**SPCRD GLOBAL
PUBLISHING**
Sustainable Solutions

RAMSS Review of Applied Management
and Social Sciences

Journal homepage: <http://ramss.spcrd.org>

ISSN (Print): 2708-2024

ISSN (Online): 2708-3640

An Empirical Approach to Study Smartphones' Usage in Academic Performance of University Students

Nargis Abbas ^a, Uzma Aashiq ^b, Syeda Mahnaz Hassan ^c, Muhammad Alam ^d

^a Assistant Professor, Department of Social Work, University of Sargodha, Sargodha, Pakistan

Email: nargis.abbas@uos.edu.pk

^b Assistant Professor, Department of Social Work, University of Sargodha, Sargodha, Pakistan

Email: uzma.ashiq@uos.edu.pk

^c Chairperson, Department of Social Work, University of the Punjab, Lahore, Pakistan

^d PhD Scholar, Department of Social Work, University of the Punjab, Lahore, Pakistan, Pakistan

ARTICLE DETAILS

History:

Accepted 26 Aug 2020

Available Online 30 Sep 2020

Keywords:

Smartphone Usage, Advantages & Disadvantages, Academic Life, Social Work Students, University of The Punjab

JEL Classification:

O14, J17, M14

DOI: 10.47067/ramss.v3i2.61

ABSTRACT

The purpose of this study was to find out the advantages and disadvantages of smartphone usage in the academic life of Social Work students at the University of the Punjab, Lahore. The quantitative research methodology was adopted in this study. The survey of Social Work students from the university was done by employing purposive sampling technique. Students having smartphones were part of this study. A structured questionnaire was used to collect the data from 203 Social Work students of the University of the Punjab. The SPSS was used to analyze the data among the smartphone users. The Social Work students used smartphones not primarily for academic purposes but for social activities. It also operated as a learning aid, which was absolutely essential to students which made them capable to find quick information and got their time saved. Smartphones were also seen more as a distraction in the classroom rather than learning aid as smartphone produce distraction in the classroom and this distraction diverted students' attention in the class. Students multitasking and non-academic usage of smartphone produced negative impact on students' learning and resultantly lower their academic performance. Smartphone usage seemed great if smartphone is capitalized to achieve the benefits associated with its use; resultantly the Social Work students can possibly enhance their academic learning that may lead them to success in their academic life.

© 2020 The authors. Published by SPCRD Global Publishing. This is an open access article under the Creative Commons Attribution-NonCommercial 4.0

Corresponding author's email address: nargis.abbas@uos.edu.pk

1. Introduction

Smartphones have developed tremendously in the 21st century, with many features such as email service, online shopping, social media, and many more. Smartphones have also made it easier for students to

access their academic knowledge through mobile and electronic learning. The presence of smartphones has a big impact on people that it has made life a lot easier than before. One cannot imagine how our life would be without smartphones. Smartphones are essential in one's life (Wang, Xiang & Fesenmaier, 2016). Besides, a smartphone provides us with a wide variety of functions such as music player which enabled us to listen to music, social networking apps for us to socialize with other people such as Facebook, Twitter and WhatsApp and many more. Due to its affordable as well as reasonable pricing, almost all people today own a smartphone (Barnes, Pressey & Scornavacca, 2019). A smartphone is a common device which helps individuals to connect with one another. It can be used to perform several activities by individuals in their daily life. Students cannot imagine their life without smart phone; they use it to access information through the internet (Masiu & Chukwuere, 2018).

In current times, students have grown up in a technological world where they have been interacting with digital technology right from their early age. In Pakistan like other developed countries, use of smartphone is rapidly increasing among college and university students. Pakistan has progressed remarkably in its telecommunication sector with the pace of developed countries. The Pakistani students are also busy in operating smart phones and other kinds of similar devices during their stay at university premises. The affordable internet rates, low prices of smartphones, availability of Wi-Fi facility at the educational institutions and working of smartphones as a mini computer have attracted the student community to use smartphones/cell phones frequently (Tariq et al., 2012).

The smartphone has become an essential part of students' lives and they view this gadget as a necessity that provides them safety, ensures their privacy and is an important tool for socialization (Amin et al., 2016). The use of smartphone has been on the increase across all the university students being targeted and potential customers in the technological industry. However, there is a need to understand that how our students use their smartphones/cell phones and for what purposes. Moreover smartphone usage also influences the academic life of students. Its use may help them to perform better academically or meet better academic outcomes (Ifeanyi & Chukwuere, 2018).

