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# **The Impact of Mobile Phones on the Performance of University Students**

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## **Abstract**

*This Paper concentrates on the impact of mobile phones on university students with special reference to University of Peshawar. A sample of 100 students was drawn from different departments of University of Peshawar for this purpose. The study used descriptive and quantitative tools for analysis. The results showed that almost 60% of the students got mobile phones from their parents. 42% of the students keep mobile phones for contacts with friends and society. Out of the sampled students, 6% use mobile phone for information access. Majority of the students (87%) are using mobile phone for the period of more than one year. They feel proud of having costly mobile phones and sometimes, use it as a source of unfair means during examination. They use its dictionary and other informative functions. The parents of female students feel easy with mobile phone to contact their daughters. They think that this new technology has not only improved the academic performance of the students but also improved the quality of education. It is recommended that the university students should try use of mobile phones positively and not waste their time unproductive text messages.*

**Key Words: Mobile Phones, University Students, SMS, University of Peshawar, Odds Ratio**

## **1. Introduction**

Mobile phone is a device which has affected our social contacts, education system, safety, business activities and many other aspects of life (Ling, 2003). It is one of those consumers' goods which created its market very rapidly and replaced other forms of communications. Being widely used around the world equally by rich and poor, it was formally introduced in Pakistan in early 1990s and was taken as status symbol but it is now a dire need of majority of Population. It was initially very expensive with limited competition in the market but latter on the competition of the cell phone producing companies and service providers have made it very cheap for the consumers. Its diffusion is fastest among the set of recent technologies with sound effects on social contexts and far reaching implications (Townsend, 2002). In Pakistan its subscribers crossed the digit of 121.13 million in March, 2013. It contains 98.40 percent prepaid and 1.60 percent postpaid subscribers (Government of Pakistan, 2013). In Pakistan, every out of every 100 people, 59.1 possess mobile or fixed phone service.

Mobiles phone is useful for common man for easy social contacts and social matters. It is a tool for emotional contact among people and people rely more on mobile phone more than ever before (Yang and Yun, 2012). It is helpful for business man in order to carry out many business deals. The widespread use of mobile phones has re-shaped, re-organized and changed multiple social facets (Ravichandran, 2009). It is used by people of almost all age groups but people of age group 60 years and above are found to be in less use of mobile phones and those who are under 25 years age frequently use this rapidly growing technology (Australian Research Council, 2007). This

may be due to the fact that designs, features and functionalities of the mobile phones changed dramatically in recent years (Head and Natalia, 2012). Research in the mobile phone and its impacts is not very common as compared to other technological issues (Aoki and Downes, 2004). It is a hard task to estimate the social and economic outcomes of mobile phones (McGuigan, 2005).

Mobile phones are very common communication devices among the university students. Almost every student of a university possesses one or more mobile phone. It is common phenomena among the teenagers (Cambell, 2006). It is affecting their social behaviour, health and budget (Ravichandran, 2009). However Ishii (2011) rejected the hypothesis of adverse effects of mobile phones on adolescents in Japan. But Jamal et al (2012) agree with the adverse effects of mobile phones on female students of Saudi Arabia. The use of mobile phones is increasing cost of education in the sense that in china about 22% of the university students change their mobile sets annually and 78% replace it after every two to three years. The mobile phone network covers 92% area of Pakistan (Govt of Pakistan, 2012-13). This paper attempts to diagnose the effects of cell phones on university students at Peshawar by taking University of Peshawar as study case.

## 2. Material and Methods

This paper is based upon primary data which was collected through well designed questionnaire. A sample of 100 students was drawn from different departments of university of Peshawar. The data has been analyzed by using descriptive as well as quantitative techniques. The descriptive techniques were percentages, graphs and tables. Moreover, in order to quantify the results, Odds Ratio technique has also been applied. The Odds Ratio (OR) is defined as the ratio of the odds of occurrence of an event in a group to its odds in another group. The model of the odds ratio used in this paper is explained below

Event	Just	Strongly	Total
Agree	a	b	a+b
Disagree	c	D	c+d
Total	a+c	b+d	a+b+c+d

The odds of Agree are =  $a/b$

The odds of Disagree are =  $c/d$

So the Odds Ratio =  $\frac{a/b}{c/d}$

More specifically, we can write the Odds Ratio (OR) as

$$OR = ad/bc$$

If the value of the Odds Ratio (OR) is 1 then it means that the event is expected to occur in both groups equally which means the odds OR is not in favour of any particular group.

