Chapter 7
MOBILE PHONE TECHNOLOGY IN EDUCATION

The chapter discusses the use patterns of mobile phone in education which are concerned with access to, uses of, attitude towards and impact of mobile phone. Mobile phone use has pervaded into every aspect of communities and it has a special presence in the lives of young and college, university going students. The chapter concludes with the major findings of the use patterns of mobile phone in education among the rural and urban as well as male and female Muslim students studying in higher educational institutions of Silchar town.

I
ACCESS PATTERNS

The section introduces and discusses access patterns of satellite television among the students which include types of mobile connection, mobile service providers, access to mobile features/ facilities, mode of acquiring mobile phone among the students.

Types of Mobile Connection

The mobile connection is able to communicate using a telephone or computer network. For example, the computers are connected remotely by telephone line. A prepaid mobile phone, commonly referred to as pay-as-you-go, pay-as-you-talk, pay and go, prepaid wireless or prepay, is a mobile phone for which credit is purchased in advance of service use. The purchased credit is used to pay for mobile phone services at the point the service is accessed or consumed. If there is no available credit then access to the requested service is denied by the mobile phone network. Users are able to top up their credit at any time using a variety of payment mechanisms. The alternative billing method, commonly referred to as a mobile phone contract, is the post-paid mobile phone, where a user enters into a long-term, generally lasting 12, 18 or 24 months, or short term, commonly referred to as a rolling contract or a 30-day contract, billing arrangement with a mobile network operator or carriage service provider (CSP). Among the respondents, there are two types of connections; viz., pre- and post-paid. Of the students, 1 does not have mobile phone and the rest (494) access mobile phone. These are shown in the following table.

Table 7.1

Types of Mobile Connection among the Students by Gender and Residence

(Percentage in Parentheses)

Types of Mobile Connection	No. of Students (%)						Grand Total (%)		
	Male (%)			Female (%)					
	Rural N=152	Urban N=93	Total N=245	Rural N=144	Urban N=105	Total N=249	Rural N=296	Urban N=198	Total N=494
Pre-paid	145 (95.39)	87 (93.55)	232 (94.69)	136 (94.44)	96 (91.43)	232 (93.17)	281 (94.93)	183 (92.42)	464 (93.93)
Post-paid	9 (5.92)	12 (12.9)	21 (8.57)	10 (6.94)	10 (9.52)	20 (8.03)	19 (6.42)	22 (11.11)	41 (8.3)

Source: Field Survey Conducted during 14 February 2011 – 29 February 2012

The table shows that most of the students (93.93%) subscribe pre-paid mobile connection and the rest have post-paid mobile connection. The patterns are by and large observed across genders and rural-urban residence categories of the students, except that the urban-students are having the post-paid connections by more about 50% as compared to their rural counterparts. Thus, most of the rural and urban students prefer to use pre-paid connection in which they paid before use of the service and also pay whenever the credit over but this is not so with the post-paid mobile connection in which they paid after use of the service after ending of a month.

Mobile Service Providers

A mobile service provider (MSP) is a company that offers transmission services to users of wireless devices (Smartphone and tablet PCs) through radio frequency (RF) signals rather than through end-to-end wire communication. Their services differ in terms of the wireless service plans, data speeds (3G vs. 4G), reliability and the devices they support. A mobile service provider is sometimes called a wireless service provider (WSP), wireless carrier or mobile carrier. Among the respondents, there are two types of mobile service providers; viz., public sector and private sector. These are shown in the following table.

Table 7.2

Mobile Service Providers among the Students by Gender and Residence

(Percentage in Parentheses)

Mobile Service Provider	No. of Students (%)						Grand Total (%)		
	Male (%)			Female (%)					
	Rural N=152	Urban N=93	Total N=245	Rural N=144	Urban N=105	Total N=249	Rural N=296	Urban N=198	Total N=494
BSNL	42 (27.63)	29 (31.18)	71 (28.98)	47 (32.64)	25 (23.81)	72 (28.92)	89 (30.07)	54 (27.27)	143 (28.95)
Airtel	39 (25.66)	18 (19.35)	57 (23.27)	38 (26.39)	29 (27.62)	67 (26.91)	77 (26.01)	47 (23.74)	124 (25.1)
Aircel	24 (15.79)	7 (7.53)	31 (12.65)	23 (15.97)	13 (12.38)	36 (14.46)	47 (15.88)	20 (10.1)	67 (13.56)
Reliance	22 (14.47)	11 (11.83)	33 (13.47)	20 (13.89)	9 (8.57)	29 (11.65)	42 (14.19)	20 (10.1)	62 (12.55)
Vodafone	20 (13.16)	20 (21.51)	40 (16.33)	22 (15.28)	16 (15.24)	38 (15.26)	42 (14.19)	36 (18.18)	78 (15.79)
Idea	3 (1.97)	8 (8.6)	11 (4.49)	2 (1.39)	8 (7.62)	10 (4.02)	5 (1.69)	16 (8.08)	21 (4.25)
Tata Indicom	16 (10.53)	16 (17.2)	32 (13.06)	7 (4.86)	14 (13.33)	21 (8.43)	23 (7.77)	30 (15.15)	53 (10.73)

Source: Field Survey Conducted during 14 February 2011 – 29 February 2012

The table reveals that over one fourth of the students (28.95%) are users of BSNL (public sector provider), followed by Airtel (25.1%), Vodafone (15.79%) and Aircel (13.56%), subsequently followed by Reliance (12.55%), Tata Indicom (10.73%) and Idea (4.25%) – all private sector providers. The pattern is by and large found across the gender and rural-urban residence categories. Thus, BSNL is the only public sector mobile service provider and one of the largest and leading public sector units in Silchar town for which it is used by quite a number of students.

Access to Mobile Features/ Facilities

The features of mobile phone are the set of capabilities, services and applications that they offer to their users. Low-end mobile phones are often referred to as feature phones, and offer basic telephony. Handsets with more advanced computing ability through the use of native software applications became known as Smartphone. The ARM architectural feature is the primary hardware environment for most mobile device operating systems such as iOS, Android, Windows Phone, Blackberry OS/ Blackberry 10, Firefox OS, Tizen and Ubuntu Touch. Twelve categories of mobile features are found from the study; namely, telephone, SMS, MMS, Dual SIM, audio player, video player, digital camera, FM radio, WAP, colouring set, black & white set and 3-G service. Thus the following table shows access to mobile features among the students.

Table 7.3

Access to Mobile Features/ Facilities among the Students by Gender and Residence

(Percentage in Parentheses)

Access to Mobile Features/ Facilities	No. of Students (%)						Grand Total (%)		
	Male (%)			Female (%)					
	Rural N=152	Urban N=93	Total N=245	Rural N=144	Urban N=105	Total N=249	Rural N=296	Urban N=198	Total N=494
Telephone	152 (100)	93 (100)	245 (100)	144 (100)	105 (100)	249 (100)	296 (100)	198 (100)	494 (100)
SMS	152 (100)	93 (100)	245 (100)	144 (100)	105 (100)	249 (100)	296 (100)	198 (100)	494 (100)
MMS	41 (26.97)	74 (79.57)	115 (46.94)	50 (34.72)	85 (80.95)	135 (54.22)	91 (30.74)	159 (80.3)	250 (50.61)
Dual SIM	9 (5.92)	16 (17.2)	25 (10.2)	10 (6.94)	6 (5.71)	16 (6.43)	19 (6.42)	22 (11.11)	41 (8.3)
Audio player	134 (88.16)	91 (97.85)	225 (91.84)	112 (77.78)	95 (90.48)	207 (83.13)	246 (83.11)	186 (93.94)	432 (87.45)
Video player	134 (88.16)	91 (97.85)	225 (91.84)	112 (77.78)	95 (90.48)	207 (83.13)	246 (83.11)	186 (93.94)	432 (87.45)
Digital camera	134 (88.16)	91 (97.85)	225 (91.84)	112 (77.78)	95 (90.48)	207 (83.13)	246 (83.11)	186 (93.94)	432 (87.45)
FM radio	37 (24.34)	59 (63.44)	96 (39.18)	39 (27.08)	40 (38.1)	79 (31.73)	76 (25.68)	99 (50)	175 (35.43)
WAP	134 (88.16)	91 (97.85)	225 (91.84)	112 (77.78)	95 (90.48)	207 (83.13)	246 (83.11)	186 (93.94)	432 (87.45)
Colouring set	149 (98.03)	93 (100)	242 (98.78)	135 (93.75)	104 (99.05)	239 (95.98)	284 (95.95)	197 (99.49)	481 (97.37)
Black & white set	3 (1.97)	--	3 (1.22)	9 (6.25)	1 (0.95)	10 (4.02)	12 (4.05)	1 (0.51)	13 (2.63)
3-G service	16 (10.53)	14 (15.05)	30 (12.24)	12 (8.33)	9 (8.57)	21 (8.43)	28 (9.46)	23 (11.62)	51 (10.32)

Source: Field Survey Conducted during 14 February 2011 – 29 February 2012

The table reveals that all the students access to telephone and short messaging service (SMS), irrespective of gender and rural-urban residence categories. Most of them (97.37%) access to colouring set, subsequently followed by audio player, digital camera, video player and WAP (87.45%), MMS (50.61%), FM radio (35.43%) and 3-G service (10.32%). But the urban male students do not have black & white set. Making calls and sending SMS are main functions of mobile phone as well as purposes of using mobile phone among the students. Other features of mobile phone are lucrative and converged into it to provide customers or

students in one device. Thus, the students own lucrative handsets to get all the features of mobile phone together and their family income permit them to purchase trendy mobile sets.

Mode of Acquiring Mobile Phone

The mode of acquiring mobile phone indicates how the students got mobile phones. It is grouped into three categories, such as purchased by oneself, purchased by family members (father, mother, brother, sister and uncle) and got it as a gift. Thus the table shows pattern of the mode of acquiring mobile phone among the students.

Table 7.4

Mode of Acquiring Mobile Phone among the Students by Gender and Residence

(Percentage in Parentheses)

Mode of Acquiring Mobile Phone	No. of Students (%)						Grand Total (%)		
	Male (%)			Female (%)					
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
Purchased by oneself	22 (14.47)	8 (8.6)	30 (12.24)	14 (9.72)	5 (4.76)	19 (7.63)	36 (12.16)	13 (6.57)	49 (9.92)
Purchased by Family members (father, mother, brother, sister and uncle)	124 (81.58)	85 (91.4)	209 (85.31)	126 (87.5)	97 (92.38)	223 (89.56)	250 (84.46)	182 (91.92)	432 (87.45)
Got it as a gift	6 (3.95)	--	6 (2.45)	4 (2.78)	3 (2.86)	7 (2.81)	10 (3.38)	3 (1.51)	13 (2.63)
Total (%)	152 (100)	93 (100)	245 (100)	144 (100)	105 (100)	249 (100)	296 (100)	198 (100)	494 (100)

Source: Field Survey Conducted during 14 February 2011 – 29 February 2012

The table depicts that majority of the students' (87.45%) mobile phones were purchased by family members; namely, father, mother, brother, sister and uncle and the least purchased by self and got as gifts. Their categories of genders and residences also reveals similar finding except the urban male students who did not got mobile phone as gift because it was purchased by family members. As most of the students are undergraduates and post-graduates and dependent on families, therefore, they acquire mobile phones through family members, particularly father.

