

**RESEARCH PAPER****The Extent of Usage of Mobile Phones and the Academic Performance as well as Moral Development of the Undergraduate Students: An Analysis****¹Dr. Muhammad Arshad Javaid ²Annam Zahra and ³Dr. Muhammad Arslan Raheem**

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Corresponding Author arshad.javaidd@ue.edu.pk**ABSTRACT**

The main objective of the study was to find out the effect of the extent of mobile phone usage on the academic performance and moral development of undergraduate students. The study was delimited to only female students studying at University of Education Lahore, D. G. Khan Campus. 199 female students were selected as a sample through stratified random sampling technique. A check list and two questionnaires were developed to collect the data from the sample of the study. The check list was used to classify the students' groups as per their extent of the usage of mobile phones. The questionnaire (Q1) and (Q2) were developed to find out the level of academic performance and the moral development of the desired sample. It was concluded that the increasing extent of usage of mobile phones affect the students academic performance as well as moral development. It was recommended that in universities, particularly; in the class rooms, during teaching learning process, usage of mobile phones may be prohibited.

Keywords: Cell Phone, Extent, Natural Science, Social Science, Technology**Introduction**

Globalisation and the quickening pace of technological innovations have a significant impact on people's priorities and living conditions. Everyone hopes for an easy life upon arrival. Because globalisation and the growth of information and communication technology (ICT) go hand in hand, the biggest change in our daily lives is a change in the way we communicate with one another. Motivation for achievement has an impact on smartphone addiction. Motivated by the possibility of success, students are more inclined to actively pursue their goals of pursuing higher education. These children are also more likely to embrace difficulties and introspection (Ran, 2022). There has never been a mobile phone addiction issue like the one that people are presently facing in human history.

Despite the numerous social, economic, legal, and philosophical implications of cell phone use, its negative impact on performance has become more concerning. Hafeez, Shah, and Farooq (2021). Since businesses are always coming out with new features and applications that improve interpersonal connections, mobile phones seem more advanced than other ICT goods. As per Mojaye (2015), the inception of the mobile dates back to 1990. A nation's ability to grow in the global economy depends on its use of educational technology. Any civilization that wishes to boast of its financial prosperity needs well-trained labourers and a robust currency (Bendarzsevskij, 2012).

One device that is regularly used for communication is a mobile phone. It can receive radio calls that go over a wide area by connecting a mobile device (Lenhart, Ling, Campbell,

& Purcell, 2010). The mobile phone is one of the biggest and most widely used technical devices in any country (Rebello, 2010). A mobile phone is a cordless smartphone that may be found in buildings all around the world. The creation of the mobile phone is among the most important developments in the field of mobile phones in terms of information and communication technology for the preceding 20 years (Plant, 2000). Mobile phones are the technology that is changing the country the quickest.

Globally, there are more mobile phone users than fixed-line TV subscribers (Rice & Katz, 2003). By the end of 1999, there were only 500 million mobile phones in use worldwide (Aoki & Downes, 2003). Several experienced researchers believe that information and communication technology (ICT) may be used in the twenty-first century to efficiently organise research, conduct studies, evaluate it, and interact with others Partnership for 21st Century Skills. Mobile phones use among students is more common, according to Satter's (2010) research. Since smartphones change people's capacity to move around and connect with others in addition to their lives (Katz & Aakhus, 2002), the benefits of owning a smartphone are more functional than necessary (Kopomaa, 2002).

Seventy-five percent of the time, curriculum is created outside of classroom settings, according to Norton's staff contacts. Students' learning environment is directly impacted by phone use, as opposed to regular computer use (Koehler & Mishra, 2009). According to Geser (2004), students' engagement is increased when students converse and discuss a wide range of topics with one another. The increasing use of mobile devices and the likelihood of developing a mobile device addiction have prompted psychologists to express caution. 34 times a day, the subjects in a recent study by Ezemenaka (2013) and Cholz (2010) checked their phones, indicating that excessive use of mobile phones may be considered an addictive disorder. The use of cell phones in the classroom has been advocated by several instructors.

