing Mobile Games, Doing bank transactions, Editing photos, Setting up meetings or activities, and about 2.1% for Watching movies and Studying and learning.

Table 3: General Purpose of Using Smartphone

General Purposes	Responses	Percentage
Messaging (SMS, WhatsApp, etc.)	86	93.47
Internet Browsing	84	91.30
Calling (Phone call, Skype, Viber, etc.)	78	84.78
Checking social media accounts	76	82.60
Listening to music	76	82.60
Checking news	76	82.60
Taking photos/Recording video	72	78.26
Checking e mails	66	71.73
Online Shopping	66	71.73
Playing Mobile Games	48	52.17
Doing bank transactions	48	52.17
Editing photos	42	45.65
Setting meetings or activities	42	45.65
Watching movies	2	2.173
Study and learning	2	2.173

5.4 Using Situations

Using situation is the moment when users spend their time using their phones. Participants are asked about their using situations and are allowed to respond to multiple answers. The following table 4 shows the use situation. It reveals that participants use smartphones When they get bored (84.78%), When alone (78.26%), In leisure times (76.08%), Waiting for someone/something (73.91%), During Class breaks (54.34%), Inside public transportation (50%). Surprisingly, about 8.69% use it While Watching TV,6.52% use it During class, and 2 2.17% use it While Driving.

Table 4: Using Situation

Sl.No	Situations	Responses	Percentage
1	When get bored	78	84.78
2	When alone	72	78.26
3	In leisure times	70	76.08
4	Waiting for someone/something	68	73.91
5	During Class breaks	50	54.34
6	Inside public transportation	46	50
7	Hanging out with friends	26	28.26
8	While Eating something	16	17.39
9	While Walking	14	15.21
10	While Watching TV	8	8.69
11	During lessons	6	6.52
12	While Driving	2	2.17

5.5 Academic use

Smartphones are sophisticated devices that can incorporate many applications that can assist students in their learning journey. Table 5 below shows that participants use smartphones to download class materials (93.47%), to join Online classes(89.13%), to read materials (86.95%), Up/Download Learning Materials (82.60%), To interact with friends and faculty (78.26%), To prepare Assignments (73.91%), To login to the student portal (67.39%) To share academic websites and links (65.21%), To capture notes taught in class(65.21%), Record Class Lectures (58.69%), To access library references (52.17%), Solve Math Problems (47.82%), and Record Class Presentations (36.95%).

Table 5: Academic Use of Smartphone

Sl.No	Academic Use	Responses	Percentages
1	To download class materials	86	93.47
2	To join Online classes	82	89.13
3	To read materials	80	86.95
4	Up/Download Learning Materials	76	82.60
5	To interact with friends and fac-ulty	72	78.26
6	To prepare Assignments	68	73.91
7	To login to the student portal	62	67.39
8	To share academ-ic websites and links	60	65.21
9	To capture notes taught in class	60	65.21
10	Record Class Lectures	54	58.69
11	To access library references	48	52.17
12	Solve Math Problems	44	47.82
13	Record Class Presentations	34	36.95

5.6 Students' Opinion of Using Smartphones

The opinion on the usage of smartphones by students was studied with the focus on questions related to the use of smartphones for learning. The ten questions below are related to the user's opinion on smartphones. It is represented in a 5-point Likert scale ranging from Strongly Agree to Disagree Strongly.

5.6.1 Smartphones Improve Learning skill

Table 6 shows that when participants were asked if Smartphones helps improve their learning skill, -majority of the students (59.6%) agree, 19.1% Strongly Agree, 17% are Neutral about it, and about 2(2.1%) Strongly Disagree with it.

Table 6: Smartphones Improved Learning Skills

	Frequency	Percent	Valid Percent	Cumulative	Percent
Valid	Strongly Agree	18	19.1	19.6	19.6
	Agree	56	59.6	60.9	80.4
	Neutral	16	17.0	17.4	97.8
	Strongly Disagree	2	2.1	2.2	100.0
	Total	92	97.9	100.0	
Missing	System	2	2.1		
Total	94	100.0			

5.6.2 Smartphone Helped in Writing Assignments

Table 7 shows that when participants were asked if Smartphones helped in writing assignments, the majority of the participants, 50 (53.2%), Disagreed with it, 22 (23.4%) Strongly Disagreed, and 8 (8.5%) stood Neutral.