In sum, the students subscribe pre-paid mobile connection, use BSNL, private sector service provider, access to telephone and short messaging service (SMS) most, purchased mobile phones through family members.

II

USE PATTERNS

The section introduces and discusses use patterns of mobile phone among the students in education such as the number of incoming calls on mobile phone, outgoing calls from mobile phone, incoming SMS/MMS & outgoing SMS/MMS in a day, people whom the students call, people who call the students, frequency of calling and receiving calls in a day, purpose of calling, average mobile phone bill in a month, persons making payment of mobile bill, mobile phone users in families of students, study-related incoming calls, study-related outgoing calls, study-related incoming SMS/MMS & study-related outgoing SMS/MMS in a

day, educational purposes of mobile phone and switch off & silence mode timings of mobile phone.

Number of Incoming Calls per Day

Call is an act of telephoning someone. The number of incoming calls on mobile phone in a day is categorised into four groups; namely, 1-5, 6-10, 11-15 and more than 15 incoming calls. Thus the following table shows their distribution among the students.

Table 7.5

Number of Incoming Calls on Mobile Phone in a Day among the Students by Gender and Residence

(Percentage in Parentheses)

Number of Incoming Calls in a Day	No. of Students (%)						Grand Total (%)		
	Male (%)			Female (%)					
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
1-5	14 (9.21)	6 (6.45)	20 (8.16)	22 (15.28)	13 (12.38)	35 (14.06)	36 (12.16)	19 (9.6)	55 (11.13)
6-10	95 (62.5)	31 (33.33)	126 (51.43)	75 (52.08)	60 (57.14)	135 (54.22)	170 (57.43)	91 (45.96)	261 (52.83)
11-15	30 (19.74)	43 (46.24)	73 (29.8)	41 (28.47)	29 (27.62)	70 (28.11)	71 (23.99)	72 (36.36)	143 (28.95)
> 15	13 (8.55)	13 (13.98)	26 (10.61)	6 (4.17)	3 (2.86)	9 (3.61)	19 (6.42)	16 (8.08)	35 (7.09)
Total (%)	152 (100)	93 (100)	245 (100)	144 (100)	105 (100)	249 (100)	296 (100)	198 (100)	494 (100)

Source: Field Survey Conducted during 14 February 2011 – 29 February 2012

The table reveals that over a half of the students (52.83%) receive six to ten incoming calls in a day, more than a quarter of them (28.95%) receive eleven to fifteen incoming calls per day, over one tenth of them (11.13%) receive one to five incoming calls daily while least of them receive more than fifteen calls per day. Thus, receiving six to ten incoming calls in a day is found as the major finding of the analysis across their genders and residences. The urban male students receive more incoming calls than female students because males mostly use mobile phone than females.

Outgoing Calls in a Day

The number of outgoing calls on mobile phone in a day is categorised into four groups; namely, 1-5, 6-10, 11-15 and more than 15 outgoing calls. Thus the following table shows their distribution among the students.

Table 7.6

Outgoing Calls from Mobile Phone in a Day among the Students by Gender and Residence

(Percentage in Parentheses)

Outgoing Calls in a Day	No. of Students (%)						Grand Total (%)		
	Male (%)			Female (%)					
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
1-5	28 (18.42)	7 (7.53)	35 (14.29)	29 (20.14)	12 (11.43)	41 (16.47)	57 (19.26)	19 (9.6)	76 (15.38)
6-10	89 (58.55)	29 (31.18)	118 (48.16)	82 (56.94)	66 (62.86)	148 (59.44)	171 (57.77)	95 (47.98)	266 (53.85)
11-15	22 (14.47)	44 (47.31)	66 (26.94)	28 (19.44)	22 (20.95)	50 (20.08)	50 (16.89)	66 (33.33)	116 (23.48)
> 15	13 (8.56)	13 (13.98)	26 (10.61)	5 (3.48)	5 (4.76)	10 (4.01)	18 (6.08)	18 (9.09)	36 (7.29)
Total (%)	152 (100)	93 (100)	245 (100)	144 (100)	105 (100)	249 (100)	296 (100)	198 (100)	494 (100)

Source: Field Survey Conducted during 14 February 2011 – 29 February 2012

The table reveals that over a half of the students (53.85%) generally make six to ten outgoing calls per day, followed by eleven to fifteen outgoing calls (23.48%). The rural students are found to make more outgoing calls ranging from 6-10 calls than their counterparts. The urban males make more outgoing calls ranging from 11-15 calls than the rural males who very often make 6-10 calls. But majority of both the rural and urban females are found to use not more than 10 calls per day. This is perhaps due to the better family income among the urban students which permit them to use more calls.

Incoming SMS/MMS in a Day

The Short Message Service (SMS) is a text messaging service component of phone, web or mobile communication systems using standardized communications protocols that allow the exchange of short text messages between fixed line or mobile phone devices. On the other hand, Multimedia Messaging Service (MMS) is a standard way to send messages that include multimedia content to and from mobile phones. It extends the core SMS (Short Message Service) capability that allowed exchange of text messages only up to 160 characters in length. The number of incoming SMS/MMS on mobile phone in a day is categorised into four groups; namely, 1-5, 6-10, 11-15 and more than 15 incoming SMS/MMS. Thus the following table shows the number of incoming SMS/MMS on mobile phone in a day among the students.

Table 7.7

Incoming SMS/MMS on Mobile Phone in a Day among the Students by Gender and Residence

(Percentage in Parentheses)

Incoming SMS/MMS in a Day	No. of Students (%)						Grand Total (%)		
	Male (%)			Female (%)					
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
1-5	41 (26.98)	6 (6.46)	47 (19.18)	24 (16.67)	11 (10.48)	35 (14.05)	65 (21.96)	17 (8.59)	82 (16.6)
6-10	75 (49.34)	31 (33.33)	106 (43.27)	73 (50.69)	61 (58.1)	134 (53.82)	148 (50)	92 (46.46)	240 (48.58)
11-15	18 (11.84)	38 (40.86)	56 (22.86)	40 (27.78)	27 (25.71)	67 (26.91)	58 (19.59)	65 (32.83)	123 (24.9)
> 15	18 (11.84)	18 (19.35)	36 (14.69)	7 (4.86)	6 (5.71)	13 (5.22)	25 (8.45)	24 (12.12)	49 (9.92)
Total (%)	152 (100)	93 (100)	245 (100)	144 (100)	105 (100)	249 (100)	296 (100)	198 (100)	494 (100)

Source: Field Survey Conducted during 14 February 2011 – 29 February 2012

The table reveals that nearabout a half of the students (48.58%) generally receive six to ten SMS/MMS per day, followed by eleven to fifteen SMS (24.9%), one to five SMS (16.6%) and more than fifteen SMS. The urban males receive more incoming SMS/MMS ranging from 11-15 and more than 15 SMS/MMS than the rural males who very often make 6-10 SMS. But majority of both the rural and urban females are found to receive 6-10 SMS per day. Thus, receiving six to ten SMS per day is found as the major finding of using SMS/MMS in general by students irrespective of their genders and residences due to their need. Hence, the urban male students get more SMS/MMS on their mobile in comparison to female students because even if the students are not talking on their cell phone, using cell phone they can constantly send and receive information.

Outgoing SMS/MMS in a Day

The outgoing SMS/MMS is generally used to send to friends, family members and others by the students. The number of outgoing SMS/MMS on mobile phone in a day is categorised into four groups; namely, 1-5, 6-10, 11-15 and more than 15 outgoing SMS/MMS. Thus the following table shows the number of outgoing SMS/MMS on mobile phone in a day among the students.

Table 7.8

Outgoing SMS/MMS from Mobile Phone in a Day among the Students by Gender and Residence

(Percentage in Parentheses)

Outgoing SMS/MMS in a Day	No. of Students (%)						Grand Total (%)		
	Male (%)			Female (%)					
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
1-5	27 (17.76)	7 (7.53)	34 (13.88)	24 (16.67)	11 (10.48)	35 (14.05)	51 (17.23)	18 (9.09)	69 (13.97)
6-10	84 (55.26)	25 (26.88)	109 (44.49)	82 (56.94)	65 (61.9)	147 (59.04)	166 (56.08)	90 (45.46)	256 (51.82)
11-15	25 (16.45)	40 (43.01)	65 (26.53)	29 (20.14)	24 (22.86)	53 (21.29)	54 (18.24)	64 (32.32)	118 (23.89)
> 15	16 (10.53)	21 (22.58)	37 (15.1)	9 (6.25)	5 (4.76)	14 (5.62)	25 (8.45)	26 (13.13)	51 (10.32)
Total (%)	152 (100)	93 (100)	245 (100)	144 (100)	105 (100)	249 (100)	296 (100)	198 (100)	494 (100)

Source: Field Survey Conducted during 14 February 2011 – 29 February 2012

The table shows that over a half of the students (51.82%) send six to ten SMS/MMS in a day, subsequently followed by eleven to fifteen SMS (23.89%), one to five SMS (13.97%) and more than fifteen SMS/MMS (10.32%). The rural students mostly send 6-10 SMS but urban students mostly send 11-15 SMS daily. There is also similar pattern across their genders. Thus, the students mostly send six to ten SMS/MMS daily because SMS packs are available in a cheaper rate for which they are able to send unlimited SMS/MMS. Thus, texting has also become a much easier way to stay in touch with their friends and families and receive quick updates about after-college plans.

People Whom the Students Call

There are six categories of people whom the students call; namely, teacher, friends, family members, virtual friends, relatives and neighbours. Thus the following table shows their distribution pattern.

Table 7.9
People Whom the Students Call by Gender and Residence
(Percentage in Parentheses)

People whom the Students Call	No. of Students (%)						Grand Total (%)		
	Male (%)			Female (%)					
	Rural N=152	Urban N=93	Total N=245	Rural N=144	Urban N=105	Total N=249	Rural N=296	Urban N=198	Total N=494
Teachers	140 (92.11)	73 (78.49)	213 (86.94)	129 (89.58)	68 (64.76)	197 (79.12)	269 (90.88)	141 (71.21)	410 (82.1)
Friends	152 (100)	93 (100)	245 (100)	144 (100)	105 (100)	249 (100)	296 (100)	198 (100)	494 (100)
Family members	147 (96.71)	88 (94.62)	235 (95.92)	139 (96.53)	104 (99.05)	243 (97.59)	286 (96.62)	192 (96.97)	478 (96.76)
Virtual friends	4 (2.63)	5 (5.38)	9 (3.67)	2 (1.39)	3 (2.86)	5 (2.01)	6 (2.03)	8 (4.04)	14 (2.83)
Relatives	89 (58.55)	66 (70.97)	155 (63.27)	48 (33.33)	63 (60)	111 (44.58)	137 (46.28)	129 (65.15)	266 (53.85)
Neighbours	11 (7.24)	17 (18.28)	28 (11.43)	5 (3.47)	12 (11.43)	17 (6.83)	16 (5.41)	29 (14.65)	45 (9.11)

Source: Field Survey Conducted during 14 February 2011 – 29 February 2012

The table depicts that all the students call friends irrespective of genders and rural-urban residences, subsequently followed by (96.76%) family members, teachers (82.1%) and relatives (53.85%). The similar finding is revealed from their gender and rural-urban distribution. Thus, the students call friends because they want to keep in touch with them and as they are from different parts of Barak Valley, their parents found it easier to keep in contact with their sons and daughters through mobile phone. They need suggestions from teachers outside classroom and contact them through phone calls.

