

Influence of Mobile Phone Usage on the Academic Performance of Students: A Case Study of Malakand Division Students

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Abstract: The purpose of this exploratory study was to determine the value of smartphone use by students at two Khyber Pakhtunkhwa universities in terms of learning and to examine the relationship between smartphone use between learning activities and students' academic performance. This research used a quantitative approach and a correlational research methodology. Its goal was to describe the specified demographic features and find links between smartphone usage and student demographics. 150 questionnaires were randomly given among students at the University of Swat and the University of Malakand, with 135 of them being backed. The correlation analysis revealed that students at the University of Malakand and Swat's use of mobile phones is a significant factor that contributes to their poor academic performance due to a lack of awareness of its positive uses that can help them improve their skills, knowledge, and competencies. The value of R is 0.651, indicating that students' use of cellphones has a significant impact on their academic performance. That is, when students' academic performance is positively influenced by their favourable use of mobile phones, they will do better. Furthermore, the R Square value is 0.429, implying that pupils' academic performance will shift by 42 percent, either positively or negatively.

Introduction

Due to fast growing pace in globalization and technology there comes a complete change in the priorities and living standards of people. Every person want an ease in his or her life and at their door step. Among the different changes the biggest change that we all observe in our daily life is that the way through which we communicate with another person. Due to globalization, there also comes advancement in information and communication technology (ICT). Smartphone addiction is influenced by achievement motivation. University students who were highly motivated by the prospect of success were more likely to actively pursue higher academic achievement goals and to embrace challenges and self-evaluation (Ran, 2022). Individuals face a unique kind of issue with mobile phone addiction that has never been seen before in human history. Mobile phone use has a variety of social, economic, legal, and ethical implications, but its impact on individual performance is becoming increasingly problematic (Farooq, Shah, & Hafeez, (2021).

In the different ICT's mobile phones are seems to be more advanced and the companies are continuously introducing new features and apps through which the communication among people become more advanced. Mojaye, (2015) argued that the mobile phones were first introduced in 1990's. Beniwal, (2013) stated that

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today around the globe there are seven billion mobile phone connections and over 3.5 billion subscriptions. Javid, (2011) argued that the mobile phones are more popular among the youth mostly in school, college and university students who want to have a unique and expensive mobile phone. Now a day's every person want to have his or her own personal mobile phone to stay in touch with their reference group and to also aware themselves from the new and upcoming trends around the globe. From the Usage of Mobile Phone few years the use of mobile phones increases day by day and now it is not only limited to answer a call or send a short text messages to another person. Now no one of us keep the photos of our loved once in a wallet or making large albums because due to advanced mobile phones we can easily capture and save photos which are far away from us on a single click. Beyond this due to advancement in the internet and wi-fy facility in mobile phones a lot of apps are introduced with the help of which the distance between people around the globe decreases and we can easily contact with our loved once at a very low cost. Rajeev, (2015) conducted a survey on the youth usage of mobile phones in 2010 in India which clearly shows that it becomes the essential part of our daily life. During the survey the necessity of mobile phone was also studied which clearly showed that the mobile phone is necessary for all age grouped people especially for adolescents because it helps in their academics and further enhance their knowledge in a more batter way. Ezemenaka, (2013) states that traditionally families and teachers were considered to be the agents of socialization but due to advancement in technology and access to any kind of information from mobile phones every individual person can get the detailed information of their desired topic with in a second. With the help of mobile phones students may also take the advantage to search the lectures of top scholars on their area of interest and may also aware themselves from the day to day happenings, innovations and advancement in knowledge with the help of research papers which are reviewed and approved by the skilled, experienced and professionals. With the help of mobile phones parents are also facilitated to easily contact with their children and also with their teachers to know that what the progress of their children in education is. While on the other hand it also become the cause of their poor performance because students are often seen that they only misuse their mobile phones which badly affect their academic performance. Male and female students are commonly observed that due to mobile phones they start searching other irrelevant websites, dating and flirting which is only the wastage of time, money and also badly effect their academic performance.