In this high – tech era that we currently live in, students have become dependent on mobile phones that they feel empty or incomplete when they are going somewhere without holding a smartphone in their hand. The reliance on smartphones is clearly seen and the usage of smartphones especially among students is increasing rapidly (Alwagait et al., 2015). Addiction will eventually develop on an individual when they get too dependent to their smartphones. Rathore et al. (2017) indicated that along with addiction, negative outcomes are bound to occur when a person cannot use their smartphone freely for leisure purposes as well as work-related stuffs. Not only that, the addiction of smartphones can also trigger personality patterns, health issue and students' academic performances.

There tends to be a significant rise in the use of smartphones in the student population at universities in Pakistan. The prevalence of smartphones in Pakistani society makes it appropriate to look at user behavior and its effect on one of the main segments of our society, i.e. students studying at higher institutions in particular (Tariq et al., 2012). The use of Smartphone has negatively affected the academic outcomes among students (Masiu & Chukwuere, 2018). Though, Sattarov and Khaitova (2020) revealed that students use their smartphone for information and access digital resources. Such a positive and productive use of smartphones will contribute to positive academic results for students.

In this scenario, it is pertinent to gauge the Pakistani student's usage pattern of smartphone and its effects on their academic life. The current study will focus to identify the smartphone usage activities, its prospective benefits and harmful effects on the academic life of students belonging to Social Work students only. The present study assessed the impact of smartphone usage on the Social Work students' academic life in the university of Pakistan—University of the Punjab, Lahore. This study may be a valuable contribution in this area in Pakistan.

The research is being carried out in Pakistan. Due to the lack of recorded research on the use of smartphones in Pakistan, especially in the educational setting, this study will help show students' recently adopted smart phones for university purposes. The use of smartphones and mobile phones in the worldwide education sector has been given much attention in recent years, but there is less studies in Pakistan. This study will explore the use of the smartphone by students in Social Work, the reason they use and the positive or negative effect on their academic lives. Its results will help to promote or limit the use of smartphones in the country's educational institutions. The results of this study will enable the faculty as facilitator and mentor to smartly direct students to use their smartphones to boost their academic result. The current study will expectantly put a valuable contribution in this abandoned area of research in Pakistan. The current study aimed to investigate the potential benefits and harms by the usage of smartphones on academic life of the Social Work students of University of the Punjab Lahore.

The use of smartphones has gained momentum among the students of high leaning institutions. It has become necessity the academic life of students due to its high-level usage. The implication of smartphones has become wide among across all the universities students, but this study was limited to only one department and campus due to limited resources and time constraints. Therefore, the study of this nature can be replicated across other universities or campuses. For further studies on this filed the researchers can study the impact of smartphones on social, cultural values, beliefs, academic performance and many more. This study was not able to cover all these aspects due to limitation of time and resources.

2. Literature Review

It is an obvious truth that smartphones gave us benefits in some aspects of life. However, younger generations today are becoming too addicted to the device that they prefer to socialize with their friends at social media platforms such as WhatsApp rather than meeting each other face to face. According to Criollo et al. (2018) smartphone users tend to develop a “cyberspace-oriented relationship”, where they feel more intimate with friends that are made through Internet rather than real life friends. Sharma (2018) found that students were inefficient in multitasking in their class and non-academic use of internet produce negative effects on student's learning and they tend to achieve lower test grades. Wang et al. (2016) observed the effects of students’ technology use and its effects on their academic performance. It was found that students who spent more time on their computers and less time on studying showed less academic performance as compared to those who devoted less time to computers and more time to their studies. The researcher concluded that such use of technology has damaging effects in the academic sphere and this trend is witnessed in different cultures of the world as well.

Al-Tarawneh (2014) found that students use electronic information technology and internet search engines for finding general information on the topic of their interest. The use of smartphone is varied among students of different fields of study.

Abdelraheem and Ahmed (2018) found that excessive use of mobile phone among students effects the brain working of students as successful multitasking is not possible as our brains do not have such capacity to entertain multiple incoming information sources at a time in an effective way.

Baiden (2020) emphasized the use of portable technologies by the students for their learning, social interaction, entertainment and for their work-related purposes. The major findings of this survey reflected the positive aspects of students’ use of mobile devices were: capturing ideas and experiences enable themselves for informal learning, making and recording, and browsing and accessing information. Along with this, some negative aspects of using mobile devices were also highlighted like distracting, intrusive, becoming dependent on the mobile and losing the feelings of ‘physical togetherness’.