People Who Call the Students

There are six categories of people who call the students; namely, teacher, friends, family members, virtual friends, relatives and neighbours. Thus the following table shows their distribution pattern among the students

Table 7.10
People Who Call the Students by Gender and Residence
(Percentage in Parentheses)

People Who Call the Students	No. of Students (%)						Grand Total (%)		
	Male (%)			Female (%)					
	Rural N=152	Urban N=93	Total N=245	Rural N=144	Urban N=105	Total N=249	Rural N=296	Urban N=198	Total N=494
Teachers	100 (65.79)	61 (65.59)	161 (65.71)	90 (62.5)	56 (53.33)	146 (58.63)	190 (64.19)	117 (59.09)	307 (62.15)
Friends	152 (100)	93 (100)	245 (100)	144 (100)	105 (100)	249 (100)	296 (100)	198 (100)	494 (100)
Family members	148 (97.37)	90 (96.77)	238 (97.14)	140 (97.22)	104 (99.05)	244 (97.99)	288 (97.3)	194 (97.98)	482 (97.57)
Virtual friends	10 (6.58)	9 (9.68)	19 (7.76)	4 (2.78)	5 (4.76)	9 (3.61)	14 (4.73)	14 (7.07)	28 (5.67)
Relatives	105 (69.08)	74 (79.57)	179 (73.06)	72 (50)	76 (72.38)	148 (59.44)	177 (59.8)	150 (75.76)	327 (66.19)
Neighbours	11 (7.24)	20 (21.51)	31 (12.65)	10 (6.94)	21 (20)	31 (12.45)	21 (7.09)	41 (20.71)	62 (12.55)

Source: Field Survey Conducted during 14 February 2011 – 29 February 2012

The table shows reveals that all of the students are called by friends irrespective of genders and rural-urban residences, subsequently followed by family members (97.57%), relatives (66.19%) and teachers (62.15%), neighbours (12.55%) and virtual friend. The gender distribution of both the rural and urban students also reveals similar findings. Thus, in case of both the rural and urban students, the people who mostly call the students are their friends, family members, teachers and relatives because they are closely related with the students in their study matters. Therefore, mobile phone has become irreplaceable tool to manage their lives and stay connected to the outside world, families and networks of friends online.

Frequency of Calling in a Day

The frequency of calling in a day is categorised into three groups; namely, very frequently (almost daily), frequently (3-4 calls) and less frequently (at least 1 call). The following table highlights how many phone calls made by the students on daily basis.

Table 7.11

Frequency of Calling in a Day among the Students by Gender and Residence

(Percentage in Parentheses)

Frequency of Calling in a Day	No. of Students (%)						Grand Total (%)		
	Male (%)			Female (%)					
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
Very frequently (almost daily)	113 (74.34)	58 (62.37)	171 (69.8)	110 (76.39)	49 (46.67)	159 (63.86)	223 (75.34)	107 (54.04)	330 (66.8)
Frequently (3-4 calls)	33 (21.71)	29 (31.18)	62 (25.31)	29 (20.14)	51 (48.57)	80 (32.13)	62 (20.95)	80 (40.4)	142 (28.74)
Less frequently (at least 1 call)	6 (3.95)	6 (6.45)	12 (4.89)	5 (3.47)	5 (4.76)	10 (4.01)	11 (3.71)	11 (5.56)	22 (4.46)
Total (%)	152 (100)	93 (100)	245 (100)	144 (100)	105 (100)	249 (100)	296 (100)	198 (100)	494 (100)

Source: Field Survey Conducted during 14 February 2011 – 29 February 2012

It depicts that over three fifths of the students (66.8%) make phone calls very frequently (almost daily), followed by frequently (3-4 calls) (28.74%) and less frequently (at least 1 call). The similar finding is observed across their genders and rural-urban categories. Thus, the overall students make phone calls very frequently in a day which is due to the genuine need of mobile phone for making contact with family members and friends.

Frequency of Receiving Calls in a Day

The frequency of receiving calls in a day is categorised into three groups; namely, very frequently (almost daily), frequently (3-4 calls) and less frequently (at least 1 call). The following table highlights how many phone calls received by the students on daily basis.

Table 7.12

Frequency of Receiving Calls in a Day among the Students by Gender and Residence

(Percentage in Parentheses)

Frequency of Receiving Calls in a Day	No. of Students (%)						Grand Total (%)		
	Male (%)			Female (%)					
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
Very frequently (almost daily)	116 (76.32)	59 (63.44)	175 (71.43)	112 (77.78)	49 (46.67)	161 (64.66)	228 (77.03)	108 (54.55)	336 (68.02)
Frequently (3-4 calls)	32 (21.05)	27 (29.03)	59 (24.08)	27 (18.75)	49 (46.67)	76 (30.52)	59 (19.93)	76 (38.38)	135 (27.33)
Less frequently (at least 1 call)	4 (2.63)	7 (7.53)	11 (4.49)	5 (3.47)	7 (6.66)	12 (4.82)	9 (3.04)	14 (7.07)	23 (4.65)
Total (%)	152 (100)	93 (100)	245 (100)	144 (100)	105 (100)	249 (100)	296 (100)	198 (100)	494 (100)

Source: Field Survey Conducted during 14 February 2011 – 29 February 2012

The table depicts that over three fifths of the students (68.12%) receive phone calls very frequently (almost daily) per day, subsequently followed by frequently (3-4 calls) (28.14%), less frequently (at least 1 call). Thus, irrespective of genders and residences the students receive calls very frequently or almost daily because cell phone calling and texting has become a preferred channel of basic communication between teens and their friends. It has become indispensable tool in their communication pattern.

Purpose of Calling

The purpose of calling is grouped into three categories, such as to stay in touch with friends as well as to discuss study related things with friends, to communicate with teachers and to stay in contact with family members as well as to seek emotional support from them. Thus the following table shows the distribution of purpose of calling among the students.

Table 7.13

Purpose of Calling among the Students by Gender and Residence

(Percentage in Parentheses)

Purpose of Calling	No. of Students (%)						Grand Total (%)		
	Male (%)			Female (%)					
	Rural N=152	Urban N=93	Total N=245	Rural N=144	Urban N=105	Total N=249	Rural N=296	Urban N=198	Total N=494
To communicate with teachers	124 (81.58)	79 (84.95)	203 (82.86)	109 (75.69)	80 (76.19)	189 (75.9)	233 (78.72)	159 (80.3)	392 (79.35)
To stay in touch with friends as well as to discuss study related things with friends	159 (104.61)	102 (109.68)	261 (106.53)	134 (93.05)	107 (101.9)	241 (96.78)	293 (98.99)	209 (105.55)	502 (101.62)
To stay in contact with family members as well as to seek emotional support from them	104 (68.42)	74 (79.57)	178 (72.65)	96 (66.66)	84 (80)	180 (72.29)	200 (67.57)	158 (79.8)	308 (72.47)

Source: Field Survey Conducted during 14 February 2011 – 29 February 2012

The table depicts that most of the students (101.62%) use mobile phone to stay in touch with friends as well as to discuss study related things with friends, subsequently followed by to communicate with teachers (79.35%) and to stay in contact with family members as well as to seek emotional support from them (72.47%). This pattern is observed from their gender and rural-urban categories. Thus, the students basically use mobile phone to stay in touch with friends as well as to discuss study related things with friends because mobile phone is given to students by their parents for contacting people during their need. As they are students, therefore, they want to communicate with teachers, classmates and family members when they are out of home and perhaps, this is the sole reason for using mobile phone to communicate with their teachers.

Reasons for Keeping Mobile Phone

Reasons for keeping mobile phone is categorised into three groups; namely, genuine need for communication, status symbol in society and not useful due to network problem. Thus the following table shows their distribution patterns.

Table 7.14

Reasons for Keeping Mobile Phone among the Students by Gender and Residence

(Percentage in Parentheses)

Reasons for Keeping Mobile Phone	No. of Students (%)						Grand Total (%)		
	Male (%)			Female (%)					
	Rural N=152	Urban N=93	Total N=245	Rural N=144	Urban N=105	Total N=249	Rural N=296	Urban N=198	Total N=494
Genuine need for communication	140 (92.11)	74 (79.57)	214 (87.35)	136 (94.44)	97 (92.38)	233 (93.57)	276 (93.24)	171 (86.37)	447 (90.48)
Status symbol in society	35 (23.03)	30 (32.26)	65 (26.53)	29 (20.14)	24 (22.86)	53 (21.29)	64 (21.62)	54 (27.28)	118 (23.88)
Not useful due to network problem	1 (0.66)	--	1 (0.41)	1 (0.69)	--	1 (0.4)	2 (0.68)	--	2 (0.4)

Source: Field Survey Conducted during 14 February 2011 – 29 February 2012

The table depicts that most of the students (90.48%) keep mobile phone for genuine need for communication, followed by status symbol in society (23.88%). By and large similar pattern is found across their categories of genders and rural-urban residences. Thus, mobile phone is genuine need for communication as the students stay in touch with family members and friends since they are out of their homes for the whole day in colleges and working in university.

Average Mobile Phone Bill in a Month

The average mobile phone bill in a month among the students is grouped into four categories, such as less than Rs. 100/-, Rs. 100-200/-, Rs. 201-300/- and more than Rs. 300/-. So the following table shows their distribution patterns.

Table 7.15

Average Mobile Phone Bill in a Month among the Students by Gender and Residence

(Percentage in Parentheses)

Average mobile Phone Bill in a Month (in Rs.)	No. of Students (%)						Grand Total (%)		
	Male (%)			Female (%)					
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
< 100/-	15 (9.87)	5 (5.38)	20 (8.16)	32 (22.22)	19 (18.1)	51 (20.48)	47 (15.88)	24 (12.12)	71 (14.37)
100-200/-	91 (59.87)	37 (39.78)	128 (52.24)	96 (66.67)	59 (56.19)	155 (62.25)	187 (63.18)	96 (48.48)	283 (57.29)
201-300/-	27 (17.76)	30 (32.26)	57 (23.27)	10 (6.94)	25 (23.81)	35 (14.06)	37 (12.5)	55 (27.78)	92 (18.62)
> 300/-	19 (12.5)	21 (22.58)	40 (16.33)	6 (4.17)	2 (1.9)	8 (3.21)	25 (8.44)	23 (11.62)	48 (9.72)
Total (%)	152 (100)	93 (100)	245 (100)	144 (100)	105 (100)	249 (100)	296 (100)	198 (100)	494 (100)

Source: Field Survey Conducted during 14 February 2011 – 29 February 2012

The table depicts that over a half of the students' (57.29%) average monthly mobile phone bill ranges from Rs. 100/- to Rs. 200/- in a month, nearabout one tenth (18.62%) pay Rs. 201/- to Rs. 300/-, over one tenth (14.37%) pay within Rs. 100/- and the least pay more than Rs. 300/-. Thus, the average monthly mobile phone bill ranges from Rs. 100/- to Rs. 200/- which is common to both the rural and urban students because they are dependent on family members for mobile phone and manages it from their pocket money.