Problem Statement

As the mobile phones, can be used at both ways depending on a person. The misuse of mobile phone is a very critical issue and give ways to many illegal activities and also decreases their academic performance. As Pakistan is an Islamic country and has a developing economy but due to globalization and modernization people are more attracted towards glamour and many people want to fulfil their desires before the right time and hence most of the teenagers get themselves involved in shortcuts and illegal activities. Hence it is essential to find out the important factors affecting the students use of their cell phones and their academic performance.

Rationale of the Study

For conducting this study the main reason is to identify that whether the usage of mobile phones helps students in their academia or not? This study can provide batter explanation on the cell phone usage of Swat students. Furthermore, this study can also explain the effect of mobile phone usage on their academics and also on their future carrier and daily life. With the help of this study the performance of students in their academics will be improved and they will batter understand the useful use of their mobile phones which will help them out in enhancing their knowledge and polish their skills. With the adoption of this study all those people such as Professors, Lecturers and departmental heads will be able to promote and introduce such ways through which the cell phone usage for students become more useful and students will be also able to play their role in the success and betterment of their society and country.

Research Question

What is the influence of mobile phone usage on the student's academic performance?

Objectives

- To identify that either the useful or misuse of cell phone of swat students is high.

- To find out the degree to which the mobile phone is useful for students.
- Examine the misuse of mobile phones on the students of Swat.
- To make proper recommendations through which the misuse of student's cell phones can be minimized.

Hypotheses

H1: A negative relationship exists between the usage of mobile phones and the academic performance of students.

H2: A positive relationship exists between usage of mobile phones and academic performance of students.

Literature Review

In Pakistan, the mobile phones not only used for the purpose of interpersonal communication but also gradually changing to the multimedia devices that give ways to advanced functions of communication. In this research study the mobile phones are considered for the communication as well as for the purpose of learning. Traditionally people use their cell phones for just voice calls and short messaging services (SMS), but due to the advancement in technology and use of internet it gives ways to other communicational forms such as multimedia messages (MMS), WhatsApp, Viber, skype, Instagram, Facebook, twitter, etc. Kayani, (2013) contended that now the mobile phones are used for the different activities of multimedia such as news alerts, talking pictures, video clips, listening music, watching movies etc. which completely change the concept of mobile phones and its usage. Malik, (2009) also maintained that the mobile phones are also used for the purpose of learning as an individual can access any kind of information and knowledge.

Positive Use of Mobile Phones by the Students

The mobile phone technology completely changes the preparedness of life. Jordaan, (2013) argued that increasing popularity of cell phones in a very near future it will be also becomes the part of educational institutions. The author also argued that as the few years ago, the graphical calculators becomes the revolutionary addition to the environment of class rooms which is now only limited to the statistics and accounting classes. The use of the portable devices is nor a new practice for the educational cycle.

As this research study is about the influence of mobile phones on students therefore it is very necessary to identify those aspects and ways through which a student can easily take more advantage from their cell phones and to identify that how they can utilize their mobile phones for learning purpose. Rabi, (2016) concluded that through internet, mobile phones can easily help in the promotion of different kinds of collaboration and learning among students. As Ahmed, (2011) also found that the students are highly influenced to their cell phones as it can be commonly observed that school or university going students have expensive and sophisticated mobile phones, ipads or tablets containing different applications and software which they can easily use by connecting to the internet. Ezemenaka, (2013) explained that students can easily use their mobile phones for the enhancement of their knowledge through internet. As Adikari, (2013) conclude that the students are happier and motivated to use their cell phones therefore by providing lectures, notes, presentation slides, videos etc they can learn more effectively. Abbas, (2015) also argued that social networking websites such as Facebook, Twitter, Instagram etc. can also encourage students learning when students make their page or group in which they can easily share their knowledge, experiences, notes, lectures and other videos that contains contents which promote knowledge and productive information. Goswami, (2016) with the help of these software and applications students and scholars can easily access to social media platforms from where they can easily contact authors and other scholars who can help them in their studies. Such as if a scholar or researcher is conducting a research on any area and is facing difficulty in finding the scale for measure a variable and he or she found that the other author also conducted a research on the same area than he or she can easily contact them by emailing him or her and can ask for the scale of such variable. It makes it easier for a scholar to conduct a research. Akanferi, (2014) the mobile technology and the use of an internet on mobile phone devices enhances the influence and relationship of users with information and also enable users to make the experience of learning more memorable by relating the already known information with the new once.