In the context of Pakistan, Iqbal and Bhatti (2020) studied the impact of Facebook usage on the academic performance of the students that university students opined that more than half of respondent that Facebook had adverse effects on their academic performance. Masiu and Chukwuere (2018) studied the

reason for using mobile phone by the South African university students in which it was found that students use their mobile phones for socializing, safety and privacy purposes respectively.

Ifeanyi, and Chukwuere (2018) elaborated that college students use their cell phones for texting during their class time. Their covert multitasking during class lectures not only produced a negative impact on their classroom learning but also caused distraction not only to them but also to those sitting next to them. Alwagait et al. (2015) examined the effects of multitasking while studying. The researcher found that texting and Facebook usage during completing class work were negative predictive of overall GPA. However, using instant messaging, talking on a phone, using email, and information searching were not related to overall GPA.

Sharma (2018) found that social and communication, search engines, tool and productivity, games or music, sports or other entertainment were the major types of apps that student used frequently with the help of their smartphones. Alwagait et al. (2015) in a study found that students use their smartphone for the purpose of looking information, photographing information, recording class lectures, accessing digital resources, and extending their participation in class activities. The students also use their smartphones as a dictionary, a thesaurus, as a calculator, as a translation device and for class communication purposes. Pre-service teachers opinion about the use of mobile phones in the classrooms. The researchers found that pre-service teachers termed anywhere/anytime learning, increased communication, increased student motivation, increased student engagement, and opportunities for differentiation of instruction as the perceived benefits associated with the usage of cell phones in the classrooms.

Rather and Khazer (2019) went little forward and noted that texting, email, use of internet and social-networking sites engage students in multitasking activities and result in their decreased academic performance. They suggested that measurement of mobile phone usage should not be restricted only to calling and texting but should also take other activities that are performed with the help of this gadget. Kibona and Mgaya (2015) while measuring the effects of smartphones on academic performance of students found that intensive use diverts their attention from their academic activities to non-academic activities and results in their lower academic performance.

There is mixed opinion among students regarding their use of smartphones for academic purposes. Abdelraheem and Ahmed (2018) found that majority of students termed the use of smartphone unsuitable for serious academic learning. These students rarely download journal articles and accessing e-books for reading on their smartphone devices. Even students avoid editing their documents on their mobile phone due to its small size. Iqbal and Bhatti (2020) studied the benefits and barriers associated with the usage of smartphones as perceived by the teacher community. The researchers found that teachers considered the use of internet, educational apps, calendar and calculators as useful tools for learning. However they reported a few barriers that have negative effect on the use of mobile phones like disruption, cheating, access to inappropriate information on the internet, cyber bullying and sexting (the act of sending sexually explicit photos and messages via mobile phones).

On the whole, the above-mentioned studies found that mixed opinion existed among students about the advantages or obstacles associated with the usage of smartphones in their academic life at the university. However, it is also important to explore the advantages and disadvantages and abuses of this system to allow or limit its use, so that students generally and students of Social Work, in particular, increase their academic results and benefit from this technology in their academic life.

3. Research Methodology

The current study was quantitative in nature. The students of Social Work from the University of the Punjab, Lahore were taken as a population of this study. The data was collected through self-administered questionnaire. The statistical package for social sciences (SPSS) was used to analyze the data. The Department of Social Work, University of the Punjab, Lahore was divided into different classes and session like morning

and evening. Purposive sampling technique was used to collect the data from the students. Those students were included in the survey, who were using smartphone in the department of Social Work. The data was collected from the 203 students.

4. Data Analysis

The table 1 mentioned below presents the demographic information of Social Work students studying at the University of the Punjab, Lahore. The demographic information revealed that most of the students were female (65%) as compared to male students (35%). The majority of the respondents (54.2%) were belong to age group 18-21 years. Most of the students were from urban area (69.5%) as compared to rural background (30.5). The majority of study participants i.e. 63.5 were enrolled in Master program whereas 36.5 % students in B.S (Hons) Programs.

Table 1: Frequency Distribution in Demographic Variables

Demographic Variables	Frequencies	Percentage
Gender		
Male	71	35.0
Female	132	65.0
Age		
18-21 years	110	54.2
22-24 years	78	38.4
Above 25 years	15	7.4
Area to which student belong		
Urban	141	69.5
Rural	62	30.5
Program of study		
Master	129	63.5
B.S. Hons	74	36.5

This section presents the advantages of having and usage of smartphone. The study literature found that there are different kinds of advantages for students using smartphones. From the analysis of the current study data, it indicated that students were using smartphones for different reasons. The students used smartphone to stay in touch with their family and friends ($M=4.22$), to get smartphones' help in learning ($M=4.19$) and feeling comfortable in finding academic information ($M=4.07$) were the academic benefits students reap from using smartphones.