Persons Making Payment of Mobile Bill

The category of persons making payment of mobile bill among the students includes self and family members (parents, mother, brother & sister). So the following table shows the persons making payment of mobile phone bill among the students by their gender and residence.

Table 7.16

Persons Making Payment of Mobile Bill among the Students by Gender and Residence

(Percentage in Parentheses)

Category of Persons	No. of Students (%)						Grand Total (%)		
	Male (%)			Female (%)					
	Rural N=152	Urban N=93	Total N=245	Rural N=144	Urban N=105	Total N=249	Rural N=296	Urban N=198	Total N=494
Self	36 (23.68)	30 (32.26)	66 (26.94)	23 (15.97)	21 (20)	44 (17.67)	59 (19.93)	51 (25.76)	110 (22.27)
Family members (Parents, Mother, Brother & Sister)	126 (82.9)	74 (79.55)	200 (81.64)	126 (87.5)	88 (83.81)	214 (85.94)	252 (85.14)	162 (81.82)	414 (82.9)

Source: Field Survey Conducted during 14 February 2011 – 29 February 2012

It depicts that majority of the students' (82.9%) family members (parents, mother, brother & sister) pay mobile phone bill, subsequently followed by students themselves (22.27%). By and large, the similar finding is observed across their categories their genders and residences. Thus, parents pay mobile phone bill because most of them are dependent on their parents as students. Parents' outlays for mobile phone and entertainment are dwarfed by the cost of college tuition or paying the rent for young-adult children.

Mobile Phones in Family

Seven categories of mobile phone users in families of students include father, mother, brother, sister, uncle, aunty and wife. Thus the following table shows their distribution patterns.

Table 7.17

Mobile Phones in Families of the Students by Gender and Residence

(Percentage in Parentheses)

Mobile Phone User	No. of Students (%)						Grand Total (%)		
	Male (%)			Female (%)					
	Rural N=152	Urban N=93	Total N=245	Rural N=144	Urban N=105	Total N=249	Rural N=296	Urban N=198	Total N=494
Father	134 (88.16)	89 (95.7)	223 (91.02)	131 (90.97)	102 (97.14)	233 (93.57)	265 (89.53)	191 (96.46)	456 (92.31)
Mother	65 (42.76)	68 (73.12)	133 (54.29)	77 (53.47)	89 (84.76)	166 (66.67)	142 (47.97)	157 (79.29)	299 (60.53)
Brother	110 (72.37)	61 (65.59)	171 (69.8)	100 (69.44)	86 (81.9)	186 (74.7)	210 (70.95)	147 (74.24)	357 (72.27)
Sister	62 (40.79)	47 (50.54)	109 (44.49)	56 (38.89)	33 (31.43)	89 (35.74)	118 (39.86)	80 (40.4)	198 (40.08)
Uncle	1 (0.66)	4 (4.3)	5 (2.04)	3 (2.08)	--	3 (1.2)	4 (1.35)	4 (2.02)	8 (1.62)
Aunty	--	--	--	1 (0.69)	--	1 (0.4)	1 (0.34)	--	1 (0.2)
Wife	--	1 (1.08)	1 (0.41)	--	--	--	--	1 (0.51)	1 (0.2)

Source: Field Survey Conducted during 14 February 2011 – 29 February 2012

The table reveals that most of the students' (92.31%) fathers use mobile phone, subsequently followed by brother (72.27%), mother (60.53%), sisters (40.08%), uncle, aunty and wife. Aunty and wife among the rural male students' families do not use mobile phone. Thus, the students' fathers mostly use mobile phone among other family members because they are working outside for which communication with colleagues, family members and friends is essential.

Study-Related Incoming Calls in a Day

The number of study-related incoming calls on mobile phone in a day is categorised into four groups; namely, 1-5, 6-10, 11-15 and more than 15 calls. Thus the following table shows their distribution among the students.

Table 7.18

Study-Related Incoming Calls in a Day among the Students by Gender and Residence

(Percentage in Parentheses)

No. of Study-Related Incoming Calls in a Day	No. of Students (%)						Grand Total (%)		
	Male (%)			Female (%)					
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
1-5	105 (69.08)	37 (39.78)	142 (57.96)	101 (70.14)	75 (71.43)	176 (70.68)	206 (69.59)	112 (56.57)	318 (64.37)
6-10	41 (26.97)	44 (47.31)	85 (34.69)	43 (29.86)	27 (25.71)	70 (28.11)	84 (28.38)	71 (35.86)	155 (31.38)
11-15	5 (3.29)	11 (11.83)	16 (6.53)	--	3 (2.86)	3 (1.21)	5 (1.69)	14 (7.07)	19 (3.85)
> 15	1 (0.66)	1 (1.08)	2 (0.82)	--	--	--	1 (0.34)	1 (0.5)	2 (0.4)
Total (%)	152 (100)	93 (100)	245 (100)	144 (100)	105 (100)	249 (100)	296 (100)	198 (100)	494 (100)

Source: Field Survey Conducted during 14 February 2011 – 29 February 2012

The table reveals that over three fifths of the students (64.37%) receive one to five study-related incoming calls on mobile phone per day, followed by six to ten (31.38%). Thus, though students generally receive more than five phone calls per day but the number of study-related incoming calls on mobile phone ranges from one to five incoming calls daily which is found common across their categories of genders and residences. But the rural female students do not receive more than ten study-related incoming calls on mobile phone. The interpretation of the two genders shows that of them, near about a half of the male students (47.31%) receive study related calls from six to ten while near about three fourths of the female students (71.43%) receive calls related to study is from one to five. Thus, though the urban students generally receive one to five study-related incoming calls on mobile phone, male students receive six to ten calls.

Study-Related Outgoing Calls in a Day

The number of study-related outgoing calls on mobile phone in a day is categorised into four groups; namely, 1-5, 6-10, 11-15 and more than 15 calls. Thus the following table shows their distribution among the students.

Table 7.19

Study-Related Outgoing Calls in a Day among the Students by Gender and Residence

(Percentage in Parentheses)

No. of Study-Related Outgoing Calls in a Day	No. of Students (%)						Grand Total (%)		
	Male (%)			Female (%)					
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
1-5	104 (68.42)	41 (44.09)	145 (59.18)	102 (70.83)	80 (76.19)	182 (73.09)	206 (69.59)	121 (61.11)	327 (66.19)
6-10	45 (29.61)	42 (45.16)	87 (35.51)	42 (29.17)	22 (20.95)	64 (25.7)	87 (29.39)	64 (32.32)	151 (30.57)
11-15	3 (1.97)	9 (9.68)	12 (4.9)	--	3 (2.86)	3 (1.21)	3 (1.02)	12 (6.06)	15 (3.04)
> 15	--	1 (1.07)	1 (0.41)	--	--	--	--	1 (0.51)	1 (0.2)
Total (%)	152 (100)	93 (100)	245 (100)	144 (100)	105 (100)	249 (100)	296 (100)	198 (100)	494 (100)

Source: Field Survey Conducted during 14 February 2011 – 29 February 2012

The table reveals that over three fifths of the students (66.19%) make one to five study-related outgoing calls on mobile phone in a day, followed by six to ten calls (30.57%). But the rural male students do not make more than fifteen study-related outgoing calls while the rural female students do not make eleven to fifteen and more than fifteen daily. Thus, making one to five calls per day is found common among the rural male and female students because it depends on the situation. But the urban female students do not make more than fifteen study-related outgoing calls per day. Thus, though the urban students are found to make upto five study-related outgoing calls, yet the urban male students make more calls than the female students depending on the situation.

Study-Related Incoming SMS/MMS in a Day

The number of study-related incoming SMS/MMS on mobile phone in a day is categorised into four groups; namely, 1-5, 6-10, 11-15 and more than 15 SMS/MMS. Thus the following table shows the number of study-related incoming SMS/MMS on mobile phone in a day among the students.

Table 7.20

Study-Related Incoming SMS/MMS in a Day among the Students by Gender and Residence

(Percentage in Parentheses)

No. of Study-Related Incoming SMS/MMS in a Day	No. of Students (%)						Grand Total (%)		
	Male (%)			Female (%)					
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
1-5	103 (67.76)	41 (44.09)	144 (58.78)	104 (72.22)	70 (66.67)	174 (69.88)	207 (69.93)	111 (56.06)	318 (64.37)
6-10	40 (26.32)	44 (47.31)	84 (34.29)	38 (26.39)	29 (27.62)	67 (26.91)	78 (26.35)	73 (36.87)	151 (30.57)
11-15	7 (4.61)	7 (7.53)	14 (5.71)	2 (1.39)	6 (5.71)	8 (3.21)	9 (3.04)	13 (6.56)	22 (4.45)
> 15	2 (1.31)	1 (1.07)	3 (1.22)	--	--	--	2 (0.68)	1 (0.51)	3 (0.61)
Total (%)	152 (100)	93 (100)	245 (100)	144 (100)	105 (100)	249 (100)	296 (100)	198 (100)	494 (100)

Source: Field Survey Conducted during 14 February 2011 – 29 February 2012

The table reveals that over three fifths of the students (64.37%) receive one to five study-related incoming SMS/MMS on mobile phone, followed by six to ten SMS/MMS (30.57%) per day. But the rural female students do not make more than fifteen SMS/MMS in a day. Thus, both the rural and urban male and female students receive one to five study-related incoming SMS or MMS in a day because it depends on their need of the course and the circulation of the information.

Study-Related Outgoing SMS/MMS in a Day

The study-related outgoing SMS/MMS is generally used to send to friends, family members and others by the students. The number of study-related outgoing SMS/MMS on mobile phone in a day is categorised into four groups; namely, 1-5, 6-10, 11-15 and more than 15 SMS/MMS. Thus the following table shows the number of study-related outgoing SMS/MMS on mobile phone in a day among the students.

Table 7.21

Study-Related Outgoing SMS/MMS in a Day among the Students by Gender and Residence

(Percentage in Parentheses)

No. of Study-Related Outgoing SMS/MMS in a Day	No. of Students (%)						Grand Total (%)		
	Male (%)			Female (%)					
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
1-5	107 (70.39)	40 (43.01)	147 (60)	106 (73.61)	73 (69.52)	179 (71.89)	213 (71.96)	113 (57.07)	326 (65.99)
6-10	37 (24.34)	42 (45.16)	79 (32.24)	34 (23.61)	26 (24.76)	60 (24.1)	71 (23.99)	68 (34.34)	139 (28.14)
11-15	7 (4.61)	9 (9.68)	16 (6.53)	3 (2.09)	6 (5.72)	9 (3.61)	10 (3.38)	15 (7.58)	25 (5.06)
> 15	1 (0.66)	2 (2.15)	3 (1.23)	1 (0.69)	--	1 (0.4)	2 (0.67)	2 (1.01)	4 (0.81)
Total (%)	152 (100)	93 (100)	245 (100)	144 (100)	105 (100)	249 (100)	296 (100)	198 (100)	494 (100)

Source: Field Survey Conducted during 14 February 2011 – 29 February 2012

The table reveals that over three fifths of the students (65.99%) make one to five study-related outgoing SMS/MMS in a day on mobile phone, followed by six to ten SMS (28.14%). Thus, irrespective of their genders and residences the students send one to five

SMS study-related outgoing SMS except urban male students who send upto ten SMS per day.

