

Original Article

MOBILE PHONE USAGE AMONG FEMALE COLLEGE STUDENTS

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Objective: To assess the prevalence and patterns of mobile phone use among female college students.

Material & Methods: The colleges were selected by convenient sampling and grades were selected randomly. The study population was 332 female students. The data was collected using questionnaire. The research was carried out by the doctors of community medicine department of Fatima Jinnah Medical College Lahore.

Results: Three colleges having total of 332 female students were surveyed for this research purpose. A significant proportion of this study group (85.5%) was found to be using mobile phones. Monthly mobile phone expenditure of 31.3% students was 100-200 rupees. 38% students were sending less than 20 messages per day. Over 39.8% students used their mobiles for less than an hour per day. So far as features of the mobile phone and their use were concerned, text messaging was the most frequently used feature (63.6%). 10.2% of the students were in the habit of using mobile phones during their classes whereas only 13.9% students contacted their parents through mobile more than once per day.

Conclusion: The above research depicted extensive use of mobile phone among female college students. Majority of the students were not using mobile phone during the class. The students used mobile to chat with their friends through messaging and their expenditure and time spent on phone was reasonable. Few of the girls were using mobile to contact their parents.

Keywords: Mobile, Phone usage, College students

Introduction

There has been a significant increase in the use of mobile phone during the last decade. Growing benefits of mobile phone are undeniable. Different studies have highlighted the advantages of mobile phone use such as young people use it to keep in touch with friends and parents (Chakraborty, 2006), to receive emergency information over a cell phone (Kay H, Braguglia, Hampton University). There is a sense of security and safety among the mobile phone users as they can contact in case of emergency (Taylor and Harper 2001).

Metrics, an organization that conducted a survey on mobile phone usage reported the high involvement of the age group 13-24 years in using mobile phone. As time is passing by many problems due to use of mobile phone are coming to surface among teenagers. Students report that cell phones distract them during study time outside the class and they believe that cell phones do not assist them in learning. Bad or upsetting news received over a cell phone affects the ability to concentrate (Kay H, Braguglia, Hampton University). Addiction towards mobile phone would cause students to experience symptoms like anxiety, depression and lack of sleep (Sheeren and Rozumah).

With cellular phones, teaching has turned into high tech. Students can text message the answers to tests, take pictures of tests or search internet for answers (Walson, 2006). All schools formally restrict mobile phone usage but it is common for students to bring mobile phones in college claiming that they use clock function only. Although students do not use voice communication during classes, they read and send messages during classes (Ito, 2006). Usage rate among the students is 1.5 to 5 hours/day and average bill per month is \$140 which is very expensive given the low student income (James and Drennan 2005).

A study by researchers in Australia shows that increased cell phone use is connected with cognitive function in young adults. Specifically the study found that "the accuracy of working memory was poorer, reaction time for a simple learning task shorter, associative learning response time shorter but less accurate working memory."

A group of Japanese students were surveyed about their cell phone use and their friendships. About half of them had cell phones and were more likely to have friends who also had cell phones. Researchers found that some of the students display symptoms of dependency; a no. of students felt that they could not

go without their cell phones and that their phones interfered with the schedule. More than half of the students without cell phones wanted one. The authors point out that it is possible that students feel left out socially if they do not have a cell phone.

Telecom sector in Pakistan is growing at a fast pace. Mobile subscribers are 95.4 million (58% of total population) as of July 2009, the highest penetration rate in South Asian Region.

Like other countries youth of Pakistan is among the high users of mobile. A study by Journal of Pakistan Psychiatry society has revealed that excessive mobile usage leads to behavioral changes, here is an extract; “recently, a dozen school and college girls were brought to author's clinic by parents, for mobile addiction. All these girls have failing grades, reported to be mostly absent from their classes spending most of the time chatting on mobile phones or sending text messages to their friends (mostly boys). They were irritable, rude and belligerent in their behavior and spent all night talking on phone. Antisocial behavior like stealing money, roaming around with boyfriends during school or college hours and precocious sexual activities were fairly common in these girls.”

The mobile phones, these days have the facilities of web, GPRS, SMS, MMS, MP3 players, games, radio etc.; they also offer low call rates and messaging packages. These accessories have played quite an important role in detracking the young generation from their actual responsibilities. Research work has been done on mobile usage in Australia, USA, India, UK and other countries. Not much emphasis has been paid to the adolescents of Pakistan.