Table 7: Smartphone Helped in Writing Assignments

	Frequency	Percent	Valid Percent	Cumulative	Percent
Valid	Strongly Agree	8	8.5	8.7	8.7
	Agree	4	4.3	4.3	13.0
	Neutral	8	8.5	8.7	21.7
	Disagree	50	53.2	54.3	76.1
	Strongly Disagree	22	23.4	23.9	100.0
	Total	92	97.9	100.0	
Missing	System	2	2.1		
Total	94	100.0			

5.6.3 Smartphones Motivate Active Participation and Discussion

Table 8 shows that when participants were asked if Smartphones motivate in active participation and discussion in academic matters, the majority of the students, 62(66%) disagreed with it, and another 14(14.9%) strongly disagreed with it. Meanwhile, about 14(14.9%) of the students are neutral about it.

Table 8: Smartphone Motivate Active Participation and Discussion

	Frequency	Percent	Valid Percent	Cumulative	Percent
Valid	Agree	2	2.1	2.2	2.2
	Neutral	14	14.9	15.2	17.4
	Disagree	62	66.0	67.4	84.8
	Strongly Disagree	14	14.9	15.2	100.0
	Total	92	97.9	100.0	
Missing	System	2	2.1		
Total	94	100.0			

5.6.4 Smartphone Cultivated Innovative Thinking

Table 9 shows that when participants were asked if Smartphone Cultivated Innovative Thinking, the majority of the students, 52(55.3%) Disagrees that Smartphone produced innovative thinking, 12 (12.8%) strongly disagreed with it, 24(25.5%) were neutral about it, and 2(2.1%) strongly agree to it.

Table 9: Smartphone Cultivated Innovative Thinking

	Frequency	Percent	Valid Percent	Cumulative	Percent
Valid	Strongly Agree	2	2.1	2.2	2.2
	Agree	2	2.1	2.2	4.3
	Neutral	24	25.5	26.1	30.4
	Disagree	52	55.3	56.5	87.0
	Strongly Disagree	12	12.8	13.0	100.0
	Total	92	97.9	100.0	
Missing	System	2	2.1		
Total	94	100.0			

5.6.5 The Smartphone Created Positive Ideas Among Friends

When participants were asked if Smartphones created positive ideas among friends, Table 10 shows that 40(42.6%) of the participants are neutral about it, 32 (34.8%) of the participants disagree with it, 14(14.9%) disagree with it, and about 6(6.4%) agreed to it.

Table 10: Smartphones Created Positive Ideas Among friends

	Frequency	Percent	Valid Percent	Cumulative	Percent
Valid	Agree	14	14.9	15.2	15.2
	Neutral	40	42.6	43.5	58.7
	Disagree	32	34.0	34.8	93.5
	Strongly Disagree	6	6.4	6.5	100.0
	Total	92	97.9	100.0	
Missing	System	2	2.1		
Total	94	100.0			

5.6.6 Smartphones Improved Academic Performance

Table 11 shows that when participants were asked if Smartphones improved academic performance, it reveals that about 46(48.9%) disagreed with it, 28(29.8%) were neutral about it, 12(12.8%) agreed that it improved their academic performance, 4(4.3%) strongly disagree, and about 2 (2.1%) strongly agree to it.

Table 11: Smartphone Improved Academic Performance

	Frequency	Percent	Valid Percent	Cumulative	Percent
Valid	Strongly Agree	2	2.1	2.2	2.2
	Agree	12	12.8	13.0	15.2
	Neutral	28	29.8	30.4	45.7
	Disagree	46	48.9	50.0	95.7
	Strongly Disagree	4	4.3	4.3	100.0
	Total	92	97.9	100.0	
Missing	System	2	2.1		
Total	94	100.0			

5.6.7 Saves Time and Increases Productivity

Table 12 shows that when participants were asked if using smartphones saves time and increases productivity, it reveals that about 34(36.2%) disagree with it, 32(34%) are neutral about it, 12(12.8%) agree that it Saves time, and increases productivity, 12(12.8%) strongly disagree, and about 2 (2.1%) strongly agree to it.

Table 12: Saves Time and Increases Productivity

	Frequency	Percent	Valid Percent	Cumulative	Percent
Valid	Strongly Agree	2	2.1	2.2	2.2
	Agree	12	12.8	13.0	15.2
	Neutral	32	34.0	34.8	50.0
	Disagree	34	36.2	37.0	87.0
	Strongly Disagree	12	12.8	13.0	100.0
	Total	92	97.9	100.0	
Missing	System	2	2.1		
Total	94	100.0			

5.6.8 Increases Searching and Learning Skills

Table 13 shows that when participants were asked if smartphones Increases Searching and Learning Skills, data reveals that the majority of the participants, 66 (70.2%), disagreed with it, about 20(21.3%) strongly Disagree with it, 4(4.3%) are neutral about it and 2(2.1%) strongly agree to it.