Educational Purposes of Mobile Phone

The educational purposes of mobile phone is grouped into four categories; namely, making communication with teachers and friends, disseminating study-related information and using mobile Internet for searching materials/ sending e-mail through mobile Internet/ using social networking website to communicate with friends, teachers, etc. So the following table shows their distribution patterns.

Table 7.22

Educational Purposes of Mobile Phone among the Students by Gender and Residence

(Percentage in Parentheses)

Educational Purpose of Mobile Phone	No. of Students (%)						Grand Total (%)		
	Male (%)			Female (%)					
	Rural N=152	Urban N=93	Total N=245	Rural N=144	Urban N=105	Total N=249	Rural N=296	Urban N=198	Total N=494
Making communication with teachers and friends	24 (15.79)	66 (70.97)	90 (36.73)	101 (70.14)	87 (82.86)	188 (75.5)	125 (42.23)	153 (77.27)	278 (56.28)
Disseminating study-related information	80 (52.63)	54 (58.06)	134 (54.69)	77 (53.47)	44 (41.9)	121 (48.59)	157 (53.04)	98 (49.49)	255 (51.62)
Using mobile Internet for searching materials/ Sending e-mail through mobile Internet/ Using social networking website to communicate with friends, teachers, etc.	37 (24.35)	38 (40.86)	75 (30.62)	35 (24.3)	34 (32.38)	69 (27.71)	72 (24.32)	72 (36.37)	144 (29.15)

Source: Field Survey Conducted during 14 February 2011 – 29 February 2012

The table reveals that over a half of the students (56.28%) use mobile phone for making communication with teachers and friends, subsequently followed by disseminating study-related information (51.62%), using mobile Internet for searching materials/ sending e-mail through mobile Internet/ using social networking website to communicate with friends, teachers, etc. (29.15%). Thus, disseminating study-related information (53.04%) is found as the major finding among the rural students because they can communicate with people and disseminate relevant information with their friends with the help of mobile phone. Thus, making communication with teachers and friends (77.27%) is found as the major finding among the urban students because to make contact with teachers and friends is the main purpose of purchasing mobile phone.

Switch Off Timings of Mobile Phone

Seven categories of switch off timings of mobile phone are found from the study. They are: while attending classes, on the way to college/university on bike, during sleeping at night, during study time, during meeting with teachers, during prayer and during tuition

classes in the evening. Thus the following table highlights switch off timings of mobile phone among the students.

Table 7.23

Switch Off timings of Mobile Phone among the Students by Gender and Residence

(Percentage in Parentheses)

Switch Off timings of Mobile Phone	No. of Students (%)						Grand Total (%)		
	Male (%)			Female (%)					
	Rural N=152	Urban N=93	Total N=245	Rural N=144	Urban N=105	Total N=249	Rural N=296	Urban N=198	Total N=494
While attending classes	99 (65.13)	57 (61.29)	156 (63.67)	95 (65.97)	63 (60)	158 (63.45)	194 (65.54)	120 (60.61)	314 (63.56)
On the way to College/University on bike	12 (7.89)	15 (16.13)	27 (11.02)	3 (2.08)	1 (0.95)	4 (1.61)	15 (5.07)	16 (8.08)	31 (6.28)
During sleeping at night	48 (31.58)	23 (24.73)	71 (28.98)	55 (38.19)	40 (38.1)	95 (38.15)	103 (34.8)	63 (31.82)	166 (33.6)
During study time	17 (11.18)	4 (4.3)	21 (8.57)	12 (8.33)	5 (4.76)	17 (6.83)	29 (9.8)	9 (4.55)	38 (7.69)
During meeting with teachers	14 (9.21)	6 (6.45)	20 (8.16)	7 (4.86)	6 (5.71)	13 (5.22)	21 (7.09)	12 (6.06)	33 (6.68)
During prayer	6 (3.95)	4 (4.3)	10 (4.08)	7 (4.86)	6 (5.71)	13 (5.22)	13 (4.39)	10 (5.05)	23 (4.66)
During tuition classes in the evening	--	1 (1.08)	1 (0.41)	2 (0.69)	--	2 (0.8)	2 (0.68)	1 (0.51)	3 (0.6)

Source: Field Survey Conducted during 14 February 2011 – 29 February 2012

It reveals that over three fifths of the students (63.56%) keep mobile phone switched off while attending classes, followed by during sleeping at night (33.6%). Their gender distribution also depicts similar findings but rural male and urban female students do not keep mobile phone switched off during tuition in the evening hours. Thus, the students keep mobile phone switched off when they attend classes because if mobile phone rings at that time, they may get disturbed and their concentration broke.

Silence Mode Timings of Mobile Phone

The study found seven categories of silence mode timings of mobile phone among the students, such as while attending classes, during sleeping at night, during study time, during meeting with teachers, during prayer, during tuition classes in the evening and do not keep in silence mode for emergency. Thus the following table shows silence mode timings of mobile phone among the students.

Table 7.24

Silence Mode Timings of Mobile Phone among the Students by Gender and Residence

(Percentage in Parentheses)

Silence Mode Timings of Mobile Phone	No. of Students (%)						Grand Total (%)		
	Male (%)			Female (%)					
	Rural N=152	Urban N=93	Total N=245	Rural N=144	Urban N=105	Total N=249	Rural N=296	Urban N=198	Total N=494
While attending classes	53 (34.87)	32 (34.41)	85 (34.69)	54 (37.5)	40 (38.1)	94 (37.75)	107 (36.15)	72 (36.36)	179 (36.23)
During sleeping at night	74 (48.68)	46 (49.46)	120 (48.98)	72 (50)	43 (40.95)	115 (46.18)	146 (49.32)	89 (44.95)	235 (47.57)
During study time	37 (24.34)	6 (6.45)	43 (17.55)	17 (11.81)	10 (9.52)	27 (10.84)	54 (18.24)	16 (8.08)	70 (14.17)
During meeting with teachers	31 (20.39)	6 (6.45)	37 (15.1)	15 (10.42)	7 (6.67)	22 (8.84)	46 (15.54)	13 (6.57)	59 (11.94)
During prayer	14 (9.21)	33 (35.48)	47 (19.18)	31 (21.53)	38 (36.19)	69 (27.71)	45 (15.2)	71 (35.86)	116 (23.48)
During tuition classes in the evening	--	--	--	2 (1.39)	1 (0.95)	3 (1.2)	2 (0.68)	1 (0.51)	3 (0.6)
Do not keep in silence mode for emergency	--	--	--	1 (0.69)	--	1 (0.4)	1 (0.34)	--	1 (0.2)

Source: Field Survey conducted during 14 February 2011 – 29 February 2012

The table shows that over two fifths of the students (47.57%) keep mobile phone in silence mode during sleeping at night, subsequently followed by while attending classes (36.23%), during prayer (23.48%), during study time (14.17%) and during meeting with teachers (11.94%). By and large, similar finding is observed across their categories of genders and residences. But the rural male students do not keep mobile phone in silence mode during tuition classes in the evening because they do not have tuition classes in the evening. Thus, majority of the students keep mobile phone in silence mode during sleeping at night instead of keeping it switched off because they do not have any work at that time and so do not use it at night.

In sum, the students generally receive six to ten incoming calls and make six to ten outgoing calls per day, generally receive six to ten SMS/MMS and send six to ten SMS/MMS in a day, call friends and are called by friends, make phone calls very frequently (almost daily) and receive phone calls very frequently (almost daily) per day, use mobile phone to stay in touch with friends as well as to discuss study related things with friends, their average monthly mobile phone bill ranges from Rs. 100/- to Rs. 200/-, receive one to five study-related incoming calls & SMS/MMS and make one to five study-related outgoing calls & outgoing SMS/MMS per day, use mobile phone for making communication with teachers and friends.

III

ATTITUDE PATTERNS OF MOBILE PHONE IN EDUCATION

The section introduces and discusses attitude of the students towards the extent of likeness for mobile phone, effectiveness of mobile phone, level of comfortability and satisfaction with mobile phone among the students.

Extent of Mobile Phone Likeness

The extent of mobile phone likeness is categorized into four categories showing particularly the three levels of extent about expressing likeness, such as low, medium and high and cannot say. Thus, the following table shows extent of mobile phone likeness among the students.

Table 7.25

Extent of Likeness for Mobile Phone among the Students by Gender and Residence

(Percentage in Parentheses)

Extent of Mobile Phone Likeness	No. of Students (%)						Grand Total (%)		
	Male (%)			Female (%)					
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
To a large extent	11 (7.24)	5 (5.38)	16 (6.53)	15 (10.42)	13 (12.38)	28 (11.24)	26 (8.78)	18 (9.09)	44 (8.91)
To a larger extent	93 (61.18)	47 (50.54)	140 (57.14)	85 (59.03)	55 (52.38)	140 (56.22)	178 (60.14)	102 (51.52)	280 (56.68)
To the largest extent	42 (27.63)	38 (40.86)	80 (32.65)	40 (27.78)	33 (31.43)	73 (29.31)	82 (27.7)	71 (35.86)	153 (30.97)
Can't say	6 (3.95)	3 (3.22)	9 (3.68)	4 (2.77)	4 (3.81)	8 (3.2)	10 (3.38)	7 (3.53)	17 (3.44)
Total (%)	152 (100)	93 (100)	245 (100)	144 (100)	105 (100)	249 (100)	296 (100)	198 (100)	494 (100)

Source: Field Survey Conducted during 14 February 2011 – 29 February 2012

The table demonstrates that over a half of the students (56.68%) like mobile phone to a larger extent, over a quarter (30.97%) like it to the largest extent and the least like it to a large extent and others cannot say about it. Similar finding is found irrespective of their gender and residence categories. Thus, the students like it to a larger extent because there are good features of mobile phone like calculator, stopwatch and dictionary which are used for educational purposes. It also provides safety while students are out of home.

Effectiveness of Mobile Phone

Effectiveness of mobile phone in education is categorized into four categories, such as not effective, moderately effective and extremely effective and cannot say about expressing views. Thus the following table shows effectiveness of mobile phone in education among the students.

Table 7.26

Effectiveness of Mobile Phone among the Students by Gender and Residence

(Percentage in Parentheses)

Effectiveness of Mobile Phone	No. of Students (%)						Grand Total (%)		
	Male (%)			Female (%)					
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
Extremely effective	24 (15.79)	32 (34.41)	56 (22.86)	37 (25.69)	20 (19.05)	57 (22.89)	61 (20.61)	52 (26.26)	113 (22.87)
Moderately effective	109 (71.71)	54 (58.06)	163 (66.53)	97 (67.36)	78 (74.29)	175 (70.28)	206 (69.59)	132 (66.67)	338 (68.42)
Can't say	16 (10.53)	2 (2.15)	18 (7.34)	7 (4.87)	5 (4.76)	12 (4.82)	23 (7.77)	7 (3.53)	30 (6.08)
Not effective	3 (1.97)	5 (5.38)	8 (3.27)	3 (2.08)	2 (1.9)	5 (2.01)	6 (2.03)	7 (3.54)	13 (2.63)
Total (%)	152 (100)	93 (100)	245 (100)	144 (100)	105 (100)	249 (100)	296 (100)	198 (100)	494 (100)

Source: Field Survey Conducted during 14 February 2011 – 29 February 2012

The table reveals that mobile phone is moderately effective in education among over three fifths of the students (68.42%), followed by extremely effective (22.87%). The similar finding is found irrespective of their gender and residence categories. Thus, mobile phone is moderately effective in education because cell phones are efficient, time-saving and can make learning process effective since there are applications that are used educationally by the students for study purposes.