There are many who question the rationale behind students using their phones in class. They feel that either a certain device is malfunctioning or that students shouldn't be using mobile devices in the classroom (Mark & Geary, 2008). Students seem to enjoy using cellphones and tiny computers in the classroom, especially business students at Norwegian and American colleges (Kvarik, 2011). As stated by Hall Davidson, NECC (2008), parents do not wish to "ban" cell phones because doing so would prevent them from being in close physical contact with their children, which would be pointless. However, a mobile phone ban might be a useful tool for defusing tense situations in educational institutions.

As a result, educational establishments had to establish guidelines for students' use of mobile phones (Buchegger, 2010). While Pakistan's Allama Iqbal Open University formerly encouraged distant learning and provided opportunities for learning in casual settings in the country's rural areas, the Virtual University of Information came into being more recently. One method that technology can help with learning and education is through online lectures. They provide degrees and courses that may be taken online at any time, from any location.

Students can access the course materials and participate in online lectures in the same way they would in a traditional classroom. Even though mobile phones affect all facets of society, whether they are allowed in the classroom or not, it is impossible to ignore their impact. Due to the accepted usage of cell phones in the teaching and learning process, several research investigations have been conducted. Many research studies have been conducted in an international setting because of the acknowledgment of the usage of mobile devices in the educational process.

However, because Pakistan is a third-world nation and the academic community is largely unaware of the potential contribution that mobile devices can make to the learning process, the researcher decided to conduct a scientific inquiry into how cell phones affect

university education and instruction. Morrison & Loether assert that educational and societal changes have begun to understand and transition from memorization of information to deep thinking values. They own the power to communicate with others, and this power is controlled by their own destiny (Katz & Aakhus, 2002). According to the study, students' use of social media platforms has a negative impact on how they develop morally.

This study may be important because it may be useful to determine the impact of cell phones on student academic performance and moral development in Pakistani perspective. It is a general practice that in Pakistan, people mostly use the cell phones for negative purposes as compared to its positive use. Similarly, in the educational institutions, a great percentage of the students use the cell phones in different activities other than the educational purposes. The real and prime objective of this study is to find out that the students' academic performance suffers because of their excessive use of mobile phones, which affects their achievement (marks) badly. Those students who spent more time with mobile phones made more behavioral changes that may be negative or positive.

Hypotheses

H₀₁: No significant difference exists between the Academic performance of the students using excessive mobile phones and less mobile phone.

H₀₂: No significant difference exists between the Moral development of the students who are using excessive Mobile phones and less Mobile phone.

Material and Methods

The population of the study comprised of female undergraduate students those were enrolled in 2nd semester from the University of Education, Lahore, D. G. Khan Campus. There were two groups of the students: one from the social sciences (SS), including BS Economics, BS Education (honors) and BS English and another group from natural sciences (NS), including BS in Chemistry, BS in Physics, BS in Botany, BS in Zoology and BS in IT. As this study was delimited to only female students, so the total number of female students in both the faculties (NS and SS) were 199. A check list along with two questionnaires was developed to collect the data from BS students. The check list was developed to classify the students in groups in order to find out the extent of mobile phone usage. The questionnaire Q₁ was developed to find out the academic performance of the undergraduate students comprising 21 statements, while the second questionnaire Q₂ containing 25 statements was developed to find out the moral development of the undergraduate students.

Through check list analysis, sample of study was divided into four groups: in the first group, those students were included who were using mobile phones for 2 hours daily; in the second group, those students were included who were using mobile phones for 4 hours in a day; in the third group, those students were included who were using mobile phones for 6 hours each day; and in the fourth group, those students were included who were using mobile phones for more than 8 hours daily. The opinion of the students on Q₁ and Q₂ were confirmed/authenticated from their respective class fellows/ teachers and parents randomly. The formation of the four groups of the students was finalized after the authentication of their opinions through numerous reliable sources. The Parametric Test of Significance was used to test the Null Hypotheses of the study. In this study, the teachers teaching the BS students and some parents of the students were approached in order to record their answers against the following questions:

Q₁ : Do you think that excessive use of mobile phone affect the academic performance of the students?