The objective of this study was to see in what ways Pakistani female undergraduates use mobile phone. This study is an attempt to determine (1) the status of ownership among students; (2) time spent on using a cell phone, (3) features most frequently used, (4) frequency of contact with parents, (5) monthly expenditure on cell phone. Shedding light on such topics may bring in notice the excessive or inappropriate use of this technology to the college administration, instructors and parents.

Material & Methods

This cross sectional study was conducted in three female government colleges located in the areas of Garhi Shahu, Waris Road and Jail Road in the city of Lahore. These are one of the populous areas of the city where the female students usually come from middle class. The technique used for sampling was

convenient sampling and the size of the sample was 332 students. Permission was taken from the principals of the respective colleges to conduct the study. The relevant data was collected through a pre-designed questionnaire. Participants were read a permission note, telling them about the significance of the study and asking for their permission. The questionnaire was filled by the researcher herself while interacting with each participant face to face. The time spent in filling each questionnaire was approximately 10-15 minutes. Information was collected about whether they used mobile phones or not; what are their expenses, the approximate hours spent on calls, the mobile phone features mostly used by them, the frequency of using mobile phone during classes and for contacting their parents. Data was analyzed using Statistical Package for Social Sciences (SPSS), version 16.0. Descriptive analysis was done to summarize information by calculating the frequency distributions for categorical variables, whereas the means and standard deviations (S.D.) were computed for continuous variables. For categorical variables measure of association was Chi-Square test. For continuous variables, measure of association was student's t test.

Results

The study was conducted among female college students of three public sector colleges. The study population was 332 and most of the participants were from 3rd and 4th year. Majority of the students (83.1%) were between 18-20 years of age and had more or less four siblings (54.7%). Among the parents, fathers were more educated (95.1%) as compared to mothers (88.2%) and were doing private jobs (40.5%) while most of the mothers were housewives (90.6%). **(Table-1)** The maximum percentage of students (31.3%) were spending 100-200 rupees per month. 20.8% were using less than 100 rupees, 15.4% were spending between 200-300 rupees per month whereas 17.5% were having expenditure more than 300 rupees. **(Table-3)**

Table-1: Demographic features of female college students.

Feature	Frequency	Percentage
Age (Years)		
15- 17	20	6
18 - 20	276	83.1
21 - 23	30	5.9
Missing	16	4.8

Class		
1st Year	3	.9
2nd Year	2	.6
3rd Year	195	58.7
4th Year	127	38.3
College		
Govt. APWA College	138	41.6
Queen Mary College	121	36.4
Govt. Jinnah Degree College	73	22
Siblings		
None	5	1.5
=4	184	54.7
=8	134	40.3
12	9	2.7
No. of Rooms		
1 - 5	228	68.7
6 - 10	87	26.2
> 10	12	3.6

The results of the study indicate that among the 332 girls surveyed 85.5% own a mobile and only 8.1% do not. **(Table 2)** 38% of the students were using mobile phones to send less than 20 messages per day; whereas 13.9%

Table-2: Mobile ownership.

Mobile Phone Users	Frequency	Percentage
Yes	284	85.5
No	27	8.1
Missing	21	6.3
Total	332	100

Table-3: Monthly mobile phone expenditure.

Monthly Expenditure	Frequency	Percentage
<100	69	20.86
100-200	164	31.3
200-300	51	15.4
>300	58	17.5
Missing	50	15.1
Total	332	100

were sending more than 100 messages. Only 7.2% of the students were not availing this facility at all. **(Table 4)** The time spent by students using mobile phone varied from less than an hour to more than ten hours daily. Over 39.8% use their mobiles for less than an hour, 24.7% from one to three hours and 6% for ten or more hours daily. **(Table 5)**

Table-4: Text messages/day.

Text Messages/day	Frequency (%age)
Not at all	24 (7.2)
100-200	126 (38)
200-300	53 (16)
>300	31 (9.3)
Missing	46 (13.9)
Total	332 (100)

The mobile sets of more than 80% of the students had the facility of clock, calendar, SMS and games. About 50% were having camera, internet, email, calculator and mp3. 41.3% were also using headsets. **(Table 6-A)** 81.6% of the students used the facility of text messages and amongst these, 63.6% used it more frequently as a source of communication. 38.3% preferred making a voice call, of which 17.8% frequently used this feature. Besides using mobile phone for communication, students were using mobile phone for recreational purposes such as music

Table-5: Time spent (hrs.)/day.