Level of Comfortability with Mobile Phone

The level of comfortability with mobile phone is categorized into five categories showing particularly the five points of comfortability from positive to negative; namely, very comfortable, comfortable, neither comfortable nor uncomfortable, uncomfortable and very uncomfortable. Thus the following table shows their distribution patterns.

Table 7.27

Level of Comfortability with Mobile Phone among the Students by Gender and Residence
(Percentage in Parentheses)

Level of Comfortability with Mobile Phone	No. of Students (%)						Grand Total (%)		
	Male (%)			Female (%)					
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
Very comfortable	45 (29.61)	42 (45.16)	87 (35.51)	50 (34.72)	31 (29.52)	81 (32.53)	95 (32.09)	73 (36.87)	168 (34.01)
Comfortable	97 (63.82)	43 (46.24)	140 (57.14)	87 (60.42)	63 (60)	150 (60.24)	184 (62.16)	106 (53.54)	290 (58.7)
Neither comfortable nor uncomfortable	9 (5.92)	4 (4.3)	13 (5.31)	5 (3.47)	9 (8.58)	14 (5.63)	14 (4.74)	13 (6.57)	27 (5.47)
Uncomfortable	1 (0.65)	2 (2.15)	3 (1.22)	2 (1.39)	1 (0.95)	3 (1.2)	3 (1.01)	3 (1.51)	6 (1.21)
Very uncomfortable	--	2 (2.15)	2 (0.82)	--	1 (0.95)	1 (0.4)	--	3 (1.51)	3 (0.61)
Total (%)	152 (100)	93 (100)	245 (100)	144 (100)	105 (100)	249 (100)	296 (100)	198 (100)	494 (100)

Source: Field Survey Conducted during 14 February 2011 – 29 February 2012

The table depicts that nearabout three fifths of the students (58.7%) feel comfortable in using mobile phone, followed by very comfortable (34.01%). But rural students do not feel very uncomfortable with mobile phone. Similar finding is found across their categories of genders and residences because they easily contact with their family members and feel safety when they remain outside home. Thus, students feel comfortable in using mobile phone because they tell their parents that they feel more comfortable to contact them through mobile phone without relying on people.

Level of Satisfaction with Mobile Phone

The level of satisfaction with mobile phone is categorized into five categories showing particularly the five points of satisfaction from positive to negative; namely, very satisfied, satisfied, neither satisfied nor unsatisfied, unsatisfied and very unsatisfied. Thus the following table shows their distribution patterns.

Table 7.28

Level of Satisfaction with Mobile Phone among the Students by Gender and Residence

(Percentage in Parentheses)

Level of Satisfaction with Mobile Phone	No. of Students (%)						Grand Total (%)		
	Male (%)			Female (%)					
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
Very satisfied	48 (31.58)	39 (41.94)	87 (35.51)	55 (38.19)	29 (27.62)	84 (33.73)	103 (34.8)	68 (34.34)	171 (34.62)
Satisfied	93 (61.18)	48 (51.61)	141 (57.55)	80 (55.56)	65 (61.9)	145 (58.23)	173 (58.45)	113 (57.07)	286 (57.89)
Neither satisfied nor unsatisfied	8 (5.26)	2 (2.15)	10 (4.09)	5 (3.47)	9 (8.58)	14 (5.62)	13 (4.39)	11 (5.55)	24 (4.86)
Unsatisfied	2 (1.32)	2 (2.15)	4 (1.63)	2 (1.39)	1 (0.95)	3 (1.21)	4 (1.35)	3 (1.52)	7 (1.42)
Very unsatisfied	1 (0.66)	2 (2.15)	3 (1.22)	2 (1.39)	1 (0.95)	3 (1.21)	3 (1.01)	3 (1.52)	6 (1.21)
Total (%)	152 (100)	93 (100)	245 (100)	144 (100)	105 (100)	249 (100)	296 (100)	198 (100)	494 (100)

Source: Field Survey Conducted during 14 February 2011 – 29 February 2012

The table reveals that over a half of the students (57.89%) feel satisfied, followed by very satisfied (34.62%). By and large, similar finding is found across their genders and residences. Thus, majority of the students feel satisfied with mobile phone because it has become a genuine need for communication with teachers and friends as well as symbol of social status of their families.

In sum, mobile phone is moderately effective in education among the students and they feel satisfied with mobile phone.

Perception about Mobile Phone

In order to understand attitude and perception of the students towards mobile phone, some statements on behalf of students were formulated for the study. These statements were based on the five-point of Lickert scale of attitude measurement. These are tabulated and analysed below:

Statement I: Text messages can be useful for communicating and disseminating any information for communication.

The statement "Text messages can be useful for communicating and disseminating any information for communication." depicts whether text messages can be useful for communicating and disseminating information for communication or not among the students. The response categories were grouped into five types; namely, absolutely agree, agree, can't say, disagree and absolutely disagree. So the following table shows the pattern of responses of this statement among the students.

Table 7.29

Students' Opinions on "Text messages can be useful for communicating and disseminating any information for communication." by Gender and Residence

(Percentage in Parentheses)

Response Type	No. of Students (%)						Grand Total (%)		
	Male (%)			Female (%)					
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
Absolutely agree	88 (57.89)	69 (74.19)	157 (64.08)	81 (56.25)	63 (60)	144 (57.83)	169 (57.09)	132 (66.67)	301 (60.93)
Agree	59 (38.82)	24 (25.81)	83 (33.88)	60 (41.67)	41 (39.05)	101 (40.56)	119 (40.2)	65 (32.83)	184 (37.25)
Can't say	2 (1.32)	--	2 (0.82)	2 (1.39)	1 (0.95)	3 (1.2)	4 (1.35)	1 (0.5)	5 (1.01)
Disagree	2 (1.32)	--	2 (0.82)	1 (0.69)	--	1 (0.41)	3 (1.01)	--	3 (0.61)
Absolutely disagree	1 (0.65)	--	1 (0.4)	--	--	--	1 (0.35)	--	1 (0.2)
Total (%)	152 (100)	93 (100)	245 (100)	144 (100)	105 (100)	249 (100)	296 (100)	198 (100)	494 (100)

Source: Field Survey Conducted during 14 February 2011 – 29 February 2012

The table depicts that three fifths of the students (60.93%) absolutely agree that text messages can be useful for communicating and disseminating any information for communication, followed by agree (37.25%). By and large, the similar finding is observed across their genders and residences. Thus, there is positive attitude among the students regarding the usefulness of text messages for making communication and sharing any kind of information because they share study-related information with male and female friends which has developed good gender relation among them.

Statement II: The mobile Internet facility helps search study materials.

The statement "The mobile Internet facility helps search study materials." depicts whether mobile Internet facility helps the students search study materials or not. The response categories were grouped into five types; namely, absolutely agree, agree, can't say, disagree and absolutely disagree. So the following table shows their response types.

Table 7.30

Students' Opinions on "The mobile Internet facility helps search study materials." by Gender and Residence

(Percentage in Parentheses)

Response Type	No. of Students (%)						Grand Total (%)		
	Male (%)			Female (%)					
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
Absolutely agree	16 (10.53)	14 (15.05)	30 (12.24)	14 (9.72)	9 (8.57)	23 (9.24)	30 (10.14)	23 (11.62)	53 (10.73)
Agree	124 (81.58)	75 (80.65)	199 (81.22)	115 (79.86)	88 (83.81)	203 (81.53)	239 (80.74)	163 (82.32)	402 (81.38)
Can't say	10 (6.58)	1 (1.08)	11 (4.49)	9 (6.25)	5 (4.76)	14 (5.62)	19 (6.42)	6 (3.03)	25 (5.06)
Disagree	2 (1.31)	3 (3.22)	5 (2.05)	5 (3.48)	3 (2.86)	8 (3.21)	7 (2.36)	6 (3.03)	13 (2.63)
Absolutely disagree	--	--	--	1 (0.69)	--	1 (0.4)	1 (0.34)	--	1 (0.2)
Total (%)	152 (100)	93 (100)	245 (100)	144 (100)	105 (100)	249 (100)	296 (100)	198 (100)	494 (100)

Source: Field Survey Conducted during 14 February 2011 – 29 February 2012

The table reveals that majority of the students (81.38%) agree that mobile Internet facility helps search study materials to students, followed by absolutely agree (10.73%). But the rural male students do not absolutely disagree to the statement. The categories of their genders and rural-urban residences also depict similar finding. Thus, majority of the Muslims students are benefitted by the mobile Internet facility in searching study materials because once they get the required information on mobile Internet they go for downloading it from the web.

Statement III: The quality information is very easy to find on the WAP.

The statement "The quality information is very easy to find on the WAP." depicts whether the students find quality information very easily on the Wireless Application Protocol (WAP) or not through mobile Internet. The response categories were grouped into five types; namely, absolutely agree, agree, can't say, disagree and absolutely disagree. So the following table depicts the pattern of responses of this statement among the students.

Table 7.31

Students' Opinions on "The quality information is very easy to find on the WAP." by Gender and Residence

(Percentage in Parentheses)

Response Type	No. of Students (%)						Grand Total (%)		
	Male (%)			Female (%)					
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
Absolutely agree	18 (11.84)	10 (10.75)	28 (11.43)	10 (6.94)	8 (7.62)	18 (7.23)	28 (9.46)	18 (9.09)	46 (9.31)
Agree	97 (63.82)	69 (74.19)	166 (67.76)	97 (67.36)	85 (80.95)	182 (73.09)	194 (65.54)	154 (77.78)	348 (70.45)
Can't say	25 (16.45)	11 (11.83)	36 (14.69)	22 (15.28)	9 (8.57)	31 (12.45)	47 (15.88)	20 (10.1)	67 (13.56)
Disagree	10 (6.58)	3 (3.23)	13 (5.31)	11 (7.64)	3 (2.86)	14 (5.62)	21 (7.09)	6 (3.03)	27 (5.47)
Absolutely disagree	2 (1.31)	--	2 (0.81)	4 (2.78)	--	4 (1.61)	6 (2.03)	--	6 (1.21)
Total (%)	152 (100)	93 (100)	245 (100)	144 (100)	105 (100)	249 (100)	296 (100)	198 (100)	494 (100)

Source: Field Survey Conducted during 14 February 2011 – 29 February 2012

The table reveals that over three fifths of the students (70.45%) agree that they find easily the quality information on the WAP, followed by cannot say (13.56%). Similar observations are found from the gender distribution of the rural students but urban students absolutely disagree to the above statement. Thus, there is found an agreement among the students regarding the quality information on mobile Internet because now-a-days mobile phone with different searching features are available in the market and many of the students own such accessories.