Along with this, the smartphone provided a sense of security among the humanity students ($M=3.59$). One of the great academic benefits highlighted by the humanity students was its capability to find information quickly even during the classrooms ($M=3.53$) and this help them saving their precious time ($M=3.52$). The benefits that were not given much importance by students were: to completing, accessing and submitting assignment ($M=2.71$) through their mobile device.

Table 2: Advantages of smartphone usage

S/N	Statements	Mean	SD
	Advantages of Smartphone Usage		
1	Smartphone helps in communication with my family and friends	4.22	1.07
2	Smartphone facilitates in learning	4.19	1.01
3	Smartphone helps in finding academic information	4.07	.999
4	Smartphone ensures my security when it is with me	3.59	1.32
5	Smartphone helps me to find quick information during the classroom	3.53	1.33
6	Smartphone saves time	3.52	1.29
7	Smartphone helps to complete and submit assignments	2.71	1.41

(Likert Scale: Always-5, Very often-4, Sometimes-3, Rarely-2, Never-1)

It is an obvious truth that smartphones gave us benefits in some aspects of life. However, younger generations today are becoming too addicted to the devices that they prefer to socialize with their friends at social media platforms such as WhatsApp rather than meeting each other face to face.

The use of smartphone also brings some disadvantages or harmful effects on the lives of university students such as getting distracted in the classroom ($M=3.41$); and resultantly it diverts their attention ($M=3.29$). One harmful effect of smartphone as reported by Social Work students was their access to inappropriate contents ($M=3.25$) using this gadget. It has become evident that students face distractions in the classroom that is responsible for diverting their attention during the class. Moreover, due to these reasons, Social Work students prefer not to use mobile phone for completing, accessing and submitting assignments (2.68) as well.

Table 3: Disadvantages of smartphone usage

	Disadvantages of Smartphone Usage	Mean	SD
1	Ringling mobile give distraction to me in the class	3.41	1.35
2	Use of smartphone divert my attention in the class	3.29	1.40
3	Student use smartphones for inappropriate content on the internet	3.25	1.26
4	Usage of mobile phones for playing games and watching videos.	3.00	1.29
5	Students send inappropriate images and text messages.	2.95	1.30
6	Use of smartphone wastes my time	2.88	1.23
7	I take less sleep due to using mobile phone excessively	2.64	1.34
8	I get eyesight problem due to intensive use of smartphone.	2.60	1.44
9	Smartphones are used for cheating in the exams.	2.56	1.38
10	I keep on texting in the class lectures through my Smartphone	2.42	1.40
11	I make or receive calls when I am in a class/lecture.	2.18	1.31

(Likert Scale: Always-5, Very often-4, Sometimes-3, Rarely-2, Never-1)

5. Discussion

The results of the study indicated that potential benefits of using smartphone according to Social Work students were that it enabled students to socialize with their families, relatives as well as friends without meeting them directly. Social networking applications such as whatsapp, Instagram, Skype and Twitter made it possible for people to stay in touch regardless of distance. Another advantage was that smartphones can act as a learning aid, which is absolutely essential to students which made them capable to find quick information and saved their time; as this gadget facilitates make learning possible anywhere and anytime and these reported benefits also confirm the findings of earlier studies (Abdelraheem & Ahmed, 2018). The students can find specific information for a specific subject through Internet.

It is also evident that smartphones are seen as cheating devices and distraction in the classroom rather than a learning tool (Alwagait et al., 2015), where students are always reminded to always keep their mobile phones on silent mode or to turn them off. The findings of the present study mentioned the harmful effects of smartphones on the Social Work students as: smartphones were seen more as a distraction in the classroom rather than learning aids as smartphone produce distraction in the classroom and this distraction divert students' attention in the class. This finding also supports the previous studies Baiden (2020) on this issue that students texting, multitasking and non-academic use of smartphone produce negative impact on students' learning and resultantly lowered their academic performance (Sharma, 2018). One of the major misuses of smartphone was found to be the access to inappropriate material for Social Work students; the same phenomenon was reported by the teacher community that students access inappropriate information on the internet and keep sending inappropriate messages that produce negative effects (Sumathi et al., 2018). In Pakistani context, Social Work male students termed the use of smartphone as harmful in their academic life. The present study also found that Pakistani Social Work students rarely record audio and video lectures on their smartphones.