### 3. Results and Discussion

This paper mainly concentrates on the effects of mobile phones on the university students in Peshawar by taking University of Peshawar as a case study. Primary data was collected for this purpose from 100 students of different level enrolled in University of Peshawar. The results show that 55 respondents were enrolled at graduate level while 19 students were studying at Master level. Similarly, 26 students were from M.Phil or Ph.D level as shown in Table I.

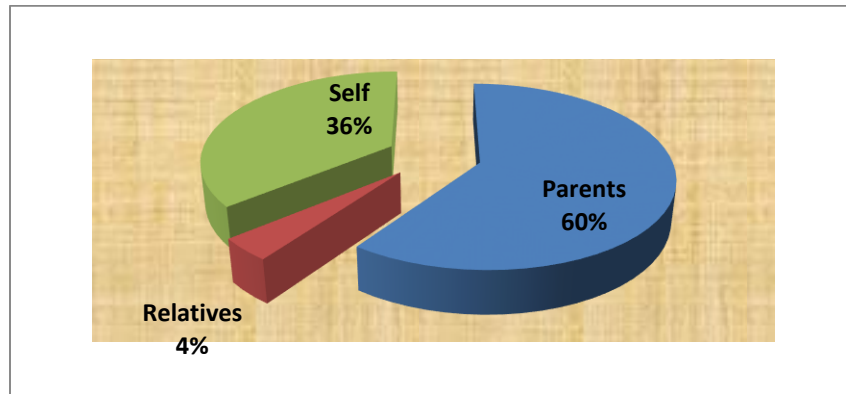
**Table I Education Level of Respondents**

S.No	Education Level	No. of Respondents
1	BS/BBA	55
2	MA/Msc/MBA	19
3	MS/M.Phil/Ph.D	26
Total		100

Mobile phone is considered as an integral part of life among the university students. Out of the total respondents, 99% possessed mobile phone while 1% had no phone.

Usually, the university students have rare sources of income and they totally or partially depend on their parents for their needs. The survey results show that 60% of the students got mobile phones from their parents while 36% purchased it from their own sources. However, 4% received mobile phones from their relatives. This is shown in Figure I.

**Figure I Who Provided You the Mobile Phone**



The students were found using mobile phones of different brands. Majority of the students (56%) were using mobile sets of Nokia, while 16% had Qmobile. The students' preferences for different brands are given in Table II

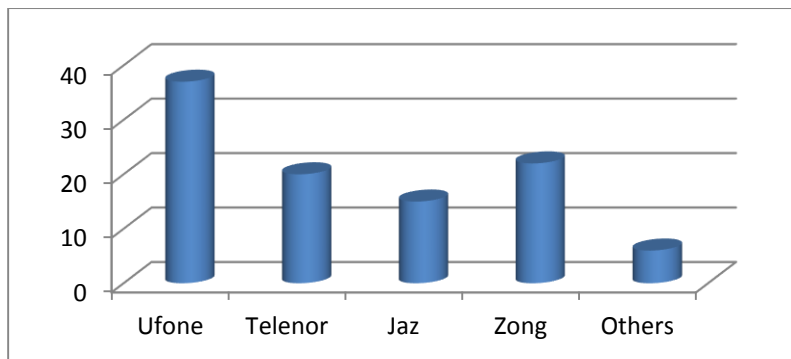
**Table II: What brand of cell phone you have**

S.No	Name of Mobile Brand	Percentage of Respondents
1	Nokia	56
2	Sony	11

3	LG	1
4	Qmobile	16
5	Other	16
	Total	100

The sampled university is located in the capital of the Khyber Pakhtunkhwa Province of Pakistan, where network of all mobile service providers exists. The results show that majority of the respondents were enjoying service provided by 'Ufone' while 'Zong' appeared as the 2<sup>nd</sup> largest service provider. Likewise, 'Jazz' and 'Zong' had also their customers as shown in the Figure II.

