

# A study on use of cellular phone

MANJU MEHTA AND KIRAN SINGH

Accepted : September, 2008

## ABSTRACT

Cellular phones have transformed the telecommunications industry. These devices make the life easy and comfortable, for this reason, the growth of cellular telephone uses crosses all ages and gender boundaries. The study is focused on the general use pattern of cell phones and awareness among respondents. The study was conducted in 100 respondents of HAU campus, comprising of 60 students and 40 staff members. About three fourth of the student respondents (70 per cent) used cellular phone for personal need and 43 per cent of students use cell phone because parents want to be in their contact at any time. Three fourth of staff used it for personal need fulfillment. Cellular phone was more frequently used by staff respondents, as compared to students. Main use of cellular phone for both types of respondents was mobile talk and SMS. Regular charging of cellular phone was very hectic and felt as a big problem by both the type of respondents, as over charging can disturb instruments functioning and also time consuming. Headache and irritation and vibrations of cellular phone was the big problems among students being 18%, 30% and 45%, respectively, where as in staff respondents the percentage was 25%, 10% and 15%, respectively.

See end of the article for authors' affiliations

Correspondence to:

**MANJUMEHTA**

Department of Family Resource Management, College of Home Science, Chaudhary Charan Singh Haryana Agricultural University, HISAR (HARYANA) INDIA

**Key words :** Cellular phone, Radio frequency radiation, Mobile talks, SMS, Mobile games, Network.

Since the introduction of cellular telephones in 1983, there has been dramatic change in the cellular industry, with a growth rate of about 40 per cent per year. Changes in the technology, from heavy, cumbersome and expensive cellular phones, to inexpensive, miniature hand held units, smaller than a pack of cigarettes, have had a significant impact on when, where and how one conducts the affairs, both business and personal. Cellular phones have become integral parts of our daily life. They are used to schedule appointments, broker deals, calls for assistance and maintain contact with loved ones. According to a new report losing a mobile phone would be similar to bereavement for almost half of young people, they could not live without their mobile phones. Because mobile cellular phones are two-way radios, they produce radio frequency (RF) radiation and they expose people near them to RF radiation. A recent study concluded tha cellular phones might affect the health of persons who use them.

Keeping in view the above facts, the present study was carried out to find out the reasons for using cellular phones and the awareness regarding cellular phone among respondents.

## METHODOLOGY

The present study was carried out in the campus of CCS Haryana Agricultural University, Hisar Samples comprised of 100 respondents out of which sixty students and forty staff members were selected purposively, who were cell phone users. The data were collected personally by means of a pre-tested interview schedule. Data were analyzed accordingly.

## RESULTS AND DISCUSSION

### *Reasons for the use of cell-phones:*

Respondents used cell phone due to different reasons. Table 1 depicts the reasons for the purchase of cell phone.

From the Table 1 it could be concluded that approximately three fourth *i.e.* 72 per cent of respondents used it for personal need out of which 70 per cent were students who purchased mobile as their parents want to know about them any time whereas one fourth of the staff members kept it to be in touch with the family members every time and 13.3 per cent of students purchased the cell phone due to the pressure

**Table 1 : Reasons for using cellular phone**

Sr. No.	Reasons	(n = 100)		
		Students (n = 60)	Staff (n = 40)	Total
1.	Needed by yourself	42 (70.0)	30 (75.0)	72 (72.0)
2.	Parents/family members want to know where about you	26 (43.3)	10 (25.0)	36 (36.0)
3.	Pressurized by friends	8 (13.3)	- (00.0)	8 (08.0)
4.	Status symbol	4 (06.6)	- (00.0)	4 (04.0)

Multiple choices

Figure in parentheses indicate percentage

of peer group and few (6%) purchased it as the status symbol.

### **Frequency of using cellular phones:**

The frequency of using mobile phone by respondents has been presented in Table 2. It is clear that majority of the respondents (80 per cent of students and 90 per cent of staff members) used it frequently to talk their family members and friends and staff were using the cell phone frequently than the students due to their higher salary as compared to the student's pocket money. Whereas, few of them, (20 per cent students and 10% faculty members) used cell phone occasionally. Discussion with the respondents revealed that most of the staff members possessed the post-paid cellular phones.

<b>Table 2 : Frequency of using mobile phones (n = 100)</b>				
Sr. No.	Frequency	Students (n=60)	Staff (n=40)	Total (N=100)
1.	Frequently	48 (80.0)	36 (90.0)	84 (84.0)
2.	Occasionally	12 (20.0)	4 (10.0)	16 (16.0)

Figure in parentheses indicate percentage.

### **Use of cellular phone:**

Different purposes are served by the cellular phone; it depends on the knowledge and requirement of the respondents, that how to use it and Table 3 depicts the mode of use of cellular phones.