Time spent (hrs.)/day	Frequency (%age)
<1	132 (39.8)
1 - 3	82 (24.7)
4 - 6	30 (9)
7 - 9	28 (8.4)
> or equal to 10	20 (6)
Missing	40 (12)
Total	332 (100)

(43.7%), games (28.6%) and camera (29.2%). Only few students were availing the facility of internet (2.4%) and email (3.3%). **(Table 6-B)** 10.2% of the students were daily users of mobile phone during their classes and 5.4% used it in every class. 63.6% of the students abstained from using mobile phone during lectures. **(Table 7)**

Contact with parents more than once a day was reported by 13.9% of the students. 11.1% were in

Table-6a: Mobile phone features (%age).

Features Present	Freq.(%age)	Features Present	Freq.(%age)
Clock	285 (85.8)	Internet	171 (51.5)
Calendar	287 (86.4)	Mp3/FM	227 (68.4)
SMS	285 (85.8)	Games	267 (80.4)
Calculator	219 (66)	Camera	160 (48.2)
Email	176 (53)	Headset	137 (41.3)

Table-6b: Mobile phone feature use (%age).

Feature	Frequency	Percentage
Voice call	127	(38.3)
SMS	271	(81.6)
Music	145	(43.7)
Games	95	(28.6)
Internet	8	(2.4)
Camera	97	(29.2)
Email	11	(3.3)
Others	7	(2.1)

Table-7: Mobile phone use during class.

Use during class	Frequency(%age)
Not at all	210 (63.3)
Every class	18 (5.4)
Daily	34 (10.2)
Weekly	19 (5.7)
Monthly	6 (1.8)

daily contact with their parents. 57.8% did not use mobile phone for contacting their parents at all. (Table 8)

Discussion

Our study reinforces the belief of previous studies that college students are tremendous users of mobile phone and majority of them (85.5%) own a mobile. Most probable reasons for acquiring a cell phone are personal safety, parental contact, social interaction, time management and they might feel left out socially without it as trendy mobiles have become a fashion and symbol of status. Majority of the students were found to use their mobile quite reasonably in terms of monthly expenditure and time spent on mobile phone. This finding is

consistent with other studies (Sheeren and Rozumah). But 33% of the students were spending around 300 rupees per month although their parents did not earn much and they had more or less 4 siblings who might be using the mobile too thereby adding a significant amount to the household expenditure. In many colleges the usage of mobile phones in classrooms is banned in order to prevent the distraction of students. In our study very few students were using the mobile phone during every class (5.4%) and a huge number did not use mobile phone at all (63.6%). On the contrary in a study by Kay H, Braguglia 53.5% of students were using mobile phones during every class in Hampton University. The feature most commonly used for communication among Pakistani students is text messaging (63.6%) whereas in study by Kay H students used voice call (66.2%) to communicate with their family and friends. This may be because different SMS packages for students are launched from time to time making this feature cheaper as compared to voice calls in our country.

Our study has highlighted that students although having highly sophisticated technology like internet or email available on their mobile phones did not use it for browsing and educational purposes. It also conforms to the study of Kay H. Braguglia where internet was used by 3.6% of the students and email by 1%. It is also inferred from the above study that most of the mobile phone owners used it for chatting with friends rather than using it for maintaining contact with their parents which is most of the time the reason for mobile provision. As far as the validity of the study is concerned, it has certain limitations. The colleges, in which the study was carried out, are not the true representatives of whole of the student's community. The results are very specific and can be generalized only on the population with same characteristics. Study included only the institutions with female students so the results of the study cannot be applied on institutions

Table-8: Frequency of mobile phone contact with parents.

Contact with parents	Frequency(%age)
Not at all	192 (57.8)
> 1/day	46 (13.9)
Once per day	37 (11.1)
Weekly	15 (4.5)
Monthly	2 (0.6)

with co-education and male students whose trends of mobile phone usage could be different.

Conclusion

The above research depicted extensive use of mobile phone among female college students. Majority of the students were not using mobile phone during the class. The students used mobile to chat with their

friends through messaging and their expenditure and time spent on phone was reasonable. Few of the girls were using mobile to contact their parents.

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