Adverse effects of Teenagers Mobile phones usage on Education:

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In spite of many positive aspects of mobile phone technology, some researchers have also highlighted negative prospects of the device. Jumoke, (2015) due to the heavy and excessive use of mobile phones youngsters face different kind of problems such as the financial, emotional stresses, lack of academic attentions and disruptions in relations. As North, (2014) due to advance technology and easy access to internet and social media through mobile phones effect the lives of young adults and the things that they watch they also want to apply it in their real lives. There is a less factor of maturity among the young adults therefore they take things very seriously and often make a big mistake such as getting involved in illegal activities, crimes, rape, murder, flirting, suicide etc. Venkataraghavan, (2015) found that on average a youngster make five calls daily and eighty five percent of them avail the short messaging services for contacting their friends and family members which give ways to very serious social, academic and health issues. Kibona, (2015) explained that the excessive use of mobile phones also becomes the cause of safety issue because it is often observed that most of the youngsters use their cell phones while driving.

Silva, (2002) found that Due to the use internet and social media contents on mobile phones students are observed to spend most of the time on social networking websites which badly effect their academic performance. The author also argued that due to social media networking the students are more attracted towards flirting and other activities that effect their social life. As Jordaan, (2013) also argued that the availability of internet and different mobile phone applications make the access to social media websites more easy and any one can access their Facebook, twitter accounts from their mobile phones. Jeffrey, (2011) also asserted that the easy access to all kind of social media platforms through mobile phones increases the engagement of youngsters with their mobile phones where they chat, download and upload videos, play games and may also watch other media contents which are more pornographic in nature. Sundari, (2015) contended that the portability and high storage capacity of the mobile phones make it more easy for youngsters to keep any kind of material in their mobile phones which they can watch anywhere. Moreover Krithika, (2013) proclaimed that the security codes on the smart phones make it more secure for the youngster to keep any kind of contents in their mobile phones without any fear from their parents and teachers.

Theoretical Framework

It is a general phenomenon that people are using different technology and advance stuff for their satisfaction and gratification. The students of schools, colleges and universities also among them who are using various news technological tools, in which one is mobile phone using for their satisfaction and academic purposes.

Uses and Gratification Theory

Griffin, E. (2000) said that uses and gratification theory was presented by Blumler J.G. & Katz, E. in 1974. Cragan, J. F., & Shields, D.C. (1998) explored that both researchers recommended that the media consumers are performing active role in using and choosing media, because to acquire their goals and objectives.

West, R., & Turner, L. H. (2000) said that according to the theory assumption the media users exposed to that media which fulfil their needs. They further said if the selected media doesn't satisfy their requirements then they use another media. Balakrishnan and Raj (2012) said that the theory emphasises to find out that why the people use the new technology to gratify their social and psychological desires. Leung, L. (2007) argued that users are enthusiastically involve in the usage of technology for their satisfaction and needs. Ogunyemi, O. (2010) said that a number of people are using cell phone for exchanging information, conversation and discussions, information viewing, socialization, education, entertainment, diversion, escapism, fashion, status and reassurance.

Research Methodology

This research is based on quantitative methodology to collect the facts, figures in numerical way, whereas the researcher used survey technique for the data collection. For this research study, primary and secondary both type of data was collected. The secondary data was collected from different articles, magazines, journals and books. After reviewing secondary data, it has been identified that there is a significant relationship between both the selected variables (Usage of Mobile Phones and Academic Performance of students). Therefore, with the help of questionnaire primary data was collected to find out the influence of

independent and dependent variable. In this study a five point Likert scale questionnaire was specifically designed (Adopted) which consists of closed ended questions.

Population and Sample

Population refers to the total number of objects or subjects or members such as employees of an organization, citizens, organizational data of specified time period etc. that an author want to study. The total population was 8016. For determining the size of the sample, it is very essential to identify the accuracy, cost, and homogeneity in population. As Swat is also one among the biggest districts of the KPK therefore the researcher select University of Swat and Malakand for the execution of the study. According the latest figure of total number of students in Swat district is approximate 8016. Therefore total 150 questionnaires were distributed among the students of University of Swat and University of Malakand through random sampling technique in which 135 were backed.