Q₂ : Does the increasing use of mobile phones affect the morality level of the young students.

Q₃ : How can we control the increasing use of mobile phones by the undergraduate students.

Results and Discussion

In response to the questions one and two, all the available teachers and the parents were agreed that increasing use of mobile by the students is of course shattering their academia as well as morality. Most of the parents were too much anxious about this deteriorating position of their young ones and the young ones of coming next. In response to the third question, the prominent and valuable suggestions by the respondents are given as under:

- Guidance and counselling by the parents, teachers and experts may be provided to the students regarding the limited use of mobile Phones.
- In the classroom, its usage should be completely banned.
- Seminars may be arranged regarding the use of mobile only for educational purposes.
- Parents should restrict their young ones about the excessive and improper use of it.
- Seminars on the ethical and moral values should be arranged within the varsities.
- Sports, debates, quizzes and other healthy co-curricular activities should be arranged regularly in the institutions of Higher education to divert the attention of the new generation.
- Awareness Campaigns may be launched on the social media to control its excessive use.
- Teachers as well as the parents may guide the young ones regularly in order to avoid them from the increasing usage of mobile phones.
- Unethical contents, videos, tik talks on the mobile phones should be restricted by the IT authorities within the premises of the varsities.

Table 1
Level of Effectiveness on Academic performance and Moral development Scales

Mean Score Values	Levels
1.00-1.99	Lowest
2.00-2.49	Lower
2.50-2.99	Low
3.00-3.49	Satisfactory
3.50-3.99	High
4.00-4.49	Higher
4.50-5.00	Highest

In this study, criteria were set for the level of effectiveness on academic performance and moral development. The levels of effectiveness were set on the basis of the "mean value" obtained after the calculations. The mean score "three" was set as a minimum satisfactory level in the statement wise analysis of the study sample.

Table 2
Analysis of Questionnaires

Check List Division of Students' Groups	Q ₁ Academic Performance	Q ₂ Moral Development	Q ₁ Level	Q ₂ Level
Group 1 students using mobile phones for 2 hours	3.75	3.01	High	Satisfactory
Group 2 students using mobile phones for 4 hours	3.47	3.32	Satisfactory	Satisfactory
Group 3 students using mobile phones for 6 hours	2.85	2.52	Low	Low

Group 4 students using mobile phones for more than 8 hours	2.45	1.42	Lower	Lowest
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Table 2, shows that the group of the students those were using mobile for two hours daily; their level of academic performance was high while the level of moral development was satisfactory. The level of academic performance as well as moral development was found satisfactory from the group two of the sampled students using mobile phones for four hours daily. The third group of the students showed low level of academic performance and moral development. Lastly, the fourth group of the students using mobile phones more than eight hours daily showed lower academic performance and lowest moral development. This shows that the academic performance as well as the moral development of the students got affected by the increasing extent of the usage of mobile phones.

Table 3
Testing the Null Hypotheses Ho1 and Ho2
ANOVA test

		Sum of Squares	df	Mean Square	F	Sig.
Questionnaire1 Group 1 to Group 4	Between Groups	45.344	3	15.115	104.118	.000
	Within Groups	28.163	194	.145		
	Total	73.506	197			
Questionnaire 2 Group 1 to Group 4	Between Groups	48.010	3	16.003	106.435	.000
	Within Groups	29.169	194	.150		
	Total	77.180	197			

An ANOVA showed that the effect of the extent of usage of mobile phones was not significant at the.05 level, $F(2,297) = 104.118$, $p < 0.05$. Therefore, the null hypothesis is rejected. One-way analysis of variance was conducted to evaluate the effect of excessive use of mobile phones on the academic performance of university students. The ANOVA was not significant at the.05 level; $F(2,297) = 106.435$, $p < 0.05$. Therefore, the null hypothesis is rejected. The result showed that a one-way analysis of variance was conducted to evaluate the effect of excessive use of mobile phones on the moral development of university students. The ANOVA was not significant at the.05 level; $F(2,297) = 80.101$, $p > 0.05$. Therefore, the null hypothesis is rejected. It means that the the extent of usage of mobile phones affect the academic achievement as well as moral development of the undergraduate students.