**Figure II Use of Service Provider**



The students were asked to show reasons for use of the mobile phones. According to the survey, 42 % of the students use mobile phones to keep in touch with friend and other social contacts. However, 28 % of the respondents use it for emergency or personal safety. Similarly, 24 percent of the respondents use mobile phone to keep in touch with parents. Some of the students (6%) were of the view that they took mobile phone for information access. The priorities of the respondents regarding use of mobile phones are shown in Table III.

**Table III Why You Took Mobile Phone**

S.No	Reason for taking Mobil Phone	Percentage
1	To use in case of emergency or personal safety	28
2	To keep in touch with friends and other social contacts	42
3	To keep in touch with parents	24
4	For information access (phone numbers, internet, email, sports etc)	6

Most of the respondents are old users of mobile phone as 87 percents of the respondents have the mobile phone for more than one year. Due to increase in the call rates, most of the users of the mobile phones prefer to use SMS service of the mobile service providers. Millions of SMS are exchanged daily in the country. But excessive use of SMS result in wastage of time for the students. The results show that only 2% of the respondent students never used the SMS service. Majority of the students used text message service multiple times a day. However, 35 % of the students used this service once a day or 1-5 times a week as explained in Table IV.

**Table IV How often do you use text messaging or SMS service**

S.No	Use Text Message	Percentage
1	Never	2
2	1 to 5 times a week	15
3	Once a day	19
4	Multiple times a day.	64

The students face shortage of time on many occasions. When they were questioned about the daily duration of the mobile phone, 32 percent of the students responded that they use it for less than one hour while 68% of the students use mobile phone for more than one hour. Out of the total respondents, 94 % keep the phone on vibration or mute during the class and 62% during the work. The use of mobile phone is prohibited during driving in almost all countries of the world for life safety. Among the respondent students, 47% students keep mobile phone on vibration or mute while driving and 64 % students did so while sleeping. It was further revealed by the students that 91 % of the respondent students keep their mobile phones on mute or vibration during pray.

**Table V Your Mobile is on Mute or Vibration**

Your Mobile is on mute or vibration in	Yes	No
While in class	94	6
While at work	62	38
While driving	47	53
While sleeping	64	36
During Nimaz	91	9

The respondents were also asked about the option of switching off their mobile phones. The results show that 67% of the students don't keep their mobile phones off during the class while only 14% revealed that they keep it switched off during work. The results further show that 91% of the respondents don't keep their mobiles switched off while driving. The responses of the respondents regarding switching off their mobiles are displayed in Table VI.

**Table VI When is your Mobile turn off**

When is your Mobile turn off	Yes (%)	No (%)
While in class	33	67
While at work	14	86
While driving	09	91
While sleeping	25	75

The study shows that most of the respondent students had one mobile phone, 26% had two and 8% had more than two mobile phones. In order to know the views of the students regarding provided statements, the respondents were asked to reveal their choice out of the given choices. The choices were Strongly Disagree, Disagree, Neutral, Agree, and Strongly Agree. The responses of the students on the likert scale are shown in Table VII.

When the students were asked to express the views regarding the statement, "The student sends missed calls to class fellows to disturb during attending classes", 54 percent of the respondents disagreed or strongly disagreed the statement. Only 26 % of the respondents agreed the statement. This means that the students mostly prefer not to disturb class fellows during the class hours. The Odds Ratio is 3.3 which favours the result.