Sampling Technique:

There are different kinds of sampling technique through which a researcher collect primary data and by analyzing that data he or she become able to conclude the whole study. Selecting a valid sampling technique totally depends on the nature of the study which confirms that which technique will be suitable for the collection of required information. Random sampling technique was adopted for the collection of data like previous study of Akenferi, (2014).

Data Collection Tool and Technique

The questionnaire was specifically designed for this study which has been adopted from the previous studies of different author (Ahmed, 2011 &Javid, 2001) to gather relevant information from the respondents regarding this study. All antecedents were answered on 5-point Likert scale having different labels to check the capacity of the answers. To get the valid response from the respondents the questionnaires was personally distributed among the potential respondents of the selected sample to identify that either the usage of mobile phones (Smart Phones)influence the academic performance of students or not? After the collection of the gathered data it was further analysed through Statistical Package for Social Sciences program (SPSS).

Data Analysis:

As this study was questionnaire based therefore the demographic information was analysed through frequency distribution. For identifying the reliability of the adopted questionnaire reliability analysis has been used. The main aim of this study is to identify the influence of usage of Mobile phones on the Academic Performance of Students, therefore correlation and regression analysis has been used to identify the effect and relationship between the selected variables in University of Swat Malakand.

Variables of the study

In this study, dependent variable was academic performance of the students, while independent variable was mobile phone usage.

Results and Analysis

Table 1

What is your gender?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	91	67.4	67.4	67.4
	Female	44	32.6	32.6	100.0
	Total	135	100.0	100.0	

The table is representing the demographic variable gender of respondents. From the analysis of the data it is clearly identified that in this research study total one hundred and thirty-five respondents took part and provide their suggestions in which ninety-one were male respondents and the total number of female respondents were forty-four.

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Table 2

What is your age group?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	15-20	28	20.7	20.7	20.7
	21-25	51	37.8	37.8	58.5
	26-30	32	23.7	23.7	82.2
	31-35	19	14.1	14.1	96.3
	36 & Above	5	3.7	3.7	100.0
	Total	135	100.0	100.0	

The table is representing the age group of respondents. The table is showing different age groups of one hundred and thirty five respondents in which twenty eight respondents were lying the age group of below 20, fifty one respondents were in 21-25 years, thirty two were in 26-30 years of age, nineteen respondents were from the age group of 31-35 and the remaining five respondents were in the age group of above.

Reliability Analysis

Usage of Mobile Phone and Students Academic Performance

Reliability Statistics

Cronbach's Alpha	N of Items
.938	11

Reliability Statistics

Cronbach's Alpha	N of Items
.742	9

Reliability Statistics

Cronbach's Alpha	N of Items
.627	20

The reliability analysis was used in order to confirm that either the scale that either the adopted scale for this study is reliable or not. The overall reliability is showing the value of cronbach’s alpha as 0.627 which is above 0.60 which confirms the authenticity of the questionnaire.

Correlation Analysis

Table 3

Correlations

		UOMP	SAP
UOMP	Pearson Correlation	1	-.651**
	Sig. (2-tailed)		.000
	N	135	135
SAP	Pearson Correlation	-.651**	1
	Sig. (2-tailed)	.000	
	N	135	135

** . Correlation is significant at the 0.01 level (2-tailed).

The correlation analysis is used to identify the relationship of usage of Mobile Phones on Students Academic Performance. The table reveals the value of -.651** with a significant value 0.000 which confirms that the usage of Mobile Phones is negatively related to the Students Academic Performance. Therefore it is confirmed that the usage of mobile phones for the students of University of Malakand and Swat a significant factor which becomes the cause of their poor performance in their academics due to lack of awareness of its positive use which can further enhance their skills, knowledge and also their competencies.

Regression Analysis

Table 4

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.651 ^a	.424	.419	.44125

a. Predictors: (Constant), UOMP

The table of model summary as mentioned above exhibit the value of R which is representing the impact of Usage of Mobile Phones with the Students Academic Performance, R square value is representing the variance. The value of R is 0.651 which shows a very strong Impact of Usage of Mobile Phones on Students Academic Performance. Means when the positive use of mobile phones has been strengthened the Academic Performance of Students will be positively influenced. Further the R Square value is 0.429 which means that there will come forty two percent change in the Academic Performance of students either through positive or negative manner. The value of Standard Error is 0.44125 which is also very less and confirming the strong relationship of Usage of Mobile Phones and Students Academic Performance.