Conclusion

The results of the study show that the increased usage of mobile phones by the undergraduate students is seriously affecting their academic achievement/performance and damaging their ethical and moral values. The excessive usage of mobile phones is just like the addiction with mobile phones revealed the lowest level of morality along with the lower level of students performance in their academic studies. Both the students achievement and the moral development if deducted from the students' struggling life; then, nothing remains exist in their life. The results of Table No: 2, clearly reveal the sorry situation of the the excessive usage of mobile phones in the life span of the undergraduate students. The results of this study were in line with the results of the study /research conducted by Jackson etal (2014) on "mobile phones' usage is negatively impacting students' academic performance". This study shows that the students who were using mobile phone more are having low GPA. On how much time they spend on using their mobile phone and in how many classes they use mobile phone, the survey analysis that there is negative relationship of these two questions with students GPA. That is the students who are using mobile phone almost 7-10 hours and those who use mobile phone during their most of the classes are having low GPA. The results of study were consistent with the results of the research conducted by Mojaye (2015) on "Attitudes of students towards the use of mobile phones and

the perceived social pressure and likely consequence". The result indicated a high usage of mobile phones.

One of the major reasons behind this is that the concerned authorities are too relaxed in coordinating the use of mobile phones in schools, high use of mobile phones leads to addiction which brings in classroom distractions and rapid fall in level of concentration. Indeed, the study confirmed that the students in boarding secondary school in Ilorin antisocial behaviors increased proportionally with their level of exposure to mobile phones. The study helped identify the harmful effects of excessive use of mobile phones at the university level and could be incorporated inside and outside the classroom.

An ANOVA statistics were used to find out the influence of the extent of the usage of mobile phone on academic performance and moral development. The ANOVA was not significant at the .05 level, $F(2,297) = 106.435, p < 0.05$. Therefore, the null hypothesis 01, which stated that there are no significant difference exists between the academic performance of the students who are using excessive mobile phones and less mobile phone, is rejected. The ANOVA was not significant at the .05 level, $F(2,297) = 80.101, p > 0.05$. Therefore, the null hypothesis 02, which stated that there are no significant difference exists between the Moral development of the students who are using excessive Mobile phones and less Mobile phone, was rejected.

The results of study were in line according to the research conducted by Pollara (2011), on "The issue of excessive mobile phone usage among university students, affects their moral development". This study showed that negative consequences of student's behaviour influence their study habits, sleep hours, and other activities. The survey analysis indicated that those students who use mobile phones inside and outside the classroom do not take interest in home tasks and educational activities.

Though many current studies have shown smart phone usage has many disadvantages for students' academic performance and moral development, Woocock et al. (2012) also focused on how students used mobile phones for personal use rather than study. So it would be concluded that now a days mobile phones are the need of students, but their excessive usage has a bad impact on their performance and moral development. Mobile phone addiction can ruin students' life if it is not stopped on time. Getting rid of this habit may be difficult but it is not impossible. With some efforts and support overcome this problem.

Recommendations

- In universities, during the teaching and learning process, the usage of mobile phones may be banned.
- Students should be kept indulged in other activities like household chores, indoor and outdoor games, which will lower their urge to check their phones frequently.
- Sports and recreational activities should be arranged and declared compulsory for each and every student within the higher educational institutions.
- Phone activities should be categorised and assigned a time per activity by the parents and teachers.
- Students should be restricted by the teachers and parents from the mobile phone usage by setting the number of hours; this way, they may avoid its excessive use.
- Moral education should be arranged in collaboration with the teachers and parents within the universities so that the students remain away from unethical activities.

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