Statement IV: Mobile phone can be used anywhere for learning.

The statement "Mobile phone can be used anywhere for learning." demonstrates whether mobile phone can be used anywhere for learning among the students. The response categories were grouped into five types; namely, absolutely agree, agree, can't say, disagree and absolutely disagree. So the following table shows the pattern of responses of this statement among the students.

Table 7.32

Students' Opinions on "Mobile phone can be used anywhere for learning." by Gender and Residence

(Percentage in Parentheses)

Response Type	No. of Students (%)						Grand Total (%)		
	Male (%)			Female (%)					
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
Absolutely agree	29 (19.08)	14 (15.05)	43 (17.55)	27 (18.75)	14 (13.33)	41 (16.47)	56 (18.92)	28 (14.14)	84 (17)
Agree	91 (59.87)	61 (65.59)	152 (62.04)	87 (60.42)	81 (77.14)	168 (67.47)	178 (60.14)	142 (71.72)	320 (64.78)
Can't say	21 (13.82)	4 (4.3)	25 (10.2)	18 (12.5)	3 (2.86)	21 (8.43)	39 (13.18)	7 (3.54)	46 (9.31)
Disagree	9 (5.92)	13 (13.98)	22 (8.98)	7 (4.86)	6 (5.71)	13 (5.22)	16 (5.4)	19 (9.59)	35 (7.09)
Absolutely disagree	2 (1.31)	1 (1.08)	3 (1.23)	5 (3.47)	1 (0.96)	6 (2.41)	7 (2.36)	2 (1.01)	9 (1.82)
Total (%)	152 (100)	93 (100)	245 (100)	144 (100)	105 (100)	249 (100)	296 (100)	198 (100)	494 (100)

Source: Field Survey Conducted during 14 February 2011 – 29 February 2012

The table reveals that over three fifths of the students (64.78%) agree that mobile phone can be used anywhere for learning, followed by absolutely agree (17%). There is found similar finding across their genders and residences. Thus, majority of the students agree because mobile phone is portable and need not take extra effort to carry with them. Thus, the there is positive attitude towards mobile phone can be used anywhere for learning among both the rural and urban male and female students.

Statement V: Mobile phone is making the m-learning possible.

The statement "Mobile phone is making the m-learning possible." depicts whether mobile phone is making the m-learning possible or not among the students. The response categories were grouped into five types; namely, absolutely agree, agree, can't say, disagree and absolutely disagree. So the following table shows the distribution pattern of this statement among the students.

Table 7.33

Students' Opinions on "Mobile phone is making the m-learning possible." by Gender and Residence

(Percentage in Parentheses)

Response Type	No. of Students (%)						Grand Total (%)		
	Male (%)			Female (%)					
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
Absolutely agree	25 (16.45)	25 (26.88)	50 (20.41)	31 (21.53)	21 (20)	52 (20.88)	56 (18.92)	46 (23.23)	102 (20.65)
Agree	112 (73.68)	51 (54.84)	163 (66.53)	98 (68.06)	77 (73.33)	175 (70.28)	210 (70.95)	128 (64.65)	338 (68.42)
Can't say	12 (7.89)	10 (10.75)	22 (8.98)	12 (8.33)	5 (4.77)	17 (6.83)	24 (8.11)	15 (7.58)	39 (7.89)
Disagree	1 (0.66)	4 (4.3)	5 (2.04)	1 (0.69)	2 (1.9)	3 (1.2)	2 (0.68)	6 (3.03)	8 (1.62)
Absolutely disagree	2 (1.32)	3 (3.23)	5 (2.04)	2 (1.39)	--	2 (0.81)	4 (1.34)	3 (1.51)	7 (1.42)
Total (%)	152 (100)	93 (100)	245 (100)	144 (100)	105 (100)	249 (100)	296 (100)	198 (100)	494 (100)

Source: Field Survey Conducted during 14 February 2011 – 29 February 2012

The table reveals that over three fifths of the students (68.42%) agree that mobile phone helps making m-learning possible, followed by (20.65%) absolutely agree. There is no significant difference found across their categories of genders and rural-urban residences. But the urban female students do not absolutely disagree that mobile phone is helping to make mobile learning possible because students indirectly increase their language skills by revising and editing sentences to express ideas more effectively and providing support to have a positive influence on students' achievement.

Statement VI: It is making the communication process in a better way.

The statement depicts whether mobile phone is making the communication process in a better way or not among the students. The response categories were grouped into five types; namely, absolutely agree, agree, can't say, disagree and absolutely disagree. So the following table shows the distribution pattern among the students.

Table 7.34

Students' Opinions on "It is making the communication process in a better way." by Gender and Residence

(Percentage in Parentheses)

Response Type	No. of Students (%)						Grand Total (%)		
	Male (%)			Female (%)					
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
Absolutely agree	60 (39.47)	56 (60.22)	116 (47.35)	64 (44.44)	68 (64.76)	132 (53.01)	124 (41.89)	124 (62.63)	248 (50.2)
Agree	89 (58.55)	36 (38.71)	125 (51.02)	75 (52.08)	37 (35.24)	112 (44.98)	164 (55.41)	73 (36.87)	237 (47.98)
Can't say	3 (1.98)	1 (1.07)	4 (1.63)	4 (2.79)	--	4 (1.61)	7 (2.36)	1 (0.5)	8 (1.62)
Disagree	--	--	--	1 (0.69)	--	1 (0.4)	1 (0.34)	--	1 (0.2)
Absolutely disagree	--	--	--	--	--	--	--	--	0
Total (%)	152 (100)	93 (100)	245 (100)	144 (100)	105 (100)	249 (100)	296 (100)	198 (100)	494 (100)

Source: Field Survey Conducted during 14 February 2011 – 29 February 2012

The table shows that a half of the students (50.2%) absolutely agree to the statement that mobile phone has made better communication process, followed by agree (47.98%). The rural male students do not disagree and absolutely disagree while the rural female students do not absolutely disagree to the statement but the negative attitude of students towards this statement is found almost absent. Thus, there is a very positive attitude towards the better communication process among students by mobile phone because unlike landline telephone, there is no extra monthly rental of payment of bill and also no network problem. Students can move with the mobile handsets with them.

Motivating Factors in Using Features of Mobile Phone

Factors of motivation in using features of mobile phone are grouped into three categories, such as convenience to carry, low cost and utility for coordinating educational events like students' meet, functions, etc. Thus factors of motivation in using mobile phone among the students are shown in the following table.

Table 7.35
Motivating Factors in Using Features of Mobile Phone among the Students by Gender and Residence
(Percentage in Parentheses)

Motivating Factor	No. of Students (%)						Grand Total (%)		
	Male (%)			Female (%)					
	Rural N=152	Urban N=93	Total N=245	Rural N=144	Urban N=105	Total N=249	Rural N=296	Urban N=198	Total N=494
Convenience to carry	98 (64.47)	65 (69.89)	163 (66.53)	117 (81.25)	77 (73.33)	194 (77.91)	215 (72.64)	142 (71.72)	357 (72.27)
Low cost	50 (32.89)	26 (27.96)	76 (31.02)	43 (29.86)	31 (29.52)	74 (29.72)	93 (31.42)	57 (28.79)	150 (30.36)
Utility for coordinating educational events like students' meet, functions, etc.	31 (20.39)	17 (18.28)	48 (19.59)	22 (15.28)	15 (14.29)	37 (14.86)	52 (17.57)	32 (16.16)	84 (17)

Source: Field Survey Conducted during 14 February 2011 – 29 February 2012

The table depicts that the motivating factor in using different features of mobile phone among nearabout three fifths of the students (72.27%) is the convenience of mobile phone to carry with them, subsequently followed by low cost of mobile phone (30.36%) and utility for coordinating educational events like students' meet, functions, etc. (17%). Thus, the convenience of mobile phone to carry with students is found as the major finding because the students keep it with them without any hindrance and it has increased the opportunity for students' interaction with teachers, friends and family members through use of text messages, Skype calls and e-mails.

In sum, the students absolutely agree that text messages can be useful for communicating and disseminating any information for communication. They agree that mobile Internet facility helps search study materials to students. They agree that mobile phone helps making m-learning possible. The students are motivated by the convenience of mobile phone to carry with them.

IV
IMPACT OF MOBILE PHONE IN EDUCATION

The section introduces and discusses impacts of using mobile phone among the students in education, on their families and gender relations, problems in using mobile phone and usefulness of mobile phone in education.

Impact of Mobile Phone on Students

The study found four impact of using mobile phone in education among the students which include mobile phone became part of life, made easy communication with students from any place, expanded and strengthened relation among people and created a sense of belonging to peer group to know about their progress of work. So the following table shows impact patterns of using mobile phone in education among the students.

Table 7.36
Impact of Mobile Phone on Students by Gender and Residence
(Percentage in Parentheses)

Impact of Mobile Phone on Students	No. of Students (%)						Grand Total (%)		
	Male (%)			Female (%)					
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
It became part of life	5 (9.09)	2 (15.38)	7 (10.29)	8 (15.38)	3 (25)	11 (17.19)	13 (12.15)	5 (20)	18 (13.64)
Made easy communication with students from any place	21 (38.18)	11 (84.62)	32 (47.06)	31 (59.62)	9 (75)	40 (62.5)	52 (48.6)	20 (80)	72 (54.55)
Expanded and strengthened relation among people	16 (29.09)	--	16 (23.53)	11 (21.15)	--	11 (17.19)	27 (25.23)	--	27 (20.45)
Created a sense of belonging to peer group to know about their progress of work	13 (23.64)	--	13 (19.12)	2 (3.85)	--	2 (3.12)	15 (14.02)	--	15 (11.36)
Total (%)	55 (100)	13 (100)	68 (100)	52 (100)	12 (100)	64 (100)	107 (100)	25 (100)	132 (100)

Source: Field Survey Conducted during 14 February 2011 – 29 February 2012

The table demonstrates that mobile phone made easy communication with students from any place among over a half of the students (54.55%), followed by expanded and strengthened relation among people (20.45%). There is a significant difference between rural and urban students on easy communication with students from any place made by mobile phone due to the tuition classes where undergraduate students expanded friendship with new students from other colleges.

Impact of Mobile Phone on Students' Families

The study found four impact of using mobile phone on the students' families which include mobile phone became part of life, reduced expenditure of family spent on landline telephone bills, enhanced social status of family and good medium for business purpose of family. Thus, the following table shows impact patterns of using mobile phone on the students' families.