**Table VII Choose any one of the given choices**

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Odds Ratio
The student sends missed calls to class fellows to disturb during attending classes.	40	14	20	12	14	3.3
The student does not feel hesitation in sending interesting/funny SMSs to his/her teacher	21	26	16	27	10	2.8
The student feels proud of having costly Mobile Phone	4	5	25	26	40	0.53
The student uses Mobile Phone in the Examination Hall as a source of unfair means.	11	10	19	43	17	2.78
The parents of female students feel easy due to Mobile Phone because their daughters can contact them easily	7	16	15	45	17	1.83
Students use dictionary /thesaurus / calculate of Mobile.	9	5	10	45	31	2.61
The Mobile Phone is the wastage of time for Students	12	17	19	31	21	1.07
The students' academic performance has been increased due to this technology.	12	17	25	27	19	1.01
The Mobile Phone has helped to improve the level of the quality of education	12	27	19	30	12	1.11

\* and \*\* shows 1% and 5% level of significance

Some of the students have close relations with their teachers and they make use of the mobile phone to contact their teachers. They also exchange valuable and informative SMS. When the students were asked about the statement, “The student does not feel hesitation in sending interesting/funny SMSs to his/her teacher”. Out of the sampled respondents, 46% disagreed the statement and 37% agreed the statement. Similarly, 16% remained undecided. This means that students wish to keep the distance with the teacher and want to follow the values and feel hesitation in sending funny/interesting SMSs to their teachers in the university. The Odds Ratio is 2.8, which provides a support to the results derived through the likert scale.

Almost, 66% of the respondents agreed the statement that students feel proud of having costly mobile phone. Only 9% of the respondents disagree or strongly disagree the statement. Hence, it can be concluded from the analysis of the statement that the students feel proud of having costly mobile phones.

Due to the law and order problem and cultural values, the parents remain worried about their daughters until they reach home after attending classes at the university. Mobile Phone is one of important source of contact between the parents and female students. The students were asked to poll their view regarding the statement, “The parents of female students feel easy due to Mobile Phone because their daughters can contact them easily”, and 62 out of the 100 sampled students agreed the statement. Only 23 respondents disagreed or strongly disagreed the statement. This means that majority of the university students agree the fact that mobile phone is an easy source of contact between the parents and female students. The Odds Ratio is 1.83 which supports the results.

The latest mobile phones have a large number of functions which may be helpful in the examination. The students were also questioned in this regard. The survey results show that about 60 percent of the respondent



students polled their opinion in favour of the statement that it is used as a source of unfair means in the examination hall. This means that Mobile Phones have negative effects as well on the university students. The Odds Ratio is 2.78 which indicates that the odds are in favour of the agree option. Moreover, latest brand mobile phones have the facility of dictionary, internet and scientific calculator which are very useful for the students. The results showed that most of the respondents (76/100) were of the view that the university students make use of this facility. The value of the Odds Ratio is very high (2.61) which strongly support the result the majority of the students agree that the students make of these facilities of mobile phones.

Though complicated yet with many entertainment functions, mobile phones is an important source of recreation for the students. If the time allocation for entertainment is increased then it becomes wastage of time for the students. The results show that 52% university students think mobile phone as source of wastage of time for the university students. The OR is 1.07 which provides some support to the claim. When the respondents were asked whether the academic performance of students improved with this technology, 46% responded in 'yes', 25% remained neutral and 29% opposed the statement. A slight support to this claim is given by the OR ratio with value 1.01. In order to see the effects of mobile phones on quality of education the students were asked to poll their opinion regarding the statement, "The Mobile Phone has helped to improve the level of the quality of education". The results showed that 42% of the respondents were of the view that use of mobile phones has improved the quality of education while 39% opposed this view. The Odds Ratio also supported the result.

#### **4. Conclusion**

It can be concluded on the basis of the results that majority of the university students keep mobile phones for social contacts. A large proportion of the university students prefer to send text messages multiple times a day. Many other students have extensive use of mobile phones and they use mobile for more than one hour per day. About 94% of the students keep it switched off during work while during prayer time, 91% did so. The students do not disturb their fellows during the class time through mobile phone. They hesitate in sending funny or interesting SMSs to their teachers. They feel proud of having costly phones. The parents feel easy to contact their daughters through mobile phones. It is used for dictionary, internet and calculator. It has not only helped in improvement of academic performance of the students but also improved the quality of education. However, majority of the students were of the view that the university students use mobile phones for unfair means in the examination halls. Similarly, it is also considered as wastage of time by some of the students.

It is recommended on the basis of the study that the university students should try make positive use of mobile phone with less emphasis on chatting and unproductive text message to save their precious time which may be used, otherwise for academic purpose accordingly.

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