Table 13: Increases Searching and Learning Skills

	Frequency	Percent	Valid Percent	Cumulative	Percent
Valid	Strongly Agree	2	2.1	2.2	2.2
	Neutral	4	4.3	4.3	6.5
	Disagree	66	70.2	71.7	78.3
	Strongly Disagree	20	21.3	21.7	100.0
	Total	92	97.9	100.0	
Missing	System	2	2.1		
Total	94	100.0			

5.6.9 Facilitates Learning Skills

Table 14 shows that when participants are asked if Smartphones Facilitate Learning skills, it reveals that about 72(76.6%) disagree with it, 6(6.4%) are neutral about it, 6(6.4%) agree that it **Facilitates Learning**, 12(12.8%) strongly disagree to it.

Table 14: Facilitates Learning Skills

	Frequency	Percent	Valid Percent	Cumulative	Percent
Valid	Strongly Agree	2	2.1	2.2	2.2
	Neutral	6	6.4	6.5	8.7
	Disagree	72	76.6	78.3	87.0
	Strongly Disagree	12	12.8	13.0	100.0
	Total	92	97.9	100.0	
Missing	System	2	2.1		
Total	94	100.0			

5.6.10 Helps to Find Updated Information

Table 15 shows that when participants are asked if Smartphones help to find updated information, it reveals that about 48(51.1%) disagree with it, 36(38.3%) strongly disagree with it, 4(4.3%) are neutral about it, 4 (4.3%) agree that it Helps to Find Updated Information.

Table 15: Helps to Find Updated Information

	Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	Strongly Agree	4	4.3	4.3	4.3
	Neutral	4	4.3	4.3	8.7
	Disagree	48	51.1	52.2	60.9
	Strongly Disagree	36	38.3	39.1	100.0
	Total	92	97.9	100.0	
Missing	System	2	2.1		
Total	94	100.0			

5.7 Application Installed for Learning Purpose

It is a known fact that smartphones are helpful to students and learners. Smartphone devices are becoming increasingly significant in 21st century. Students are increasingly inclined to utilize smartphones to retrieve their information needs in their daily lives. The smartphone offer a platform for using a variety of mobile applications (apps) and features for easy and comfortable access to the user worldwide, especially for academic information, discussing with classmates for course materials, assignments, etc.; table 16 shows that the Pdf reader with 81 (88.04%) users is the most widely installed software among the participants, it is followed by Dictionaries apps like Meriam-Webster Dictionary, Oxford Dictionary of English (67.39%), Applications for learning languages (e.g. Duolingo) (34.78%), Mobile eBook readers (e.g. Aldiko, iBooks) (30.43%), Applications for accessing learning management systems (e.g. Moodle) (28.26%), Applications for accessing learning materials (Dropbox, FileAppPro, Scribd)(15.21%), Application for enhancing memory, concentration and learning skills (e.g. Brain Gym) (10.86%), Applications for planning learning activities (e.g. Learn on the go, Study timetable, Student) (8.69%) Online class software (google meet, zoom) (2.17%)

Table 16: Application Installed for Learning Purpose

Sl.No	Applications	Responses	Percentage
1	Pdf documents readers (e.g. Adobe Reader, Foxit Reader,)	81	88.04
2	Dictionaries (e.g. Meriam-Webster Dictionary, Oxford Dictionary of English),	62	67.39
3	Applications for learning languages (e.g. Duolingo),	32	34.78
4	Mobile eBook readers (e.g. Aldiko, iBooks),	28	30.43
5	Applications for accessing learning management systems (e.g. Moodle),	26	28.26
6	Applications for accessing learning materials (Dropbox, FileAppPro, Scribd)	14	15.21
7	Application for enhancing memory, concentration and learning skills (e.g. Brain Gym)	10	10.86
8	Applications for planning learning activities (e.g. Learn on the go, Study timetable, Studomat),	8	8.69
9	Online class softwares (google meet, zoom)	2	2.17

5.8 Negative Impact of Smartphones

Smartphones are addictive, and the prevalence of smartphone addiction has grown rapidly in recent years, raising serious health concerns. Table 17 shows the response of students' impact on smartphones in their life.

Table 17: Negative Impact of Smartphones

	Negative Impact of Smartphones	N	Percentage
1	Even when I know I should stop, I continue to use smartphones	50	54.34
2	Spending a lot of time on a smartphone has become my habit	44	47.82
3	I tried to reduce the time I spend on a smartphone but failed	38	41.30
4	I tried to reduce the time I spend on a smartphone but failed	38	41.30
5	I have a hard time doing what I have planned (study, do homework, or go to after-school classes) due to using Smartphone	32	34.78
6	I cannot imagine my life without a smartphone.	26	28.26
7	My Smartphone does not distract me from studying.	24	26.08
8	Family or friends complain that I use my Smartphone too much.	20	21.73
9	My school grades dropped due to excessive smartphone use.	14	15.21
10	When I cannot use a smartphone, I feel like I have lost the entire world.	14	15.21
11	I get anxious and nervous without a smartphone.	14	15.21
12	Using a smartphone is more enjoyable than spending time with family or friends.	2	2.173
13	I panic when I cannot use my Smartphone.	2	2.17
14	Smartphones help me a lot in studies, especially for students who can't afford expensive materials	2	2.17