Table 5

ANOVA^b

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	19.044	1	19.044	97.811	.000 ^a
Residual	25.895	133	.195		
Total	44.940	134			

a. Predictors: (Constant), UOMP

b. Dependent Variable: SAP

The significance value appears in the anova table is 0.000 which is less than the 0.05. Hence it also confirms the significant relationship of Usage Of Mobile Phones with the Students Academic Performance. The value of

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significance is acceptable up to 0.05 in every study. When the value of significance decreases the level of significance between the selected variables increases while if the value of significance exceeds from the 0.05 the level of significance decreases.

Table 6

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	3.630	.157		23.074	.000
UOMP	-.415	.042	-.651	-9.890	.000

^a Dependent Variable: SAP

The coefficient table also shows the relationship and its significance. In the above table the beta value appears -.651 as appeared in the table of model summary and correlations with a significance value 0.000. Therefore it can be easily interpret the whole regression as there is a significant negative relationship between Usage of Mobile Phones and Students Academic Performance.

On the basis of above results and their interpretations it is confirmed that there is a negative and significant relationship between the Usage of Mobile Phones and Students Academic Performance. Therefore the hypothesis H1 that is assumed in the chapter 2 is proved and hence accepted while H2 is rejected.

Discussion

For identifying the significant relationship between the independent and dependent variable the regression has been applied. After applying the regression from the value of R in the model summary and the value of significance clearly showed that there is a significant negative relationship between independent variable (Usage Of Mobile Phones) and dependent variable (Students' Academic Performance) in University of Swat and Malakand. Furthermore by applying correlations it has also been found that there is a great impact between independent and dependent variable.

Conclusion and Recommendations

The exploration of the significant relationship of Usage of Mobile Phones with the Students' Academic Performance as it was discussed in the chapter first that bringing increase in the usage of mobile phones for academic purpose is more crucial for the better performance of students in their academics. It was also discussed that due to increase in technological advancement there also comes some serious negative aspects as well which continuously affect our societal norms and beliefs due to the lack of student's interest in their academics. From the analysis of the collected data the results of this study indicates that the Usage Of Mobile Phones have an adverse effect on the Academic Performance of students in University of Swat and Malakand. The results of this study has a close resemblance to the study of Leep, (2015) in which the author study the pattern of mobile phone usage with the academic performance of students and found it very problematic for the academic performance of students. During the collection of data it was also observed that there is a lack of awareness among the students of University of Swat and Malakand related to the positive usage of their mobile phone devices. The students were also found in taking more interest in those features of mobile phones that can help them in increasing their social circles. While When the Usage of Mobile Phones is strengthened the students are more able to interact with their teachers and other class fellows (Batata, 2009). With the help of usage of mobile phones in Academia students are also updated from the latest information related to their academics and other necessary information's that can influence their performance in academics. Further from the perception of the potential respondents of this study it is clarified that if there comes decrease in the use of mobile phones the academic performance of students will be negatively influenced due to the existence of negative relationship among variables. The results also confirms that due to decrease in the positive Usage Of Mobile Phones also decreases the motivational level of students towards their academics and are not willing to

accept the challenging tasks, assignments and projects that can contribute more in the enhancement of their knowledge and also to their academic performance as they can easily access their desired information on internet from their mobile phones as well.

Recommendations

The negative relationship and impact of the Usage of Mobile Phones and Students Academic Performance decreases its importance for the enhancement of students knowledge and their interest in their academics. The misuse of cell phones in academics is found to be more problematic therefore it is the responsibility of the educational institutes and network operators to promote its positive aspects and also take initiative for bring positive behavioural change in community. The usage of mobile phones among the students is becoming more popular around the globe therefore the management of the academia must take initiative and develop a database through which they can easily contact with every individual student. With an increase in the positive usage of mobile phones in Academia the privacy factor can be also enhanced such as management can easily interact and inform those students having outstanding dues and other issues related to their subjects and academia through short messages. Hence they will be able to tackle the issues on time and focus more on their studies.

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