6. Conclusion

The present study in the field of smartphone attempted to determine the effects of Smartphone's usage on academic lives of Social Work students in the largest university of Pakistan. The study concluded that Social Work students were using their smartphones not primarily for academic purposes but for social activities, as many of them had also turned this device as a learning tool. Smartphone enabled students to socialize with their family as well as friends without meeting them directly. It also acted as a learning aid, which was absolutely essential to students which made them capable to find quick information and saved their time. On the other side, smartphones were seen more as a distraction in the classroom rather than a learning aid as smartphone produced distraction in the classroom and this distraction diverted students' attention in the class. Students' texting, access to inappropriate material, multitasking and non-academic use of smartphone produced negative impact on students' learning and resultantly lower their academic performance. The young student generation is highly attracted to use the smartphones and the impact of smartphone usage seems great if smartphone is capitalized to achieve the benefits associated with its use; resultantly the Social Work students can possibly enhance their academic learning that may lead them to success in their academic life.

References

- Abdelraheem, A. Y., & Ahmed, A. M. (2018). The Impact of Using Mobile Social Network Applications on Students' Social-Life. *International Journal of Instruction*, 11(2), 1-14.
- Al-Tarawneh, H. A. (2014). The influence of social networks on students' performance. *Journal of Emerging Trends in Computing and Information Sciences*, 5(3), 200-205.
- Alwagait, E., Shahzad, B., & Alim, S. (2015). Impact of social media usage on students academic performance in Saudi Arabia. *Computers in Human Behavior*, 51, 1092-1097.
- Amin, Z., Mansoor, A., Hussain, S. R., & Hashmat, F. (2016). Impact of social media of student's academic performance. *International Journal of Business and Management Invention*, 5(4), 22-29.
- Baiden-Fletcher, E. M. (2020). Impact of social media on students' academic performances: a case study kumasi technical university (Doctoral dissertation, School of Graduate Studies, Kwame Nkrumah University of Science and Technology).
- Barnes, S. J., Pressey, A. D., & Scornavacca, E. (2019). Mobile ubiquity: Understanding the relationship between cognitive absorption, smartphone addiction and social network services. *Computers in Human Behavior*, 90, 246-258.
- Criollo-C, S., Luján-Mora, S., & Jaramillo-Alcázar, A. (2018, March). Advantages and disadvantages of M-learning in current education. In 2018 IEEE World Engineering Education Conference (EDUNINE) (pp. 1-6). IEEE.

- Ifeanyi, I. P., & Chukwuere, J. E. (2018). The Impact of Using Smartphones on the Academic Performance of Undergraduate Students. *Knowledge Management & E-Learning*, 10(3), 290-308.
- Iqbal, S., & Bhatti, Z. A. (2020). A qualitative exploration of teachers' perspective on smartphones usage in higher education in developing countries. *International Journal of Educational Technology in Higher Education*, 17(1), 1-16.
- Kibona, L., & Mgaya, G. (2015). Smartphones' effects on academic performance of higher learning students. *Journal of Multidisciplinary Engineering Science and Technology*, 2(4), 777-784.
- Masiu, T. M., & Chukwuere, J. E. (2018). The Effect of Smartphones on Students' Academic Life: A Perceptive from A South African University. *and Management Dynamics*, 174.
- Rather, S. A., & Khazer, M. (2019). Impact of Smartphones on Young Generation. *Library Philosophy and Practice*, 1-9.
- Rathore, A. K., Kar, A. K., & Ilavarasan, P. V. (2017). Social media analytics: Literature review and directions for future research. *Decision Analysis*, 14(4), 229-249.
- Sattarov, A., & Khaitova, N. (2020). Mobile learning as new forms and methods of increasing the effectiveness of education. *Архив Научных Публикаций JSPI*.
- Sharma, B. (2018). Mobile phone: Advantage and disadvantage. *Asian Journal of Nursing Education and Research*, 8(3), 339-342.
- Sumathi, K., Lakshmi, N. S., & Kundhavai, S. (2018). Reviewing the impact of Smartphone usage on academic performance among students of higher learning. *International Journal of Pure and Applied Mathematics*, 118(8), 1-7.
- Tariq, W., Mehboob, M., Khan, M. A., & Ullah, F. (2012). The impact of social media and social networks on education and students of Pakistan. *International Journal of Computer Science Issues (IJCSI)*, 9(4), 407.
- Wang, D., Xiang, Z., & Fesenmaier, D. R. (2016). Smartphone use in everyday life and travel. *Journal of travel research*, 55(1), 52-63.