Table 17 reveals that about 50 (54.34%) of the respondents indicate that they continue to use smartphones even when they know they should stop, 44 (47.82%) reveals using smartphone has become their habit. About 38 (41.30%) mentioned that they tried to reduce the time spend on a smartphone but failed, 38 (41.30%) of users have a hard time doing what they have planned (study, do homework, or go to after-school classes) due to using smartphone, 32(34.78%) reveals they cannot imagine their life without a smartphone, about 20 (21.73%) of the respondents shows that their school grades dropped due to excessive smartphone use, 14 (15.21%) feel they have lost the entire world. 14 (15.21%) get anxious and nervous without a smartphone. 14 (15.21%) feel using a smartphone is more enjoyable than spending time with family or

friends. 2 (2.17%) got panic when they could not use their smartphones. 2 (2.17%) think smartphones help in studies. On a positive note, about 26 (28.26%) users think Smartphone does not distract them from studying.

6. Finding and Discussion

i. As far as the demographic is concerned, most of the respondants belong to female (73.91%) users, and male students accounted for 26.08%. A whopping 88.04% of the respondents are in the age group of 21-25, most of whom are from the 1st semester.

ii. Data analysis also shows that all the respondents use smartphones, and Android OS is the most used operating software and the majority have used the Smartphone for over six years.

iii. When it comes to general purposes, it is found that smartphones are used for ordinary tasks such as messaging (93.47%), Internet Browsing (91.30%), Calling (Phone calls, Skype, Viber, etc.) (84.78%), Checking social media accounts(82.60%). Surprisingly it also reveals that about 2.17% are watching movies and studying and learning.

iv. The study also found that participants use smartphones to download class materials (93.47%), join Online classes(89.13%), reading (86.95%), Up/Download learning Materials (82.60%), to interact with friends and faculty (78.26%), to prepare Assignments (73.91%), to login to the student portal (67.39%), to share academic websites and links (65.21%), to capture notes taught in class (65.21%), Record Class Lectures (58.69%), to access library references (52.17%), solve Math Problems (47.82%), and Record Class Presentations (36.95%).

v. A study based on the Likert scale also reveals that the majority of the participants (60.9%) agree that Smartphone improves learning skills, About 54.3% disagree that Smartphone Help in Writing Assignments, 67.4% also disagree that Smartphone Motivate Active Participation and Discussion, 56.5 disagree that Smartphone Cultivated Innovative Thinking, 43.5% neutral about that fact that Smartphone created positive ideas among friends and about 34.8% disagree to it as well, 48.9% disagree to the fact that Smartphone improved academic performance and about 29.8% are neutral about it, about 37.0% reveals that they disagree with the fact that Smartphones Saves Time and Increases Productivity and about 34.8% are neutral about it. It is also found that 70.2% of the participants disagree with the fact that smartphones Increases Searching and Learning Skills, it is also found that about 76.6% disagree that Smartphones Facilitates Learning skills. Data also reveals that 51.1% disagree that smartphones help to Find Updated Information, and about 38.3% strongly disagree with the fact that Smartphones.

vi. Number of applications are available for use on a smartphone. Data shows that, for learning purpose, apps like Pdf reader is the most widely installed app (88.04%) among the participants, other apps include Dictionaries apps (67.39%), Applications for learning activities account for only 8.69%, and Online class apps (google meet, zoom) account for only 2.17%.

vii. Every good thing has its side effect as well, and there exist impacts like Addictions among users. Respondents were asked about their experience on the impact of using smartphone and it is found that its negative impacts are minimal. About 50 (54.34%) respondent think they continue to use smartphone, Even when they know they should stop, 44 (47.82%) think they spend a lot of time on a smartphone has become my habit, 38 (41.30%) concern about their using pattern and think they tried to reduce the time spend on a smartphone but failed.

7. Conclusion

The smartphone is seen as an icon of the younger generation. People regard mobile phones as an extension of their hands and rely on social network connections to build their identity that gives its users more flexibility in terms of time and place(Kanagavalli et al., 2019).The present study shows how university students use smartphones for general and academic purposes. A smartphone is a handy tool that is now available in everyone's hands, and it is essential to use those smartphones to assist users in their learning journey. The study shows that students extensively use smartphones for academic purposes, from downloading study materials to joining Online classes, reading, and interacting with friends and faculty. In the meantime, learning centers must also provide helpful information that can be accessed using a smartphone. Learning methods have changed as impacted by the change in technologies.

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