Table 7.37
Impact of Mobile Phone on Students' Families by Gender and Residence
(Percentage in Parentheses)

Impact of Mobile Phone on Students' Families	No. of Students (%)						Grand Total (%)		
	Male (%)			Female (%)					
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
It became part of life of family members	7 (20)	4 (36.36)	11 (23.91)	5 (19.23)	2 (18.18)	7 (18.92)	12 (19.67)	6 (27.27)	18 (21.69)
Reduced expenditure of family spent on landline telephone bills	12 (34.29)	7 (63.64)	19 (41.3)	10 (38.46)	9 (81.82)	19 (51.35)	22 (36.07)	16 (72.73)	38 (45.78)
Enhanced social status of family	4 (11.42)	--	4 (8.7)	3 (11.54)	--	3 (8.11)	7 (11.47)	--	7 (8.43)
Good medium for business purpose of family	12 (34.29)	--	12 (26.09)	8 (30.77)	--	8 (21.62)	20 (32.79)	--	20 (24.1)
Total (%)	35 (100)	11 (100)	46 (100)	26 (100)	11 (100)	37 (100)	61 (100)	22 (100)	83 (100)

Source: Field Survey Conducted during 14 February 2011 – 29 February 2012

The table that mobile phone reduced expenditure of families spent on landline telephone bills among over two fifths of the students' (45.78%) families, followed by good medium for business purpose of families (24.1%). Thus, students' families were using landline telephone before purchasing mobile phone. Their families paid monthly rental charges even if they did not make calls. But mobile phone reduced this extra cost among their families.

Impact of Mobile Phone on Gender Relations

The impact of mobile phone on gender relations is grouped into eight categories; namely, created a sense of interdependence/ belonging with other students, communicated male & female friends for study purpose & shared study-related information with them, discussed urgent works with friends, made easy sharing of materials with friends through communication, good relation among friends without face-to-face interaction through mobile phone, shared educational information through SMS/ MMS, improved/ strengthened gender relations and less gender gap in accessing mobile phone because of equal access to mobile phone by females like males. The table demonstrates the impact of mobile phone on the students' gender relations by genders and residences.

Table 7.38
Impact of Mobile Phone on Gender Relations among the Students by Gender and Residence
(Percentage in Parentheses)

Impact of Mobile Phone on Gender Relations	No. of Students (%)						Grand Total (%)		
	Male (%)			Female (%)					
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
Created a sense of interdependence/ belonging with other students	15 (11.72)	14 (15.05)	29 (13.12)	20 (17.39)	11 (10.48)	31 (14.09)	35 (14.41)	25 (12.63)	60 (13.61)
Communicated male & female friends for study purpose & shared study-related information with them	31 (24.22)	47 (40.86)	78 (35.29)	41 (35.65)	47 (33.33)	88 (40)	72 (29.63)	94 (36.87)	166 (37.64)
Discussed urgent works with friends	12 (9.37)	19 (20.43)	31 (14.03)	16 (13.91)	28 (26.67)	44 (20)	28 (11.52)	47 (23.74)	75 (17.01)
Made easy sharing of materials with friends through communication	--	7 (7.53)	7 (3.18)	--	14 (13.33)	14 (6.36)	--	21 (10.6)	21 (4.76)
Good relation among friends without face-to-face interaction through mobile phone	--	6 (6.45)	6 (2.71)	--	5 (4.76)	5 (2.27)	--	11 (5.55)	11 (2.49)
Shared educational information through SMS/ MMS	13 (10.16)	--	13 (5.88)	21 (18.26)	--	21 (9.55)	34 (13.99)	--	34 (7.71)
Improved/ strengthened gender relations	45 (35.16)	--	45 (20.36)	13 (11.31)	--	13 (5.91)	58 (23.87)	--	58 (13.15)
Less gender gap in accessing mobile phone because of equal access to mobile phone by females like males	12 (9.37)	--	12 (5.43)	4 (3.48)	--	4 (1.82)	16 (6.58)	--	16 (3.63)
Total (%)	128 (100)	93 (100)	221 (100)	115 (100)	105 (100)	220 (100)	243 (100)	198 (100)	441 (100)

Source: Field Survey Conducted during 14 February 2011 – 29 February 2012

It shows that nearabout two fifths of the students (37.64%) communicated male & female friends for study purpose & shared study-related information with them, followed by discussed urgent works with friends (17.01%). There is no significant difference among the students across their categories of genders and residences. There was communication problem before using mobile phone among the rural and urban students and they did not get information about progress of classes if students were ill at home. Mobile phone has helped keep in touch with male and female friends for sharing study-related information even if they are unable to attend classes during illness.

Problems in Using Mobile Phone

Problems in using mobile phone among the students include four categories, such as becoming mobile hang, network problem where no signal is available, problem of recharging

the account balance and difficulty in downloading study materials due to lack of software in mobile phone. So the following table shows their distribution patterns among the students.

Table 7.39

Problems in Using Mobile Phone among the Students by Gender and Residence

(Percentage in Parentheses)

Problems in Using Mobile Phone	No. of Students (%)						Grand Total (%)		
	Male (%)			Female (%)					
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
Becoming mobile hang	14 (9.21)	15 (16.13)	29 (11.84)	9 (6.25)	4 (3.81)	13 (5.23)	23 (7.77)	19 (9.59)	42 (8.5)
Network problem where no signal is available	96 (63.15)	69 (74.19)	165 (67.35)	89 (61.81)	83 (79.05)	172 (69.07)	185 (62.5)	152 (76.77)	337 (68.22)
Problem of recharging the account balance	16 (10.53)	9 (9.68)	25 (10.2)	21 (14.58)	18 (17.14)	39 (15.66)	37 (12.5)	27 (13.64)	64 (12.96)
Difficulty in downloading study materials due to lack of software in mobile phone	26 (17.11)	--	26 (10.61)	25 (17.36)	--	25 (10.04)	51 (17.23)	--	51 (10.32)
Total (%)	152 (100)	93 (100)	245 (100)	144 (100)	105 (100)	249 (100)	296 (100)	198 (100)	494 (100)

Source: Field Survey Conducted during 14 February 2011 – 29 February 2012

The table reveals that over three fifths of the students (68.22%) face network problem where no signal is available, followed by the problem of recharging the account balance (12.96%). Similarly, their gender and rural-urban distribution also reveals more or less similar findings. The urban students do not face difficulty in downloading study materials due to lack of software in mobile phone because they are more advanced in handling devices than the rural students because of development of techno-culture and electronic hubs in the of the town.

Usefulness of Mobile Phone in Education

The study found five categories of usefulness of mobile phone in education among the students; namely, maintaining good relation among friends, class-mates and teachers through mobile phone, very useful in providing and obtaining & disseminating information through phone calls/ SMS, using mobile internet for searching materials, sharing information regarding examination, tuition, internal tests, etc. and using text messages/ phone calls in education. Thus the following table shows their distribution patterns among the students.

Table 7.40

Usefulness of Mobile Phone in Education among the Students by Gender and Residence

(Percentage in Parentheses)

Usefulness of Mobile Phone in Education	No. of Students (%)						Grand Total (%)		
	Male (%)			Female (%)					
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
Maintaining good relation among friends, class-mates and teachers through mobile phone	44 (28.95)	25 (26.88)	69 (28.16)	54 (37.5)	32 (30.47)	86 (34.54)	98 (33.1)	57 (28.79)	155 (31.37)
Very useful in providing and obtaining & disseminating information through phone calls/ SMS	86 (56.58)	14 (15.40)	100 (40.82)	67 (46.53)	30 (28.57)	97 (38.96)	153 (51.69)	44 (22.23)	197 (39.88)
Using mobile Internet for searching materials	18 (11.84)	17 (10.75)	28 (18.28)	11 (7.64)	23 (21.92)	34 (13.65)	29 (9.8)	40 (20.2)	69 (13.96)
Sharing information regarding examination, tuition, internal tests, etc.	--	34 (36.56)	34 (13.88)	--	18 (17.14)	18 (7.23)	--	52 (26.26)	52 (10.53)
Using text messages/ phone calls in education	4 (2.63)	3 (3.23)	7 (2.85)	12 (8.33)	2 (1.9)	14 (5.62)	16 (5.41)	5 (2.52)	21 (4.26)
Total (%)	152 (100)	93 (100)	245 (100)	144 (100)	105 (100)	249 (100)	296 (100)	198 (100)	494 (100)

Source: Field Survey Conducted during 14 February 2011 – 29 February 2012

The table demonstrates that the usefulness of mobile phone for education of nearabout two fifths of the students (39.88%) is very useful in providing and obtaining & disseminating information through phone calls/ SMS, followed by maintaining good relation among friends, class-mates and teachers through mobile phone (31.37%). By and large, there is similar finding observed across their categories of genders and residences among the students. Thus, mobile phone has maintained good gender relation among the students by making easier the communication in education as well as social life.

In sum, impacts of mobile phone in education among the students reveal that mobile phone made easy communication with students from any place among the students. They communicated male and female friends for study purpose & shared study-related information with them. Mobile phone is very useful for education in providing and obtaining & disseminating information through phone calls/ SMS.

There are major patterns of mobile phone in education among the students found from the study. The major findings of the chapter are summarised on the basis of following major patterns:

1. Most of the students (93.93%) subscribe pre-paid mobile connection. Over one fourth of the students (28.95%) are users of BSNL (private sector provider).
2. All the students access to telephone and short messaging service (SMS), irrespective of gender and rural-urban residence categories.
3. Over a half of the students (52.83%) generally receive six to ten incoming calls, over a half (53.85%) make six to ten outgoing calls, nearabout a half (48.58%) receive six to ten SMS/MMS and over a half (51.82%) send six to ten SMS/MMS in a day.
4. All the students call friends and all are called by friends irrespective of genders and rural-urban residences.
5. Over three fifths of the students (66.8%) make phone calls very frequently (almost daily) and over three fifths (68.12%) receive phone calls very frequently (almost daily) per day.
6. Most of the students (101.62%) use mobile phone to stay in touch with friends as well as to discuss study related things with friends.
7. Over a half of the students' (57.29%) average monthly mobile phone bill ranges from Rs. 100/- to Rs. 200/- in a month.
8. Over three fifths of the students receive one to five study-related incoming calls & SMS/MMS on mobile phone and make one to five study-related outgoing calls & outgoing SMS/MMS per day.
9. Over a half of the students (56.28%) use mobile phone for making communication with teachers and friends.
10. Mobile phone is moderately effective in education among over three fifths of the students (68.42%).
11. Three fifths of the students (60.93%) absolutely agree that text messages can be useful for communicating and disseminating any information for communication.
12. Majority of the students (81.38%) agree that mobile Internet facility helps search study materials to students.
13. Over three fifths of the students (68.42%) agree that mobile phone helps making m-learning possible.
14. The motivating factor in using different features of mobile phone among nearabout three fifths of the students (72.27%) is the convenience of mobile phone to carry with them.
15. Mobile phone made easy communication with students from any place among over a half of the students (54.55%).
16. Nearabout two fifths of the students (37.64%) communicated male & female friends for study purpose & shared study-related information with them.
17. The usefulness of mobile phone for education of nearabout two fifths of the students (39.88%) is very useful in providing and obtaining & disseminating information through phone calls/ SMS.

In sum, mobile phone is found to have an impetus role among the students coming from the rural and the urban settings. It is highly used by them in contacting with their teachers, friends, family members, relatives, etc. They feel secure when they are away from home as social security is provided by the mobile phone. The students keep their mobile

phone in silence mode while attending classes and during their study times. They use it for disseminating study-related information. If mobile phone is to be used in educational institutes, certain issues must be addressed, including leadership and school culture; the attitudes of teachers, students and other influential parties; appropriate curriculum activities; professional development; technical integration and support; and a new approach to mobile phone policies. A more widespread implementation would require strong leadership, good management and professional development of teachers to promote cultural change. Starting small, with champions of the technology and then expanding is a good strategy for this type of change.