The data indicate that majority (90 per cent and 80 per cent) students used mobile for small mobile talks and for SMS, respectively, whereas cent per cent staff

members used it for mobile talks and majority (85 per cent) used cell phone for SMS. 30 per cent students and 10 per cent of staff members used it as digital diary; students also used it for internet surfing, mobile games, calculations, 10.0%, 6.6%, and 33.3%, respectively. Both staff and student respondents also used it for news update, reminders, picture clippings, and latest music with 10.0% and 20.0%, respectively.

### **Problems with the use of cellular phone:**

Different problems caused with the use of cellular phones are presented in Table 4. With making life comfortable, there were some problems felt by the respondents with the use of cellular phones. Most of the respondents, 93.3 per cent students and 75 per cent staff felt the regular charging of cellular phone is a big problem. Whereas problem related to network was rated as second in importance and the other problems were sometimes sound was not clear and the problem of repair.

### **Health hazards caused by cell phone radiation:**

Cellular phone is a two way radio based on RF radiation. Different health problems as perceived by the users by using cellular phone are given in Table 5.

From the Table 5 it is concluded that half of the respondents believed that vibrations of cellular phone affect which the heart whereas majority 90 per cent of staff believed that its noisy volume affects the listening power, further one fourth of staff respondents felt that it is a cause of headache, one third of students respondents felt that the ring tone is irritating and 20 per cent of staff and 18 per cent of student respondents

<b>Table 3 : Mode of use of cellular phones (n = 100)</b>					
Sr. No.	Mode of use	Student ( n=60)	Staff ( n = 40)	Total	60+40= 100)
1.	Mobile talks	54 (90.0)	40 (100.0)	94	(94.0)
2.	SMS	48 (80.0)	34 (85.0)	82	(82.0)
3.	Internet surfing	6 (10.0)	- (0.0)	6	(6.0)
4.	Digital diary	18 (30.0)	4 (10.0)	22	(22.0)
5.	Mobile games	4 (6.6)	- (0.0)	4	(4.0)
6.	Calculations	20 (33.3)	- (0.0)	20	(20.0)
7.	Any other	12 (20.0)	4 (10.0)	16	(16.0)

Multiple choice

Figure in parentheses indicate percentage

<b>Table 4 : Problems with the use of cellular phones (n = 100)</b>					
Sr. No.	Problems	Students ( n=60)	Staff (n=40)	Total	(60+40=100)
1.	Regular charging	56 (93.3)	30 (75.0)	86	(86.0)
2.	Repair	4 ( 6.6)	- (0.0)	4	(14.0)
3.	Sound not clear	10 (16.6)	4 (10.0)	14	(14.0)
4.	Networking problems	18 (30.0)	10 (25.0)	28	(28.0)

Multiple choice

Figure in parentheses indicate percentage

Table 5 : Health hazards caused by cell phone radiation				(N=100)
Sr. No.	Health effects	Students (n = 60)	Staff (n=40)	Total (60+40=100)
1.	Head acne	12 (20.0)	10 (25.0)	22 (22.0)
2.	Irritation	20 (33.3)	4 (10.0)	24 (24.0)
3.	Cancer	12 (20.0)	8 (20.0)	20 (20.0)
4.	Poor listening	18 (30.0)	36 (90.0)	54 (54.0)
5.	Vibrations affect the heart	30(50.0)	6(15.0)	36(36.0)

Multiple choice

Figure in parentheses indicate percentage

believed that its radiations can cause cancer, but there is no real scientific basis for this claim.

### Conclusion:

As the cellular phone is now becoming a part of daily life, which makes the life comfortable, today the cellular users are very much aware of facilities provided by cellular phones. Most of the student respondents referred to use pre-paid cellular services and post-paid was preferred by the staff respondents. Cellular phone was more frequently used by staff respondents as compared to students. Students used cell phone mainly for sending SMS and short mobile talks. Regular charging was the problem felt most often by the respondents. Students felt ring tone of cell phone irritating, whereas it was considered as the cause of headache by staff members. But the respondents were satisfied with their cell phone services, because it was fulfilling their needs and desires. Cell phone became the part of the life and without it, their daily work and contact were affected.

---

Authors' affiliations:

**KIRAN SINGH**, Department of Family Resource Management, College of Home Science, Chaudhary Charan Singh Haryana Agricultural University, HISAR (HARYANA) INDIA

---

### REFERENCES

- Anonymous** (2003). Age of cyber. *Hindustan Times*, June 30, 2003.
- Bagai, D.** (2003). Brain storming through cell phone. *The Tribune*, July, 3.
- <http://www. An investigation of the safety implications of wireless communications in vehicles. htm>.
- <http://www. Cellular phone antennas 'Mobile phone base station' and human health. htm>.
- <http://www. Mobile telephones and health effects. htm>.

\*\*\*\*\*  
\*\*\*\*\*